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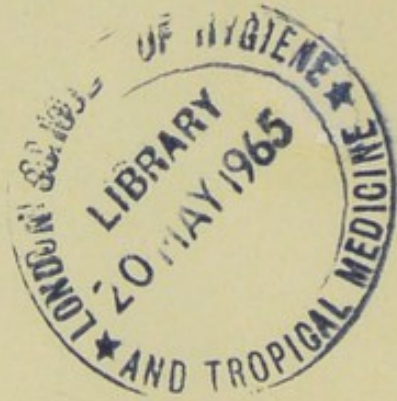
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GLASGOW X-RAY CAMPAIGN—THE GEORGE SQUARE X-RAY CENTRE



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1957

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PREFACE.

The year has been outstanding on account of the city-wide X-ray campaign carried out in the early part of the year and the pandemic of influenza which reached the city in the autumn. During the five weeks of the X-ray campaign some 715,000 persons were X-rayed, of whom 622,349 were Glasgow residents. Among the Glasgow residents, 2,369 active pulmonary tuberculosis cases were found, giving a rate of 3·7 per 1,000 over 14 years of age. A full account of the campaign is included in this report.

The pandemic of influenza, the first since 1918, originated in China in March, 1957, but by August the disease was already present in Britain, although it did not occur in epidemic proportions in the city until September. By the end of October the first wave had passed, having affected probably 300,000 to 350,000 persons. The second wave of influenza, which was expected to follow the first, did occur during the first three months of 1958, but was of low intensity. During the months of September, October and November there were registered 425 cases of acute influenzal pneumonia, and 1,950 of acute primary pneumonia.

For the first year there were no cases of diphtheria reported, which compares with the situation in 1940 when there were 5,190 cases and 226 deaths.

The infant mortality rate was 35, an increase of 2 on last year's figure. The general death rate, 12·20, has increased slightly on account of the presence of influenza. The number of births has increased again to 22,413, giving a birth rate per 1,000 of the population of 20·76. The number of children who died between the ages of one and five years has increased, and for the first time for many years the death rate per 1,000 of the population at ages one to five years has gone up.

The number of occupied houses has further increased by 2,982 to 324,350, and the population has decreased slightly to 1,079,800.

MATERNAL AND CHILD CARE.

The infant mortality rate was 35 per 1,000, an increase of 2 compared with the previous year. An analysis of the deaths shows the

increase is entirely in the group of infants who die in the first day or first week of life. The major cause of death in children under one year is still immaturity, and in 1957 71 per cent. of all infant deaths were so attributable. This is 3 per cent. more than in 1956. "Violent causes" was an important cause of death in children under one year, the total being 47, 4 more than in the previous year. All but 6 of the deaths were due to asphyxia, and of these 27 were due to inhalation of vomit or regurgitation of food. Suffocation by blankets and overlaying also accounted for 5 deaths. From an analysis of 751 of the 774 deaths of infants under one year, 422 occurred during the first week and 563 or 75 per cent. in the first four weeks of life.

There was also an increase in the number of stillbirths registered in the city, 637 compared with 612, and the stillbirth rate is 26 for the second year in succession. Again there is need to emphasise the importance of mothercraft teaching. At only one maternity hospital are such classes held, and at the local authority clinics where teaching is available the numbers attending are considerably less than before 1948.

The deathrate per 1,000 of the population at ages one to five years increased. The most common cause of death at these ages is accidents and violence, and during 1957 there were 22 deaths in this group. Road accidents, burns and scalds, and drowning were the main causes of death.

An important work, increased and extended during the year, was the prevention of the break up in families, and one health visitor is giving her entire time to the study and guidance of particularly difficult families. The greatest factors in the causation of the disrupted home today are unemployment and debt. The incurring of debt far beyond the ordinary capacity of the family causes frustration, anxiety and great emotional upset. The families involved were directed regarding the family budget and were encouraged to curb needless spending. Hire purchase firms were visited and arrangements made for the acceptance of smaller payments over longer periods. Many cases were in difficulties over rent arrears and eviction notices were prevalent. The result of this work is somewhat slow, but the evidence shows that many families which are at breaking point are now making some co-operative effort to prevent disruption.

Plans have been passed for a permanent comprehensive clinic in the Drumchapel Housing Estate, and an additional clinic was provided

in the Castlemilk Estate by the transference and adaptation of the George Square X-ray centre. There is, however, still much work to be done, and there are many areas urgently in need of improved accommodation.

Again attention has to be drawn to the lack of accommodation in maternity hospitals for Glasgow mothers. Little or no progress has been made by the Department of Health for Scotland or the Western Regional Hospital Board in increasing the number of beds available. As stated in the previous report, Glasgow is at a serious disadvantage compared with other cities, as only 57 per cent. of mothers can have their babies in hospital compared with 80 per cent. in Edinburgh and Dundee and almost 90 per cent. in Aberdeen.

HOME NURSING SERVICE.

During the year the Home Nursing Service nursed approximately 15,000 patients, to whom 403,000 visits were paid. This number includes 46,000 visits to 1,700 maternity patients. There has been an increase in the number of new patients added during the year and also an increase of 10,000 in the number of visits paid. The work was carried out by the Glasgow District Nursing Association on behalf of the Local Health Authority, and the Association also made provision for both district and midwifery training.

HOME HELP SERVICE.

The Home Help Service assisted 7,044 cases during the year. It has been necessary to make provision for the special group of old folks living alone, the majority being old age pensioners with no relatives to provide assistance. Included in the general section of the service are 1,580 cases receiving extended service, of which some 93 per cent. are over 60 years of age.

A beginning was made during the year to supply a long felt want among many old folks living alone, a Sunday, evening, and night service. A two-hourly Sunday service for old people living alone was introduced on 9th June and 30 helps are at present engaged in this type of work. A night service for the seriously ill, unfit to be left alone, was started on 1st August with six helps as night sitters. The evening service is at present provided by four women who visit some cases for one hour in the evening to give a cup of tea and see the old person safely to bed.

INFECTIOUS DISEASES.

As already mentioned, a pandemic of influenza occurred during 1957. In Glasgow the disease was present during the months of September and October, causing considerable disorganisation in the scholastic and commercial life of the city. It was one of the few occasions when a world-wide epidemic could be traced as it moved across the world from its origin in China. It was not noticeably spread by air traffic but principally by the movement of shipping. The influenza was due to a presumably new type of virus, although there was found evidence that the same virus probably caused the 1889 pandemic of influenza. A detailed report on the epidemic is included.

Over the whole year there were 448 cases of influenzal pneumonia, an increase of eight times the incidence in 1956. The majority of the cases occurred during the pandemic. The number of deaths, 161, was a three times increase over the previous year. Acute primary pneumonia increased slightly, there being 5,447 cases with 575 deaths. The deaths from both bronchitis and lung cancer decreased slightly. There were 588 deaths from bronchitis during the year compared with 656 in 1956 and 700 in 1955.

Lung cancer, a cause of death that has steadily increased in importance, was responsible for 586 deaths, 490 male and 96 female. The association between lung cancer and cigarette smoking is indubitable, and while there probably has been a reduction in cigarette smoking it will have had little or no influence on the statistics.

As long as there are vast poster displays encouraging the public to smoke more cigarettes and the danger to life from cigarette smoking is not immediately apparent there is no deterrent which can be appreciated by the younger citizens. Further, in general conditions when there is stress in the home, at work and in the nation generally it is difficult to persuade the giving up of what may be thought to be an essential tranquilliser. In the majority of cases the opposing factors to an individual discontinuing cigarette smoking are at present considerable.

There was a slight decrease in the number of cases of dysentery, but this disease is subject to large fluctuations and the lowered incidence cannot be regarded as evidence that the end of the city's prolonged epidemic is yet in sight. Institutional outbreaks do occur, and a large hospital for children had 182 cases in the course of the year. The

epidemic was traced to "missed" cases on a county farm which supplied unpasteurised "Certified" milk, bottled and in bulk, to the institution. A smaller outbreak occurred in a large mental hospital and proved very difficult to check. The original source of infection was not discovered, and once it was introduced case-to-case spread rapidly occurred. Many symptomless carriers occur in this disease, which is frequently of considerable mildness, and of the 3,917 cases notified during the year there were three deaths (ages 3, 22 and 63).

1957 was the first full year of official notification of food poisoning. The incidence in the city showed a considerable fall compared with the previous two years. Outbreaks associated with communal cooking were few and the number involved in these incidents small. For the second successive year no death was known to be caused or precipitated by food poisoning. Out of a total of 247 cases registered only 39 were sporadic cases of unknown cause. Three outbreaks were recorded, in all of which the suspected vehicle was cold meat. Again there is need to emphasise the extreme care which must be taken in the cooking, handling and serving of cold dishes.

For the first year there were no cases of diphtheria reported in the city. This compares with the situation in 1940 when there were 5,190 cases and 226 deaths. Immunisation campaigns over the years have brought about this position, but there must be no relaxation if the disease is to be permanently banished from the city. By the end of 1957 less than half (39.5 per cent.) of the children under five years of age have had some measure of protection against diphtheria, although it is estimated that at least 75 per cent. of pre-school children must be protected if the disease is to be kept under control.

Scarlet fever continues to exist in a mild form, and during the past eight years only 4 deaths have occurred. In 1957 there were 971 cases registered and no deaths. Almost 95 per cent. of the cases occurred between the ages of two and fifteen years.

The incidence of measles and whooping cough was high during the year, and there were 3 deaths from measles and 5 from whooping cough.

Poliomyelitis was not prevalent in the city, but there were 19 paralytic cases registered during the year. It is usual nowadays to divide poliomyelitis into the non-paralytic and the paralytic forms. In the main, the diagnosis of the paralytic type is comparatively straight-

forward, but it is a different matter with non-paralytic cases. For many years a certain mild type of illness has been called by various names—lymphocytic meningitis, benign lymphocytic meningitis or aseptic meningitis. A proportion of these cases are known to be non-paralytic poliomyelitis, but there has been difficulty in deciding what the actual proportion is. In 1957 the Virus Laboratory at Ruchill Hospital has been able to come slightly nearer to the truth in this matter by the isolation and detection of polio and other viruses.

Vaccination against poliomyelitis was continued during 1957. Supplies of British vaccine were, however, limited, and it was not until the purchase by the Government early in 1958 of considerable supplies of American Salk-type vaccine that progress was made with the protection of children under fifteen years of age.

There was a rise in the number of acute syphilis cases in males. The total for both sexes was 22 compared with 17 in 1956. A slight increase has also occurred in acute gonorrhoea in both males and females. The attendance of patients suffering from non-venereal conditions remains high, although there was a slight decrease during 1957. A few cases of congenital syphilis still come to the notice of the Department, but for the second year in succession none has come to light in children under one year of age.

Some 8,400 antenatal blood tests were carried out, and 0·14 per cent. were found positive. The number of blood tests still represents less than half the total births in the city, and while the Maternity and Child Welfare clinics and hospital antenatal clinics make a practice of antenatal blood tests for the Rhesus factor and the Kahn and Wassermann Tests this is not the custom with general practitioners.

Only 3 babies were proved to have gonococcal ophthalmia, although 37 children with eye conditions were examined.

Occasional cases of leprosy come to light in the city, always foreign seamen, students or visitors. Adequate though somewhat prolonged treatment is necessary to ensure non-infectiousness. In every infectious case the patient is transferred to a special hospital where such treatment is available, as the danger is to children and not to adults.

TUBERCULOSIS.

All anti-tuberculosis activities in 1957 were dominated by the city-wide X-ray campaign which took place between 11th March and 12th

April. A full description of the campaign is included in the report. Some 715,000 persons were X-rayed in five weeks, and among the Glasgow residents 2,369 active cases of pulmonary tuberculosis were found, equal to 3·7 per 1,000.

The total number of new cases of pulmonary tuberculosis notified during the year was 3,925 compared with 2,024 in 1956. The age and sex distribution showed as usual a high incidence in the young adult female and a continued high incidence in males at all ages over 45. Among the campaign cases the preponderance in the males was in the older age groups where infection was believed to exist. The death rate from pulmonary tuberculosis fell only from 34 to 33 per 100,000, the deaths occurring mainly in patients over 45 years of age in males and in females in the age group 26-44 years.

There was a fall in the incidence of non-pulmonary tuberculosis, with a slight increase in tuberculous meningitis, but only one infant was notified during the year as suffering from tuberculous meningitis.

During 1956 a scheme of intimation of primary tuberculosis by hospital physicians was commenced. It will be noted that primary infections are intimated and not notified. During 1957 a total of 94 intimations were received and the routine scheme of contact investigation carried out.

The school B.C.G. vaccination scheme was delayed in 1957 by influenza, but when finally completed some 7,500 children had been vaccinated. The parental consent was well maintained at 83·4 per cent., and of the children Mantoux tested 72·6 per cent. were negative, a rise of 2·4 per cent. The percentage of children skin-tested negative is an important figure, as even with an increase to 72·6 per cent. it does indicate that there is still a considerable amount of infection present in the city.

B.C.G. vaccination was extended to infants born in the Eastern District Hospital, the sixth obstetrical unit in the scheme. The number of new-born infants vaccinated has now reached 6,694. The vaccination of new-born infants has had an important effect in preventing tuberculous meningitis in children under one year.

Discussion had taken place regarding the actual scope of contact tracing that might be possible after the campaign. While it was agreed that contacts of notified cases would receive immediate attention, it

was thought possible to include at a later date the contacts of all patients kept under observation at the chest clinics. Associated with the contact tracing was the offering of B.C.G. vaccination to contacts of these patients. During the year over 4,000 contacts were vaccinated or twice the usual number following on the intensive contact tracing.

The X-ray department has now been provided with a new 70 mm. unit. Some 12,800 miniature and 1,281 full-size films have been taken, and in addition the centre was used during the X-ray campaign as a recall centre when over 5,000 recall films were taken.

BLIND PERSONS.

The Regional Certifying Clinic examined 734 persons for the first time, 44·7 per cent. at home. Out of the 734 persons, 57·8 per cent. were certified blind and 29·3 per cent. partially sighted. There were also re-examined 274, of whom 46·7 per cent. were certified blind and 43·1 per cent. partially sighted. As in previous years the vast majority of these persons were over 70 years of age.

The causes of blindness of those examined for the first time and found to be blind were cataract in 29·5 per cent., arterio-sclerosis in 17 per cent., glaucoma in 12 per cent., and myopia in 11 per cent. Numerous other causes were responsible for the remaining cases.

A recommendation was made in Department of Health Circular No. 43 of 12th June, 1957, for the early ascertainment of defective vision. The circular recommended a screen test for children aged 5 or 5+ in place of the Snellen test-card in operation for 7-year-olds. A pilot experiment was begun in a number of schools for testing the vision in 5-year-olds by means of the "E" test. The results are not yet available.

An effort has also been made by the health visitors in their routine visits to detect at an early age defective vision in young children with the immediate reference of the child to the family doctor for guidance and the obtaining of expert examination.

ACCIDENT PREVENTION.

As has already been mentioned, deaths from violence in children under five years of age are an important factor in both the infant and toddler death rate. In the case of babies and young children death is

usually due to the inhalation and ingestion of food and accidental mechanical suffocation in bed or cradle. This is a well recognised danger which for years the Health Department has, through its Maternity and Child Welfare Service, endeavoured to prevent by the education of mothers. Particular attention has been given to the dangers of a child being sick after a feed or of suffocating by lying on a soft pillow. It is not always the babies of poorer mothers who die, but the preponderance are in this section of the population. In spite of the attention which has been given to these known dangers, there is little or no improvement in this group of deaths in the course of the years. Intensive propaganda and education is in progress by the health visitors of all parents on the precautions that must be taken to prevent burning or scalding of children, the need for care with pot and teapot handles and teacups, and the danger of table cloths hanging down within reach of toddlers, and many others.

In the older age groups one of the major causes of accidents is clothes catching fire from coal, gas or electric fires, especially when the person is standing looking at a mirror or reaching up to the mantelpiece. This type of accident affects the female sex more than the male, and disasters have occurred particularly to women and children wearing party frocks or nightdresses. The adoption of pyjamas instead of nightdresses would probably prevent a number of accidents of this type in girls and women.

There is need also to employ a practical form of safe fireguard. Investigation has shown that in the better housed areas in the city the parents are alive to the need to have an adequate fireguard but in the poorer areas where the family has to live and work in one or two rooms the presence of a fireguard is not so frequently noticed.

Also under consideration is the type of fireguard which is most suitable and most likely to be used regularly by the mother. Spark guards are not satisfactory, as they are too light in weight and easily disturbed by a child. The spring type of fireguard may have to be removed each time the fire is replenished or, if a spring attachment is provided, there may be no point of attachment on the fireplace. The British Standards Institution have provided a specification for a fireguard to prevent burning accidents, and manufacturers of electric fires are being required by law to provide a substantial and useful guard on electric fires ; yet there are thousands still in use unprotected.

In the older members of the population death is sometimes occasioned either by coal gas poisoning or a minor accident such as by tripping over the edge of a carpet or on a stair. Attention has been paid by the Welfare Officers to the gas arrangements in the homes of the old people they visit, and similar duties are being placed on Assistant Sanitary Inspectors in their routine visitation of properties. Many of the fatal accidents caused by fire affect the elderly, although there are a large number of non-fatal accidents in children leading to permanent scarring and disfigurement. With the collaboration of the medical superintendents of the hospitals in the city, information regarding all children under fifteen years of age admitted suffering from burns and scalds is being sent weekly to this Department for information and follow-up.

PORT HEALTH AUTHORITY.

During the year a total of 6,932 vessels arrived within the area covered by the Port Health Authority. Vessels arriving from overseas numbered 1,598, and were subjected to the measures and controls laid down by the Public Health (Ships) (Scotland) Regulations, 1952-54, at the anchorage at the Tail of the Bank before they were given clearance by the Boarding Inspectors and the Customs and Excise Officers stationed in that area.

During adverse weather conditions at the anchorage permission to proceed up river may be granted if the vessel is showing a signal that she has a clean bill of health and on arrival at Glasgow will be boarded by the inspector on duty.

No quarantinable diseases were found on ships arriving at the port during the year, but particular attention was given to all vessels arriving from areas or ports which are known to be infected. The crews of these vessels are placed under surveillance until the appropriate incubation period has expired, and similar action is applied to all Asiatic crews arriving in this area via the London air port.

Coasting vessels operating within the limits of the port were dealt with as a matter of routine, but particular attention was applied to the small coasting vessels of foreign nationality operating in this field. Information regarding an outbreak of poliomyelitis in Southern Ireland came to the notice of this Department, and instructions were given to the effect that all vessels from that area were to be examined and enquiries made in regard to the health of the crews.

The normal duties carried out by the port medical staff are recorded in the report, but the major problem during the year was that dealing with the increasing number of cases of influenza on ships arriving at the port.

All complaints by members of the ships' crews with regard to drinking water supplies are immediately investigated and samples are submitted for bacteriological and chemical examination. This is a matter of considerable importance to seamen on the tramp class of vessel where the quantity of water available for domestic use is limited. The results of these examinations are recorded in this report.

During the year 1,890 seamen were immunised against yellow fever by the port medical staff. These crews were serving on vessels which were trading at ports situated within the yellow fever zone.

The degree of rodent infestation in vessels arriving at the port shows a further decrease during the year, and similar results are being recorded in regard to rodent infestation in premises within the dock area.

The examination of imported food cargoes under sections of the Public Health (Imported Food) (Regulations) (Scotland), 1937-48, and the Food and Drugs (Scotland) Act, 1956, occupy a considerable part of the duties of the Port Health staff. Damaged cargoes are detained for examination, and reconditioning is permitted under the supervision of inspectors if conditions justify such action.

Special attention has been given to the examination of imported egg products during the last few years due to the presence of salmonella found in earlier consignments. Some 49,000 tins of frozen whole egg have been dealt with, and out of 2,389 samples submitted for bacteriological examination salmonella organisms were found in 52.

A further consignment of some 4,800 tins of frozen whole egg was released except for 144 tins from which the salmonella organisms had been isolated. These tins were later released for delivery to a firm in the London area with the consent of the local Medical Officer of Health on receipt of an undertaking that they would be subjected to pasteurisation and used in high temperature baking.

Similar controls and investigations were carried out in dealing with consignments of Chinese hen egg albumen which are now all heat processed locally before being released for use.

HOUSING.

The total number of permanent local authority houses completed during the year was 5,579. The Corporation now own 110,184 houses, over one-third of all the dwellings in the city.

The rehousing of tuberculous families continued, with 571 families being recommended and 495 rehoused, leaving 360 still to be dealt with at the end of the year.

The Rent Act, 1957, led to an increase in the number of applications for certificates of disrepair following on the serving of notices of increase.

The number of houses represented as unfit was 1,716, to which should be added 295 houses included in the Royston Road Clearance Area. Continued progress is now being made in wiping out the slums which have for so long been a reflection on the city.

The supervision of tenants in housing schemes has been continued and extended at the request of the Property Management Committee. Prior to 1957 it was customary for the housing nurses to visit regularly houses in rehousing schemes and also occasionally in "intermediate" and "ordinary" schemes. In 1956 it was decided that an extension of house visiting should take place to all houses in new schemes as they are occupied, and repeat visits to tenants in residence who were having difficulties. It was also felt that assistance might be given to families who are overcrowded and have long standing applications where difficulty had been found in securing their rehousing. These extensions were initiated in 1956, and during the first nine months—October 1956 to May 1957 (incl.) 16,761 visits were paid.

Once again reference must be made to the design of multi-storey developments being adopted in the city. Rehousing to a large extent is a matter of finance, but it is poor economy to omit windows from bathrooms and to build houses without through ventilation in order to save a few pounds in money and a few square yards of ground.

DISINFESTATION UNIT.

Every now and then bed bugs occur in new houses. Most of these infestations may be traced to second-hand furniture bought after the

tenant has gone to the new house. The example given in the report is of infestation in a very clean house being traced to a second-hand wireless set.

BACTERIOLOGICAL LABORATORY.

The Laboratory had a full year in 1957, and the varied nature of its work in relation to the diagnosis and treatment of disease, to prevention and control, and to public health administration is indicated by the many lines of investigation recorded in this report.

As already mentioned, there was a large decrease in the incidence of dysentery among the population, and this was shown by some 4,500 fewer specimens examined in the Laboratory, the decrease being mainly in the Sonne dysentery but also in the Flexner.

There was a large increase in the work done in investigating the fitness for consumption of food entering the port or exposed for sale in the city, the increase being chiefly due to many more examinations of samples of imported dried and frozen eggs.

Initial steps were also taken, along with the Senior Food Inspector, to examine with bacteriological control the hygienic condition of itinerant ice cream vans. The work is being continued in 1958.

As already mentioned, no case of diphtheria occurred in Glasgow during 1957, the first time since mass immunisation was started in 1940.

The City Bacteriologist has carried on an extensive investigation into the natural history and epidemiology of diphtheria since 1932, and during this long survey 19,000 strains have been isolated. There were over 9,000 cases due to the gravis strain with a case mortality of 4.31 per cent. The intermedius strain was the cause of 6,654 cases with a case mortality of 3.92, while the mitis strain was responsible for 3,363 cases with a case mortality of 1.66.

Staphylococcal infections are the commonest cause of boils, abscesses, carbuncles and similar lesions in man. In recent years, staphylococcal infections have become troublesome in hospitals as sources of infection of the newly born. Many of the strains are resistant to antibiotics and quickly develop resistance to the newer antibiotics

being developed each year. Experience now indicates that all antibiotics should be used with critical discrimination, particularly in the presence of staphylococcal infection.

Certain strains of this micro-organism are responsible for outbreaks of food poisoning. This is not an infection but an intoxication resulting from swallowing preformed enterotoxin produced as the result of a period of incubation by the maintenance of infected food at a suitable temperature, during which time lapse between the preparation of the food and its consumption, the multiplying staphylococci manufacture the injurious toxin. Such attacks of food poisoning are fairly common, but the upset is fortunately usually transient. The contamination of food may be by an infected handler or indirectly by the use of contaminated ingredients in prepared dishes.

Examination was made of selected samples of shell-fish and a new system of grading adopted. Among all the shell-fish examined, most could be classified as grade I—as clean as raw shell-fish can be expected to be—but there was one batch of mussels and one batch of whelks (both uncooked) which fell into grade II, and one batch of uncooked mussels frankly polluted and thus classified as grade III.

The number of samples of sputum for examination for *M. tuberculosis* was 7,911, of which 371 were positive. While the total number of samples was fewer than in the previous year there was a large increase (up to more than 2,000 in April and over 1,000 in May) in specimens examined during and following the X-ray campaign.

FOOD INSPECTION.

The Food and Drugs (Scotland) Act, 1957, has now been in operation for a complete year and certain advantages and disadvantages have been found in its operation. The Act has been followed by a number of regulations controlling food standards, colouring matter in food, the use of anti-oxidants and various other matters.

Food sampling has continued during the year, and a total of 5,098 samples of foodstuffs have been submitted for analysis.

As in previous years, court proceedings instituted during the year against butchers greatly outnumbered those taken against other traders.

Of the 34 cases in which proceedings were taken, 20 related to preservative in mince during the proscribed period and 14 to sausage and mince containing excess of preservative.

It is now unusual to find samples of milk deficient in milk-fat owing to added water, but there were two cases of the sale of diluted whisky in which proceedings were taken.

It is not generally the practice for manufacturers in Scotland to colour the skins of black puddings, but in one case it was found that when the skin of the pudding was rubbed with cotton wool a black colouring matter was removed. The colouring matter was associated only with the outer layer of the skin and had not penetrated to the surface of the pudding. It so happened that the dyeing and washing off processes had not been efficiently carried out. The use of a black colouring matter is not prohibited but is unnecessary.

The number of complaints lodged by the public with the Department concerning food alleged to be contaminated, unsound or otherwise unfit for human consumption increased during the year to 144. A thorough investigation was made into all the complaints, and it is significant to note that in 20 instances the food or drink complained of was normal in taste and smell.

Several complaints again this year referred to salmon. One sample submitted turned out to be fresh *Scottish* salmon, the flavour of which was strange to the consumer. Another sample was of Lemburger cream cheese, a cheese of German origin. It was pre-packed in a foil wrapper, was dark in colour, and had a most unappetising odour—its natural state.

Visits of inspection were made to markets, stores, wholesale and retail premises on 12,214 occasions for the purpose of inspecting the premises or examining suspected food.

A large quantity of food, some 105 tons in weight, was considered to be unsound and destroyed with the owners' consent or otherwise disposed of.

The inspection and supervision of milk supply and distribution and the carrying out of the various Orders was continued during the year. A fuller investigation into the thoroughness of the cleansing of milk

churns in the city creameries was started this year. Unlike milk bottles it is not practicable to bring milk churns to the laboratory for bacteriological investigation, and so they were rinsed with sterile water and the rinse water subjected to examination. Of the 97 milk churns, 44 were satisfactorily washed, 12 were fairly satisfactory and 41 were unsatisfactory. Advice was given on the appropriate methods to have these churns cleansed and sterilised and repeat samples showed greatly improved results.

Under the Ice Cream Regulations, 1948, in addition to the regular annual inspection, a check was made on ice cream vehicles under working conditions. The work was carried out every Sunday afternoon during the months of June to September inclusive. Certain faults, some of a technical nature, were found, but others included empty or leaking water tanks used for holding water for hand-washing, no soap, no hand towel, no overall, dirty hands and general carelessness. A number of vehicles however were found to be in excellent condition.

The Food Section is considerably involved in the examination of imported egg products, and the work detailed in last year's report was continued during the year. Samples were also taken of so-called fresh eggs sold in the city. Two lots each of one dozen eggs were examined, and were taken from consignments dispatched from the Scottish and Irish Egg Packing Stations respectively. The age and source of the eggs were ascertained from the markings on the eggs and cases. The Bacteriologist reported that both samples were practically sterile and no organisms were isolated except a few staphylococcus albus from the Scottish eggs, perhaps a contaminant. A second sample was taken 35 days later, and again the bacteriological report was that both samples were apparently sterile and no organisms isolated. At this stage the Scottish eggs were 46 days old and the Irish eggs 62 days old from the time of packing.

Several shopkeepers were warned of their obligations under the various Orders of the Merchandise Marks Acts, 1889-1953, the Labelling of Food Order, 1953, and under Section 6 of the Food and Drugs (Scotland) Act, 1956. It was noted that during May many grocer shops had Northern Ireland and English eggs displayed with show tickets stating that they were Scottish eggs from Aberdeen, Elgin, Girvan, etc., and there was also complaint that Cyprus oranges were being ticketed and sold as Jaffas. Many shopkeepers were advised of the inaccuracy of the descriptions used. The labelling of imported tomatoes has again

improved, but later in 1958 it was necessary to take court action in this connection.

Observations were continued with regard to the inaccurate wording of labels and pre-packed articles of food and misleading statements and claims of advertisements. Inaccuracies in labelling were brought to the notice of food processers and packers.

AIR PURIFICATION AND SMOKE ABATEMENT.

Certain sections of the Clean Air Act, 1956, came into force on 31st December, 1956. Under the terms of the prior approval section of the Act (Section 3) there has been a ready co-operation by industry and national undertakings. In all schemes of alterations and additions coming to the notice of this Department the particular claims and aspirations of the Act are given a prominent place distinct from the statutory applications imposed by the Act.

Plant improvements continued to be noted during the year—the replacement of solid fuel by oil, the installation of new plant to give increased capacity with greater efficiency and reduced emission of smoke, and the consideration of arrestors for grit and dust covered by a section of the Act not yet in force in Scotland.

Under the section dealing with the smoke control areas a detailed review was carried out of a proposed smoke control area in the centre of the city covering some 200 acres. The local authority propose to make an order in respect of this area in 1958.

With the public interest in clean air, there has been a considerable increase in the number of complaints of nuisance. All complaints are carefully investigated and the executive of the plant involved are interviewed and technical and practical aspects of control discussed. In the majority of cases the advice given is acted upon and suitable remedial measures adopted. It has been necessary to prosecute where offending plant owners have failed to collaborate, resulting invariably in a series of infringements. Complaints have occurred in respect of the railway operating and servicing sheds, and discussions have taken place with the British Railways Executive who are fully alive to the problem and are endeavouring to obtain improvement. It is likely that the schemes of electrification and the replacement of steam by diesel locomotives will considerably improve the conditions at running sheds.

The efficient operation of steam raising plant is only possible with the training and technical education of plant personnel. The courses of instruction which the Corporation of Glasgow have provided since 1910 were continued during the year. The students catered for in these courses are those who propose to take the local or the City and Guilds of London Institute examinations with a view to obtaining a certificate in boiler practice (Boiler Operator Certificate) and also others going forward to more technical examinations in boilerhouse practice and combustion engineering. A monetary recognition is given by the local authority and by other organisations to men holding these certificates.

There are now 13 soot and dust precipitation collection centres in use, including two country stations at Loch Katrine and at Mugdock. The average weight in tons per square mile of solid deposit was 206, which compares with 201 in 1956. The average yearly figure for the preceding six-year period is 225.

GENERAL SANITARY OPERATIONS.

The inspectorate, as all other members of the staff of the Department, took part in the X-ray campaign, and necessarily there was partial reduction in the time available for normal duties during the early part of the year.

Problems arising from housing in its various aspects have occupied a considerable part of the time of the staff especially in an attempt to check the increasing dilapidation occurring in domestic property. More and more responsibility is being placed on the Department for maintaining property in good repair.

Under the Public Health (Scotland) Act, 1897, the Local Authority is required to have the district inspected from time to time to ascertain what nuisances exist. Nuisances arising from structural defects in dwelling-house property can be exceedingly costly to abate, for example, defective slating on roofs, blocked or broken chimney heads, dry rot in floors or choked or collapsed drains. Many owners of the poorer type of property are not financially in a position to have the nuisance abated. In other instances, nuisances are allowed to continue through neglect. It has been necessary to ask the Local Authority to issue notices in respect of these nuisances and to take court proceedings against an increasing number of non-cooperating owners.

Progress continues in the representation of unfit property for closing, demolition or clearance. Detailed inspection, discussions with owners and factors and the preparing of the necessary documents have been important duties during the year.

Rodent and insect infestation continue to require attention. For rats and mice "Warfarin"—a blood anticoagulant—is being used almost exclusively. It is clean to handle, comparatively safe where animals are concerned, and simple in application. Expert knowledge, however, is necessary if baiting is to be effective and the best results obtained. Much help could be given by the public in preventing infestations by rats and mice by careful storage of food in rat-proof premises, by placing waste food in bins with covers, and discontinuing the indiscriminate practice of dispersal of bread in the feeding of birds.

Many complaints of insect infestations are brought to the notice of the Department. Usually they are infestation with flies, bugs and beetles of various types, and advice is given as to how to deal with it, or the work is carried out by the disinfestation unit.

WELFARE SERVICES.

Two new homes, "Roberton" and "Knowehead," were opened during the year for the accommodation of 17 and 38 old persons respectively. Merrylee Lodge, a specially built home for 40 persons, was also opened during the year. This is the first home specially designed for the purpose built for the accommodation of old persons since the National Assistance Act, 1948, came into operation. The building is of two floors with a lift in order that old people who find difficulty with stairs can still occupy bedrooms on the first floor. The old people are accommodated in 14 single and 10 double rooms with a sick bay of two rooms each accommodating three.

A new building in the Castlemilk area on the same lines as Merrylee Lodge was completed in 1958.

A new venture was the opening of a holiday home (Frogna), a mansion house standing in extensive grounds near Troon. The grounds are beautifully laid out with flower beds and lawns and surrounded by woodland. Residents from the Glasgow homes are taken to Frogna by bus for two-weekly periods, and even in the short time the home has been operating the beneficial effects of change of surroundings are

noticeable. It is proposed that this home will also be available for short holidays for handicapped persons as well as the aged.

The policy of improving the amenities at Foresthall was continued during the year, and the male block was re-opened early in 1958.

The welfare services for the handicapped were developed and increased by the opening of Laurieston House, commodious premises on the riverside provided with club rooms for blind persons and facilities for various voluntary organisations dealing with particular types of handicapped such as the Muscular Dystrophy Group, the Scottish Epilepsy Association, the Association for the Mentally Handicapped and the Association of Parents of Handicapped Children. The last mentioned organisation have the use of accommodation for five days a week and run a centre for severely handicapped children staffed by their voluntary workers. A midday meal is provided by the Education Department School Meals Service, and accommodation and transport are provided free by the Health and Welfare Department. Additional services for the handicapped include classes held in Laurieston House for blind persons and concerts arranged at intervals during the winter and dances at which there is a large attendance. There are six district clubs for men and three for women in different parts of the city, and club facilities are also available at Laurieston.

General welfare services were continued with a meals-on-wheels service for old people and the visitation of old people in their homes.

I have pleasure in thanking the Convener and members of the Health and Welfare Committee for their generous support and co-operation during 1957. In the preparation of this report I have had the assistance of all sections of the Department and in particular Miss Knox, the Department's Librarian, to whom I am indebted for her work in collecting and arranging the material. The year has been a heavy one, and recognition and warm appreciation are extended to all members of the Health and Welfare Department for their whole-hearted collaboration.

WM. A. HORNE.

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SECTION I.

POPULATION.

The decline in the City's population still continues and according to the Registrar General's estimate as at 31st December, 1957, this was down to 1,079,800, 3,700 less than in 1956. This decrease too is in spite of a larger excess than usual of births over deaths, 9,239 as against 8,691 in 1956, as the following table will show :—

NATURAL INCREASE.			
1952 ...	6,496	1955 ...	7,748
1953 ...	7,405	1956 ...	8,691
1954 ...	8,227	1957 ...	9,239

Added to the estimated population in 1956 of 1,083,500, this Natural Increase would have given, in 1957, a population of 1,092,739, 12,939 more than the Registrar General's estimate.

This loss of population is accounted for partly by emigration abroad and to a greater extent to the migration outwith the City, some into the adjacent counties, some to other areas of Scotland and the United Kingdom. Exact figures are not available but the Registrar General has estimated that in 1957 some 6,000 persons emigrated overseas and 9,200 to other areas in the United Kingdom, about 15,200 persons in all. This figure, however, is reduced to 12,900 when adjustment is made for recruitment to and releases from, the Services.

In 1956 some 10,200 persons left the City, 3,500 for destinations abroad and 6,700 to other parts of Scotland and the United Kingdom.

Consideration of the changes in the number of local government electors on the Voter's Roll between October, 1956, and February, 1957, to some extent confirms this estimate, since during that period there was a reduction of 7,648 in the number of voters. This figure multiplied by the ratio of population to voters established at the 1951 Census, represents a population loss of some 11,360 persons. On this basis the following estimate of the population was obtained :—

Population as at December, 1956	1,083,500
<i>Add</i> Natural Increase 1957	9,239
	<hr style="width: 100%;"/>
	1,092,739
<i>Deduct</i> Loss from Migration based on Decrease in Voters' Roll	11,360
	<hr style="width: 100%;"/>
	1,081,379
	<hr style="width: 100%;"/>

The Registrar General's estimate of 1,079,800 has therefore been used for the calculation of all rates throughout this Report.

Ward Population.—Details of the population in each ward of the City are given in Appendix Table I and the distribution of the population in the five administrative divisions of the City is shown in Section XIV—General Sanitary Administration, page 313. Ward populations are based on the Census ratio of population to local government electors as changes in the electoral register provide as accurate an index as any of the movement of population between wards.

Parallel with this continual migration outwith the City there is a constant movement of population between the wards themselves, mainly outward from the older congested areas of the City to the new housing schemes just on the periphery. In 1957 only four wards showed an increase of any size, all of them outer wards with large housing schemes. Of these two were north of the river, Maryhill (260) and Knightswood (6,482). South of the river, the Castlemilk Scheme in Cathcart Ward accounted for an increase of some 6,645 persons and Pollokshaws in the south-west for 1,067. In spite of the influx of population into the Drumchapel Scheme which accounts for the increase in Knightswood Ward, there was a decrease in the overall population north of the river from 690,215 in 1956 to 684,595 in 1957. South of the river the population increased by 1,920 to 395,205.

Decreases in the ward populations ranged from 78 in Camphill to 1,795 in Gorbals and included among others 1,319 in Anderston, 1,208 in Cowcaddens, 1,082 in Mile End and 869 in Govan.

Institutional Population. On the 30th June each year a special census of persons resident in hospitals and institutions, hotels, etc., is taken by the district inspectors and in 1957 this population totalled 25,366, a reduction of 150 from the previous year. Squatters are included in this return but their numbers are steadily diminishing and in 1957 were reduced still further to 29.

The largest institutional population (2,962) was in Exchange Ward where most of the City's hotels are located. Of the 2,373 persons in Pollokshields Ward more than half were resident in Hawkhead Mental Hospital and the remainder in Crookston Home or distributed throughout the many nursing homes and residential homes (for children and for aged persons) which are a feature of this area. Robroyston and Stobhill Hospitals together account for most of the 2,211 persons in Springburn

Ward. Provan Ward where Barlinnie Prison and Gartloch Hospital are located had an institutional population of 2,003, 298 more than in 1956.

The main Glasgow hospitals are distributed throughout the City as shown in the following table :—

LOCATION IN WARDS OF THE VARIOUS GLASGOW HOSPITALS
AND THE NUMBER OF PERSONS RESIDENT THEREIN
AS AT 30TH JUNE, 1957.

Ward	Hospital	Persons Resident
1. Shettleston and Tollcross	Lightburn	64
2. Parkhead	Belvidere	460
7. Provan	Gartloch	921
9. Springburn	Stobhill	1,432
	Robroyston	713
10. Townhead	Royal Infirmary	1,196
	Eastern District	285
11. Exchange	Royal Maternity	411
12. Anderston	Ear, Nose and Throat	111
	Royal Hospital for Sick Children	415
13. Park	Eye Infirmary	105
	Royal Beatson Memorial	119
14. Cowcaddens	Baird Street Auxiliary	42
15. Woodside	Oakbank	265
16. Ruchill	Ruchill	625
18. Maryhill	Eastpark Home	72
19. Kelvinside	Gartnavel	1,031
	Homoeopathic	26
	Redlands	52
20. Partick East	Western Infirmary	927
23. Yoker	Knightswood	191
	Blawarthill	55
24. Knightswood	R.H.S.C., Drumchapel	115
30. Fairfield	Shieldhall	92
	Elder Cottage	30
	Southern General	1,111
	David Elder	54
32. Pollokshields	Hawkhead	1,269
34. Pollokshaws	Darnley	68
35. Govanhill	Samaritan	199
36. Langside	Victoria Infirmary	814
		<hr/> <u>13,270</u>

The major changes were in Exchange (376), Maryhill (244), Cowcaddens (149) and Kelvinside (109), due to decreases in the hotel, barrack, lodging-house and hospital population respectively.

The institutional population as at 30th June, 1957, was accommodated as follows :—

	1957	1956
General Hospitals	3,185	3,165
Fever Hospitals	1,276	1,305
Mental Hospitals	3,221	3,059
*Sanatoria and other Hospitals	6,403	6,266
Hotels	2,498	2,748
Common Lodging Houses	2,744	2,897
Hostels, Old Folks' Homes, etc.	2,305	2,290
Special Institutions (Barracks, etc.)	3,705	3,724
Squatters	29	62
	<u>25,366</u>	<u>25,516</u>

* Includes nursing homes.

Acreeage.—The area of the City remains unaltered at 39,725 acres. The following table shows the progress of the City's expansion since the beginning of the Century :—

	Acres
1901	12,681
1911	12,975
1921	19,183
1931	29,511
1951	39,725

The 37 wards of the City vary considerably in size, from the smallest, Woodside, with 170 acres to Provan with 4,846 acres. Cowcaddens, Woodside and Gorbals are the only three wards which have remained unchanged in area throughout the various extensions to the City and alterations in ward boundaries which have taken place since the wards were first " recast " in 1920.

Density.—The average density of the City remains unchanged at 27 persons per acre. Three of the oldest wards of the city, Townhead, Gorbals and Woodside, are still the most densely populated with densities in each case of over 100, well above those of the other 34

wards. The progressive reduction in the density of these wards over the past thirty-six years is shown as follows :—

			Woodside	Gorbals	Townhead
1921	...	...	222	207	171
1931	...	...	195	186	156
1951	...	...	158	145	116
1952	...	...	150	139	114
1953	...	...	148	136	112
1954	...	...	144	131	109
1955	...	...	140	128	107
1956	...	...	137	121	105
1957	...	...	133	114	102

As in 1956, 22 wards showed some reduction in density during the year. In 12 wards, density remained unchanged and in only three was there any increase in density during 1957. These were Knightswood (from 21 to 25), Pollokshaws (from 15 to 16) and Cathcart (from 10 to 13 persons per acre), all due to the influx of population to the new housing schemes in these areas.

Occupied Houses. A return of occupied and unoccupied houses (including inhabitant occupiers) as at Whitsunday of each year is compiled by the City Assessor and the following analysis is based on the information given in this return.

In 1957 the total number of occupied houses in the City was 324,350, compared with 321,368 in 1956, an increase of 2,982. The distribution of these throughout the municipal wards of the City is shown in Appendix Table II and in the five administrative divisions on page 314. This year the greatest increase (3,203) was in Cathcart Ward where the Castlemilk Housing Scheme is now well advanced. North of the river, in Knightswood Ward, where the Drumchapel Scheme is nearing completion, another 1,043 houses have been added. Other increases, mostly due to house building, were Provan (721), Pollokshaws (265), Langside (174), Govanhill (133) and Pollokshields (106). Closure and demolition of old properties was largely responsible for decreases in the number of houses in Cowlares (363), Gorbals (302), Anderston (267), Dalmarnock (222), Mile End (217), Kingston (198) and Cowcaddens (197).

The number of occupied houses in the City according to size is as follows :—

	1957	Compared with	1956
One apartment	31,876	Decrease ...	1,384
Two apartments	104,485	Decrease ...	1,228
Three apartments	102,023	Increase ...	3,656
Four apartments	60,450	Increase ...	1,496
Five apartments and over ...	25,516	Increase ...	442
	<u>324,350</u>		<u>2,982</u>

The considerable decrease in the number of (occupied) one-apartment houses is of course the *net* total for the City, but there were major *increases* in two wards, 133 in Knightswood and 75 in Cathcart as a result of provision made for single and aged persons in the new housing schemes in these areas. This illustrates how, with the advent of the flats for single and aged persons which are now a feature of the more recent housing schemes, the category of "one-apartment house" is assuming a new significance. At one time synonymous with "a single end" it may now refer to a service flat or accommodation for the aged or single person, as well as to a single apartment in a tenement property.

The decrease in occupancy of the older type of one-apartment house was 1,384 in all (this figure takes no account of the increase of 187 in the unoccupied one apartments).

The distribution of the 31,876 occupied one-apartment houses throughout the 37 wards ranges from 21 in Yoker to 3,368 in Dalmar-nock with the greatest concentration in the older parts of the City. Twelve wards have over 1,000 of this type of house.

The following table shows the total number (occupied and empty) of one-apartment houses, with the relative proportion of houses of all sizes in each of the following :—

	Number	As Percentage of Houses of all Sizes
Dalmarnock	3,455	29.3
Hutchesontown	2,894	31.0
Mile End	2,432	22.2
Woodside	1,570	20.6
North Kelvin	1,315	15.6
Calton	1,300	18.7
Cowcaddens	1,239	17.5
Cowlairs	1,228	16.2
Townhead	1,222	12.9
Shettleston and Toller-cross ...	1,206	9.0
Gorbals	1,176	14.4
Govan	1,162	13.1
Partick West	1,010	11.7
Kingston	972	14.0
Kinning Park	927	11.5

Unoccupied Houses.—The number unoccupied at Whitsunday, 1957, was 3,547 compared with 2,953 in 1956. This represents an increase of 594 and marks a further advance in the number of houses falling—and remaining—vacant. The following table shows the steady increase in number since 1950 :—

NUMBER OF EMPTY HOUSES.

	1957	1956	1955	1954	1953	1952	1951	1950
1 Apartment	892	705	520	371	320	206	169	117
2 Apartments	1,145	825	768	546	399	347	250	142
3 Apartments	571	541	510	412	372	301	218	144
4 Apartments	402	362	329	489	288	223	154	92
5 Apartments and Over	537	520	506	501	512	400	253	157
	<u>3,547</u>	<u>2,953</u>	<u>2,633</u>	<u>2,319</u>	<u>1,891</u>	<u>1,477</u>	<u>1,044</u>	<u>652</u>

These figures suggest that the new Rent Act has not as yet had the effect that was anticipated. It would appear that these houses are still being offered for sale or at a rent which the situation or condition of the house does not justify.

Of this total of 3,547, 15·1 per cent. were houses of five apartments and over compared with 17 per cent. in 1956. Park Ward had the greatest number of empty houses, 214 compared with 212 in 1956 and of these, 83 (39 per cent.) were of five or more apartments. This and other wards in which over 30 per cent. of the empty houses were of five apartments and over are shown in the following table :—

NUMBER OF EMPTY HOUSES.

	Total	Five Apartments and Over	Percentage
Park	214	83	39
Partick East	206	66	32
Pollokshields	94	58	62
Craigton	64	23	36

Dean of Guild Court Linings.—During the year ended 31st August, 1957, 3,033 linings were granted compared with 3,769 in 1956. Details of the number and size of house for which these were granted are given in Appendix Table III, with a comparison of the figure for the preceding years from 1919. Of the total linings granted, 1,656 were for three-apartment, 848 for four-apartment, 190 for five-apartment and 9 for six apartment houses. Accommodation for single and for aged persons is to be provided by 138 single and 192 two-apartment houses situated mainly in the Easterhouse and Castlemilk Housing Schemes. A small number will be included in the Summertown Road and Hutchesontown (First Development) Areas.

METEOROLOGY.

The year was a mild one with no extremes of temperature, the winter of 1956-57 being the least severe since that of 1924-25. A mild and sunny spring was followed by a cool, wet summer and an indifferent autumn. There was more than the average amount of sunshine this year. The mean temperature for the year was 48.3° F. compared with 46.7° F. in 1956 and is above the average for the preceding seven years 1950 to 1956. Since 1920 the mean temperature has fluctuated between 46° F. and 48° F., the three decennial averages for 1920/29, 1930/39 and 1940/49 being 47° , 47.6° and 47.4° F. respectively. During that period the lowest mean temperature recorded was 46.1° F. in 1924 and the highest, 49.3° F. in 1949.

January, with a mean temperature of 39.9° F. (35.6° F. in 1956) was the warmest January in Glasgow since 1949 in spite of a cold spell with frost and some fog from the 15th to the 17th, and some snow. December had a very similar mean temperature of 39.7° F. and the lowest day temperature of any month, 24° F. on the 15th. Frost and fog occurred together on the 2nd and 9th of this month and frost on the 23rd (snow fell on the 10th and lay for two days). February, however, was the coldest month (for the fourth successive year) with a mean temperature of 38.1° F. (34.3° F. in 1956) with a cold spell of frost and fog from the 18th onwards and a snow storm on the 23rd, the snow lying for five days. March was mild with a mean temperature of 45.9° F., the highest since 1945 (46.0° F.) and above its seasonal average. April too was warmer, with 47.3° F. compared with 44.2° F. in 1956. May with 49.6° F. was cooler than usual, its mean temperature being below the average for the preceding seven years. A temperature of 71° F., was, however, recorded on the 26th of this month. The highest day temperatures, 82° F. and 81° F., were recorded on the 15th and 16th June, this month being warmer than of late, with a mean temperature above the average. July, with 59.5° F. compared with 57.7° F. in 1956, was, with one exception (1955), the warmest since 1949. So too was August with 58.9° F. as against 53.4° F. in the previous year. September was cooler, the highest day temperature recorded during the month being only 64° F., with a mean temperature of 51.2° 3° below the seasonal average. October with 49.0° F. (47.8° in 1956), was the warmest since 1951 (49.7° F.) with a fine spell early in the month, followed by unsettled weather and strong winds. Mean temperature for November, 43.3° F., was 1.1° higher than in 1956 and this month was a mild one, especially towards the close.

Although there were almost the same number of wet days in 1956 (221) and 1957 (220) rainfall was heavier, 42.05 inches in 1957 as against 38.19 inches in 1956. This is, however, about the average of the ten years 1940/49 (42.21 inches) though above that of the preceding seven years 1950/56 (40.69 inches).

January was the wettest month with 5.53 inches compared with only 2.80 inches in 1956 and was the wettest January since 1948 (6.13 inches). Rainfall in February, 3.25 inches, was about the seasonal average and, with the same number of wet days (17) as July, had a very similar rainfall. March was unusually wet, with 24 wet days and 4.58 inches of rain, almost twice its seasonal average. In 1956 the respective figures were 12 and 2.59 inches. April, which in the four previous years has been drier than usual, reverted to its seasonal normal with 2.10 inches in 1957. Rainfall in May was heavier than in 1956, 3.04 inches as against 2.03 inches, but comparable with that of the two preceding years 1954 and 1955. June, however, was drier, 2.41 inches in 1957 as compared with 3.11 inches in 1956.

In 1956 rainfall in July was exceptionally heavy (5.88 inches) but this year the amount recorded, 3.51 inches, was nearer the seasonal average. The variation in the rainfall since 1920 onwards in this, Glasgow's favourite holiday month, is shown as follows :—

RAINFALL IN THE MONTH OF JULY.

	Amount in inches		Amount in inches
1920-29 (average) ...	3.57	1955	1.23
1930-39 ..	3.92	1956	5.88
1940-49 ..	3.25	1957	3.51
1950-54 ..	4.40		

August, with 4.10 inches, was drier than in 1956 (4.98 inches) but almost as wet as October (4.16 inches). The amount of rainfall recorded in each of these months has shown considerable variation in recent years. September was the third driest month of the year with only 18 wet days and 2.92 inches of rain as against 21 days and 5.10 inches in 1956. The driest month was November with only 17 wet days and 1.69 inches of rain, an amount closely comparable with the 1.65 inches in 1956. In 1951, 1953, and 1954, a rainfall of over 6 inches was recorded in this month. December had no less than 23 wet days and 4.76 inches of rain, not much more than the 4.53 inches recorded in 1956 and almost exactly the amount in 1953 (4.73 inches).

There was more sunshine in 1957, 1,264 hours as against 1,196 in 1956, and so, with the exception of 1955 (1,563 hours), the sunniest since 1952 (1,280). With the exception of January and March the first half of 1957 was sunnier than in 1956, 780 hours as against 734. January (33 hours) and December (33.3 hours) were equally dull, although the latter month compared favourably with December, 1956, when only 5 hours sunshine was recorded. In both months there was some fog but this was not dense or persistent. November too was duller, 37 hours compared with 54 in 1956 and 49 in 1955. There was some fog on the 9th of this month, along with frost. February had more sunshine, 68 hours as against 42 in 1956 but March was very dull with only 41 hours sunshine, less than half that recorded in 1956 and 1955. April with 169 hours was the sunniest since 1942 (188 hours) while May, 202 hours, although not so sunny as in 1955 (238 hours), was the sunniest since 1951 (214 hours). June had the greatest amount of sunshine of all the months and with a total of 267 hours was the sunniest June since records were started in 1914. Sunshine in July, 129 hours, was less than in 1956 (144) and like the rainfall in this month, is a very variable figure from year to year. August was brighter than in 1956, with 114 hours as against 108, although duller than in 1955 when 177 hours were recorded. September, with 124 hours, had the same amount of sunshine as in 1955 but almost twice that of 1956 (68 hours). October was one of the duller months with only 46 hours sunshine compared with 83 hours in 1956 and 79 in 1955.

There was a severe storm early in February and strong winds late in October.

SECTION II.

VITAL STATISTICS.

The following is a summary of the principal vital statistics of the city :—

SUMMARY.

	1957	1956	1955	1954	1953
Population	1,079,800	1,083,500	1,085,100	1,084,700	1,085,000
Acreage	39,725	39,725	39,725	39,725	39,725
Persons per acre	27	27	27	27	27
Number of Inhabited Houses	324,350	321,368	317,894	312,323	307,783
Deaths—Number registered	13,883	14,034	14,086	13,658	13,586
Deaths—After correction for Transfers	13,177	13,194	13,275	12,750	12,827
Births—Number registered	22,581	22,622	21,670	21,228	20,519
Births—After correction ...	22,413	21,885	21,023	20,977	20,232
Death rate per 1,000 living—All causes	12·20	12·18	12·23	11·75	11·82
Birth rate per 1,000 living	20·76	20·20	19·37	19·34	18·65
Deaths under One Year—After correction ...	774	720	765	736	723
Deaths under One Year—Per 1,000 births ...	35	33	36	35	36
Neonatal death rate—Per 1,000 live births ...	23·0	20·8	22·7	21·5	22·2
Stillbirth rate per 1,000 births (live and still) ...	26	26	27	29	27

Particulars of the causes of mortality together with the rates are given in Table VIII in the Appendix, and the age and sex distribution in Table IX.

BIRTHS.

With the exception of 1953 when there was a slight setback, the number of births registered each year has increased steadily since 1950. This trend was continued in 1957 although the increase on the previous year's figure (528) was smaller than that between 1955 and 1956 (862). Excluding the two post-war years, 1946 and 1947, the 22,413 births

registered in 1957 is the greatest number recorded since 1932 (22,732) and is above the average for the period 1930-1939. The following table shows the trend since 1930 :—

1930-39	...	...	22,238	1955	...	...	21,023
1940-49	...	...	21,941	1956	...	...	21,885
1950-54	...	...	20,334	1957	...	...	22,413

The rate per 1,000 of the population was 20·76 compared with 20·20 in 1956 and 19·37 in 1955. This is still above the rate for Scotland as a whole, 19·0 per 1,000 in 1957 as against 18·5 and 18·0 respectively.

The proportion of male births increased slightly, from 51·1 per cent. in 1956 to 51·2 in 1957.

Dalmarnock for the fourth year in succession had the greatest number of births (1,008) of any of the 37 wards, and has now taken the place of Gorbals in this respect. Other wards contributing more than 900 births were Shettleston and Tollcross (922), Hutchesontown (946), Cathcart (947), and Mile-End (950).

The effect on the vital statistics of a ward such as Cathcart following the influx of population into the Castlemilk Housing Scheme in that area is quite striking. From 1949 to 1953 this ward consistently had an unfavourable balance between births and deaths due mainly to a steady decrease in births. In 1954, however, for the first time, over 300 births were registered and the increase since has been considerable—403 in 1955, 644 in 1956 and 947 in 1957, already one more than in Hutchesontown. The birth rate rose sharply from 22·8 in 1956 to 27·2 in 1957 and now ranks with Dalmarnock (27·9). The highest birth rate of all the 37 wards was again Hutchesontown with 34·7 (32·6 in 1956). Other wards with high rates were Cowcaddens (31·2), Gorbals (30·2), Woodside (30·4), Kingston (29·3) and Townhead (28·9), all the old congested wards of the City. Twenty-one wards had rates above the City average, and only one, Whiteinch (20·7), had almost exactly the same rate. Fifteen wards had rates below the city average. The lowest rate, for the third year in succession, was that of Craigton (11·2). Other low rates were Yoker (11·8), Pollokshields (12·4), Langside (12·9), Pollokshaws (13·5), Camphill (13·6) and Kelvinside (14·4).

One aspect of the low birthrates in all but two of these wards has been commented on in previous reports. Since 1949, with the exceptions

indicated in the table which follows, Kelvinside, Camphill and Langside have consistently shown an excess of deaths over births.

	1957		Decrease (except where indicated by *)						
	Births	Deaths	1957	1956	1955	1954	1953	1952	(1948-51)
Kelvinside ...	259	257	2*	30	28	48	51	71	104
Camphill ...	279	352	73	121	93	44	71	96	246
Langside ...	316	335	19	70	109	52	14*	13	90

In 1957, however, Kelvinside, for the first time since 1948 had a favourable balance of 2, due almost entirely to a decrease in the number of deaths (287 in 1956), the number of births, 259, being only two more than in 1956.

From 1948 to 1954 only one other ward, Partick East in 1951, had more deaths than births but this was not repeated. The natural increase in this ward, however, is small, only 19 in 1957.

In 1955 there was for the first time an excess of deaths over births in other two wards, Yoker and Craigton. Scrutiny of the births and deaths in these two wards from 1948 onwards revealed a well established trend—a decreasing number of births coinciding with an increase in the deaths. The only interruption in this trend occurred in Craigton in 1952, when there were fewer deaths, and in Yoker in 1954 when there were more births than previously, and the balance was more favourable. In 1956 this downward trend was arrested in Craigton ward. Births were again reduced in number, but so too were the deaths, resulting in a small favourable balance of nine. Although there were more births in this ward in 1957, deaths also had increased and the balance was again unfavourable. In Yoker, in 1956, the births were offset by exactly the same number of deaths, both slightly fewer than in 1955. In 1957 the position was practically unchanged, the number of deaths (329) being exactly the same as in 1956 and the births (327) two less. The following table shows the gradual reduction in the natural increase in these two wards from 1948 to 1957 :—

NATURAL INCREASE.

	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Yoker ...	182	120	53	54	51	18	60	—4	—	—2
Craigton ...	211	167	117	40	97	50	20	—14	9	—25

It is interesting to note that at the 1951 Census the population in each of these wards was very similar in age constitution :—

PERCENTAGE OF THE POPULATION IN EACH AGE GROUP.

	0-4	5-14	15-64	65+
Yoker	6.8	15.0	70.8	7.4
Craigton...	6.8	15.4	70.1	7.7

Illegitimate Births. During 1957 1,045 births were registered compared with 1,051 in 1956. This is 4.7 per cent. of the total births, a decrease of 0.1 from the previous year. The following table shows the trend in this rate since 1900 :—

1900	...	...	6.2	1950	...	...	5.5
1925	...	...	5.8	1955	...	...	4.7
1935	...	...	5.9	1956	...	...	4.8
1945	...	...	8.3	1957	...	...	4.7

The highest ward rates were those of Park (10.8), Gorbals (7.4), Exchange (7.4), Woodside (7.3), Kingston (6.5) and Cowcaddens (6.4). The lowest rate was that of Fairfield (2.1) followed by Langside (2.2), Cathcart (2.4), Craigton (2.6) and Kelvinside (2.7).

A more accurate comparison of the legitimate and illegitimate birth rates is obtained when the calculation is based on the number of women of child-bearing ages ; the former on married women of 16 to 44 years of age, and the latter on the unmarried women and widows of the same ages. This is given in the following table (the latest available figure being that of 1956) :—

GLASGOW—BIRTH RATES, DISTINGUISHING LEGITIMATE AND ILLEGITIMATE IN CERTAIN YEARS FROM 1871.

(Based on Figures of the Register-General).

Year	Number of Legitimate Births	Rate per 1,000		Number of Illegitimate Births	Rate per 1,000 Unmarried Women and Widows 16-44 Years
		Married Women 16-44 Years	Illegitimate Births		
1871	17,118	298	1,749	27	
1881	17,605	293	1,501	22	
1891	18,304	283	1,553	21	
1901	22,676	260	1,530	14	
1911	19,966	229	1,603	14	
1921	27,790	238	1,922	13	
1931	21,504	176	1,427	10	
1951	19,029	134	1,062	9.6	
1952	19,378	137	961	8.9	
1953	19,211	136.5	1,021	9.7	
1954	19,954	141.9	1,023	9.9	
1955	20,036	142.2	987	9.9	
1956	20,834	147.4	1,051	10.9	

These rates are higher than those for Scotland as a whole. In 1956 the comparable legitimate birth-rate for Scotland was 137·4 and the illegitimate 9·6.

MARRIAGES.

There was a decrease in the number of marriages in 1957—10,329 compared with 11,072 in 1956 and 10,651 in 1955. This represents a rate of 9·6 per thousand of the population as against 10·2 for the previous year. The following table shows the trend of the marriage rate since 1871 :—

MARRIAGES PER THOUSAND PERSONS LIVING.

1871-1880	9·1	1946-1950	9·8
1881-1890	9·3	1951	9·6
1891-1900	9·4	1952	9·5
1901-1910	8·8	1953	9·7
1911-1920	9·7	1954	9·6
1921-1930	8·9	1955	9·8
1931-1940	9·7	1956	10·2
1941-1945	11·0	1957	9·6

DEATHS.

There was another decrease, although small, in the number of deaths registered in 1957, 13,883 compared with 14,034 in 1956. After correction for transfers 1,614 outward and 908 inward, this figure was reduced to 13,177, 17 less than in the previous year. In 1957, Glasgow with 21·0 per cent. of the population of Scotland accounted for 21·6 per cent. of all the deaths, 0·3 more than in 1956. The death rate for the city, 12·2 per 1,000, has remained unchanged since 1955 although the rate for Scotland has fallen from 12·0 in 1956 to 11·9 in 1957.

Camphill ward still has the highest death rate of all the 37 wards, 17·16 in 1957 as against 18·1 in 1956. In the past eight years there has been only one occasion (in 1954) when another ward, (Kelvinside), had the highest rate. Other high death rates were Partick (East) (16·3), Govanhill (15·0), Park (14·6), Kelvinside (14·3), Exchange (13·8), Woodside (13·8), Fairfield (13·8), Langside (13·6), Calton (13·5), Parkhead (13·4). Seventeen wards had rates above the city average and only one, Kingston, had a similar rate. In 1957, for the seventh successive year Pollokshaws had the lowest rate (7·6) of all the wards. Other wards with low rates were Knightswood (8·9), Springburn (9·0), Pollokshields (9·1) and Provan (9·6).

Age and Sex Distribution.—This decrease in the total number of deaths was not common to both sexes, and although there were fewer female deaths (66) there were 49 more deaths among males. Male deaths totalled 7,017 as against 6,968 in 1956 and female deaths 6,160 and 6,226 respectively. (The average number of male and female deaths in the preceding six years, 1951-1956, has been 7,072 and 6,294 respectively). The proportion of male deaths was higher than usual, 53·3 per cent. as against 52·8 in 1956. There is little variation in this figure from year to year.

Details of the age and sex distribution of deaths according to the International Classification of Causes of Death (Short List) are given in Appendix Table IX.

The age distribution of deaths as a rate per 1,000 deaths at all ages is shown from 1947 onwards in the following table. In 1947, 16 per cent. of all the deaths occurred at ages under 15 years and 61 per cent. at ages over 55. In 1957 the relative proportions were 7 per cent. and 76 per cent. There were increases in all the age groups in males with the exception of the 35-45's which remained practically the same as in 1956. There were 70 fewer deaths at ages over 55. Although the total female deaths were fewer there were increases in the age groups under 1 year, between 35 and 45 and 55 to 65. With the exception of ages 65 and over (in which there were 142 fewer deaths) the figures for the other age groups were very similar to those of 1956.

RATE PER 1,000 DEATHS AT ALL AGES.

	—1	—5	—15	—25	—35	—45	—55	—65	65+	Total
1947 ...	130	17	18	35	39	49	99	162	451	1,000
1951 ...	64	12	9	16	25	45	98	180	551	1,000
1953 ...	57	9	9	13	23	43	102	175	569	1,000
1955 ...	58	7	7	10	18	37	100	179	584	1,000
1956 ...	55	6	6	8	18	35	96	184	592	1,000
1957 ...	59	7	7	9	19	37	98	185	579	1,000

Male deaths in the "over 55" age group numbered 5,160 compared with 5,230 in 1956 and 5,196 in 1955, while female deaths, 4,911 in 1957 were 99 fewer than in 1956. The proportion of the over 55's to male deaths at all ages was 73·5 per cent. (75·1) in 1956. Deaths of females over 55 accounted for 79·7 per cent. of all female deaths compared with 80·5 in 1956.

Relative Frequency of Causes of Death.—A comparison is made in the following table of the commonest causes, or groups of causes, of

death which together were responsible for 80 per cent. of all deaths in 1957 and over 81 per cent. in 1956.

	Number	1957 Per cent. of all Causes	Number	1956 Per cent. of all Causes
Heart Disease	3,745	28.42	3,740	28.35
Malignant Neoplasms ...	2,360	17.91	2,331	17.67
Vascular Lesions of the Central Nervous System	1,784	13.54	1,942	14.72
Violence (Suicide, Road Traffic Accidents, etc.)	615	4.67	597	4.52
Bronchitis	588	4.46	656	4.97
Pneumonia	575	4.36	579	4.39
Congenital Malformations and Diseases of Early Infancy ...	521	3.96	518	3.93
Pulmonary Tuberculosis ...	361	2.74	368	2.79
	<u>10,549</u>	<u>80.06</u>	<u>10,731</u>	<u>81.34</u>

With the exception of Violence and Bronchitis, the relative frequency of the eight main causes remained unchanged from 1956. As a result of the increase in deaths from Violence in 1957 and a decrease in deaths from Bronchitis, Violence now takes precedence of the latter as fourth on the list.

An analysis of the provisional figures of the causes of death for the whole of Scotland shows the first three causes as above but followed by Violent Causes, Congenital Malformations and Diseases of Early Infancy, Pneumonia, Bronchitis and Influenza in that order. Together the eight causes account for 80.9 per cent. of the total deaths compared with the city figure of 80.1. Bronchitis and Pneumonia accounted for a higher proportion of the city deaths, 4.46 and 4.36 per cent. respectively as against 3.29 and 3.34 for the country as a whole. Pulmonary Tuberculosis, which ranks ninth as a cause of death for Scotland as a whole accounted for 2.74 per cent. of the city deaths and 1.09 for the whole country. In only two groups, Heart Disease and Vascular Lesions were the proportions lower for the city; for Scotland the respective figures were 31.70 and 15.65. The proportion of deaths due to Malignant Causes was slightly higher for the City, but of the same order, 17.91 as against 17.57. So too with the deaths from Violent Causes, 4.67 as against the Scottish figure of 4.58. Similarly with Congenital Malformations and Diseases of Early Infancy in respect of which the proportion of the city deaths was 3.96 and for Scotland 3.67.

Causes of Death.—The following table is a summary of the causes of death as shown in Appendix Table VIII arranged in the principal groups according to the International Classification adopted in 1950.

SUMMARY OF DEATH RATES PER MILLION FROM PRINCIPAL CAUSES.

	1957	1956	1955
General Diseases—			
(a) Infectious	35	41	64
(b) Tuberculosis—			
(1) Respiratory	334	340	340
(2) Non-Respiratory	21	25	31
(c) Malignant (Cancer, etc.)	2,186	2,151	2,139
Diseases of the Nervous System (including Mental Disorders)	1,955	2,022	1,994
Diseases of the Circulatory System	4,089	4,052	4,060
Diseases of Respiratory System (including Influenza)	1,310	1,282	1,284
Diseases of Digestive System	389	384	346
Congenital Defects and Diseases of Early Infancy ...	547	478	521
Violence	570	551	582
All Other Causes	767	851	873
	<u>12,203</u>	<u>12,177</u>	<u>12,234</u>

Infectious Disease.—Mortality from infectious disease continues to decline and the rate of 35 per million in 1957 was 6 less than in 1956 and almost half the rate for 1955. Diarrhoea under 2 years of age is the major cause of death and in 1957 accounted for 13 of the 38 deaths in this group. The rate, which apart from a slight increase in 1955, has been falling steadily since 1952, was reduced still further in 1957 to 12 per million. In 1956 it was 20. As in 1956 there were three deaths from Dysentery, a male aged 22, a 3 year old girl and a woman of 63. The death of a 73 year old woman was ascribed to Streptococcal Sore Throat but there were no deaths from either Scarlet Fever or Diphtheria. Three deaths from Measles were all female, one under two years and two under ten years. Whooping Cough was the cause of death of 3 male infants (one 4 months and two 6 months) and 2 females (an infant of 1 month and child of 4 years). Cerebrospinal Fever accounted for 5 male and 4 female deaths, all but one under 2 years of age. There were 3 deaths from acute Encephalitis Lethargica, two males of 2 years and a woman aged 41. Erysipelas was the cause of death of a 62 years old woman.

Tuberculosis.—Deaths from pulmonary tuberculosis numbered 361, only seven less than in 1956. Of this total three were children under 5 years of age (one of them a 9 month old infant). The mortality rate, the lowest yet recorded, was 334 per million, six less than in 1956. The rate which was fallen steadily since 1948, when it was as high as

1,142 per million, now shows a tendency to become stabilised around 340, a little more than a third of the rate of 874 recorded as recently as 1950.

The following table shows the age distribution of the deaths from pulmonary tuberculosis (stated as a percentage of the total).

		—15	—20	—25	—35	—45	—55	—65	65+	All Ages
MALES—										
1957	...	0.4	—	1.6	7.7	11.4	22.0	26.4	30.5	100.0
1956	...	0.8	0.8	1.7	7.1	10.0	21.2	32.1	26.3	100.0
1955	...	0.8	0.4	1.2	12.8	11.6	26.4	28.8	18.0	100.0
1953	...	1.3	0.6	3.9	12.1	13.0	22.8	29.0	17.3	100.0
1951	...	2.1	2.8	5.8	13.1	16.1	20.7	24.9	14.5	100.0
FEMALES—										
1957	...	1.7	—	1.7	17.4	28.7	17.4	7.8	25.3	100.0
1956	...	0.8	1.6	4.7	31.2	20.3	12.5	6.3	22.6	100.0
1955	...	0.8	4.2	8.4	25.2	21.9	13.4	14.3	11.8	100.0
1953	...	3.6	7.9	11.0	25.0	22.6	12.2	10.4	7.3	100.0
1951	...	5.7	9.0	18.1	23.0	18.5	9.1	8.7	7.9	100.0

This sex difference in the age distribution of mortality from the pulmonary form of the disease should be compared with the following table in which the rates for each sex and age-group are based on the respective Census populations :—

PULMONARY TUBERCULOSIS :

RATES PER 1,000 POPULATION IN EACH AGE GROUP.

		—15	—20	—25	—35	—45	—55	—65	65+	All Ages
MALES—										
1930-32	...	0.17	0.95	1.35	1.22	1.54	1.59	1.21	0.76	0.96
1950-52	...	0.10	0.24	0.73	0.74	0.95	1.36	2.02	1.49	0.82
FEMALES—										
1930-32	...	0.26	1.47	1.41	1.11	0.79	0.62	0.60	0.23	0.75
1950-52	...	0.12	0.67	1.40	1.08	0.66	0.35	0.39	0.30	0.55

There was another reduction in the death rate from Non-Pulmonary Tuberculosis in 1957, 21 per million compared with 25 in 1956 and 31 in 1955. Six of the twenty-two deaths were due to Tubercular Meningitis, and only one of these was a child under 1 year of age. Of the other five, three were children under ten years of age, and two adults of 23 and 25 years respectively. Abdominal Tuberculosis was responsible for the deaths of two males aged 59 and 77 years and a young woman of 18. Deaths from other forms of tuberculosis were again reduced in 1957, 13 as against 17 in the previous year and all but two over 20 years of age. Both of these were in the age group 15 to 20 years.

Diseases of the Nervous System.—The steady increase in the deaths from this group of causes, which has been apparent since 1952, received its first check in 1957 with a decrease of 81 from the 1956 total of 2,192. The rate, which in 1954 was 1,964, in 1955 1,994 and 2,022 in 1956, has now fallen to 1,955 per million. Vascular Lesions which rank third on the list of major causes of death, accounted for 1,784 (85 per cent.) of the 2,111 deaths in this group. Thirteen deaths were allotted to Non-meningococcal Meningitis, two more than in 1956, and of these, 4 males and 3 females, were under one year of age. There was some increase in the deaths attributable to certain mental diseases included in this group, 46 as against 36 in 1956 and 33 in 1955. Deaths from a variety of other nervous diseases numbered 268, 65 more than in 1956.

Diseases of the Circulatory System.—This is the major group of causes of death, accounting in 1957 for 4,415 deaths in all, 34 per cent. of the deaths from all causes, a slight increase on the proportion which since 1952, has remained between 32 and 33 per cent. In 1956, deaths in this group totalled 4,390. As in the two previous years 77 per cent. of the deaths in this group were due to arteriosclerotic and degenerative heart disease which in 1957 accounted for no less than 3,400 deaths (3,378 in 1956.) The proportion of these deaths classified as coronary thrombosis was 55 per cent. in 1957 as against 52 per cent. in 1956 and 49 per cent. in 1955 and the number of such deaths has risen steadily since 1953.

Mortality from this form of heart disease is consistently higher in men than in women as the following table shows :—

		Males	Females	Total
1954	...	958	555	1,513
1955	...	1,062	609	1,671
1956	...	1,102	637	1,739
1957	...	1,151	717	1,868

In each of the preceding three years, male deaths have been of the order of 63 per cent. of the total, and the female deaths, 36 per cent. In 1957 the proportion of male deaths fell to 62 per cent. while that of the females increased to 38 per cent.

This disparity is not common to every age group as the following age distribution of the deaths in 1957 will show :—

		—35	—45	—55	—65	—75	+75	All Ages
Males	...	11	37	195	352	343	213	1,151
Females	...	—	10	42	144	311	210	717
		11	47	237	496	654	423	1,868

Deaths at all ages under 55 years accounted for 21.1 per cent. of all the male and 7.3 per cent. of the female deaths. This is an increase on the 1956 figures of 20.7 and 6.1 respectively. These figures do not include 12 deaths (5 male and 7 female) from Angina Pectoris. Of these only 1 was under 55 years of age.

Deaths from Rheumatic Heart Disease were more numerous, 245 compared with 217 in 1956, and of these only seven were under 20 years of age. Seventeen were over 75 years. Deaths from hypertension numbered 338 as against 387 in 1956 and "Other diseases of the heart" accounted for 160 deaths, 15 more than in 1956. Two hundred and seventy-two deaths were due to a variety of circulatory disorders shown in the Short List as "Other diseases of the Circulatory System," compared with 263 in 1956.

Diseases of the Respiratory System.—There was an increase in the total number of deaths in this group in 1957, 1,414 as against 1,390 in 1956 and 1,394 in 1955 and the rate rose from 1,282 per million in 1956 to 1,310 in 1957. This increase was due entirely to the mortality resulting from the Influenza epidemic (a detailed report of which appears at page 137). There were 161 deaths from Influenza in 1957 as against 50 in 1956 and 40 in 1955 and the rate rose from 46 to 149 per million. Deaths from Pneumonia (excluding Pneumonia of the Newborn) were about the same as in 1956, 575 and 579 respectively, and the rate 533 per million, practically unchanged. Bronchitis deaths were again fewer, 588 in 1957 as against 656 in 1956 and 700 in 1955 and accounted for 42 per cent. of all the deaths in this group compared with 47 per cent. in 1956. A detailed review of the age and sex distribution of the deaths from Bronchitis and Pneumonia will be found in the Infectious Disease Section, page 130 of this Report.

There were fewer deaths from "Other Respiratory Diseases," 90 as against 105 in 1956.

Diseases of the Digestive System.—Mortality in this group in 1957 was very similar to that of 1956, 421 deaths as against 416, and a rate only a little higher, 389 per million compared with 384. Of these 421 deaths 108 were attributed to Ulcer of the Stomach or Duodenum, 8 less than in 1956. The rate which was 112 per million in 1955 and 107 in 1956 has again fallen to 100. There were more deaths from Appendicitis, 25 as compared with 17 in the previous year and the rate increased

from 16 to 23. Deaths from Intestinal Obstruction and Hernia were fewer, 79 as against 92 in 1956 and the rate fell from 85 to 73 per million. As in 1956 there were four deaths from Gastritis and Duodenitis. Deaths from Enteritis and Colitis (over two years of age) were only one more, 50, than in 1956. Cirrhosis of the Liver showed an appreciable increase, from 34 in 1955 and 40 in 1956 to 65 in 1957. A variety of causes grouped under "Other Digestive Diseases" was responsible for 90 deaths, eight fewer than in the previous year.

Deaths from Violence.—This group now ranks fourth as a major cause of death. In 1957 there was another increase in the number of these deaths, 615 compared with 597. The death rate rose from 551 per million in 1956 to 570 in 1957. The male deaths (401) were more numerous than in 1956 (374) and above the average for the two periods 1945-49 and 1950-54. In contrast the female deaths (214) were fewer than in the two previous years and below the average. In 1957 male deaths were more numerous than the female in every age group with the exception of under 2 years and over 75. Female deaths preponderate at ages over 75.

The age and sex distribution of the deaths from Violence since 1945 is shown in the following table:—

Year	MALES						FEMALES					
	—5	—15	—45	—65	65+	Total	—5	—15	—45	—65	65+	Total
1945-49 Ave.	39	45	89	92	87	352	25	13	27	40	92	197
1950-54 Ave.	41	31	88	95	102	357	28	11	26	40	116	221
1955 ...	47	25	101	105	107	385	26	9	33	37	141	246
1956 ...	39	29	97	114	95	374	25	13	26	42	117	223
1957 ...	37	26	111	110	117	401	32	6	25	45	71	214

Reference is made elsewhere in this Report (in the Maternity and Child Welfare Section) to the deaths of infants under one year and of toddlers (1 to 5 years) as a result of accidents in the home. The Department of Health for Scotland has estimated that in the period 1950 to 1955 home accidents were responsible for 48 per cent. of the total fatal accidents in males and 85 per cent. in females. "Home accidents are a problem of the very young and the elderly. Among women over 65 the rate of occurrence of fatal home accidents is almost double that of men of the same age. While accidental suffocation by food is the main cause of fatal accidents in infants, accidental falls and accidental poisoning by gases and vapours are the principal cause of fatal home accidents in the elderly."

These figures refer to Scotland as a whole, but are equally applicable to Glasgow. In 1957, 30 per cent. of all male deaths from violent causes were over 65 years of age and 51 per cent. of female deaths were in this age group. The respective figures for 1956 were 25 and 52 per cent.

An analysis of the 117 male and 106 female deaths over 65 years of age shows the following distribution of violent causes, compared with 95 male and 117 female deaths in 1956 :—

PERCENTAGE OF TOTAL DEATHS FROM VIOLENT CAUSES
AT AGES OVER 65 YEARS.

	Males		Females	
	1957	1956	1957	1956
Road Accidents	22.2	23.1	8.5	11.1
Poisoning (Gas, etc.)	11.1	11.6	14.2	12.0
Falls	44.5	45.3	62.3	65.0
Burns	3.4	3.2	4.7	8.5
Suicide	5.1	4.2	0.9	0.8
Drowning	8.6	5.3	1.9	—
Other Violence	5.1	7.3	7.5	2.6
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Exact information as to the circumstances in which the accident occurred, or the cause, is in a very large number of deaths, not recorded and any figures regarding the number of accidents occurring at home should therefore be regarded as an approximation only. In 1957 the information available suggests that 36 per cent. of the male deaths from violence in this age group and 71 per cent. of the female deaths occurred at home.

Falls were the most common accident in this age group in 1957, especially among women (62.3 per cent. as against 44.5 per cent. in males) and a large proportion of these female deaths occurred at home. Gas poisoning accounted for 28 deaths (13 male ; 15 female), 36 per cent. of all the deaths from this cause. There were fewer burning accidents in 1957, 9 as against 13 in 1956, and of these only one was due to clothing becoming ignited (as in this instance at a gas fire). Deaths from accidental drowning were more numerous in 1957 with 12 deaths compared with only 5 in 1956.

Congenital Defects and Diseases of Early Infancy.—With the exception of the deaths from congenital malformations, all the deaths attributed to this group occur at ages under 1 year and these are discussed in the appropriate section of Maternity and Child Welfare. A large proportion of the deaths from congenital malformation also occur before 1 year of age (in 1957, 140 of the 178 deaths were in this age group) but the mortality is not confined to this age group and the deaths, though relatively small in number, are widely distributed throughout all the age groups, the over 65's not excepted. The physical handicap of a congenital defect does not apparently curtail the normal lifespan—a fact of some importance in the provision of welfare services for those severely incapacitated by a congenital defect.

The distribution of the deaths from congenital malformations in 1957 is compared with the average for 1950-56 as follows :—

Males—	—1	—15	—45	—65	—75	75+	All Ages
1950-54 (average)	61	6	5	3	1	—	77
1955	51	10	7	5	—	—	73
1956	63	5	4	6	1	—	79
1957	77	9	8	2	2	—	98
Females—							
1950-54 (average)	54	7	4	3	1	—	70
1955	67	12	7	—	1	1	88
1956	56	7	3	3	1	2	72
1957	63	5	9	2	—	1	80

Cancer.—The group Malignant Neoplasms now ranks second on the list of major causes of death, accounting in 1957 for 17·9 per cent. of the deaths from all causes, and 17·7 per cent. in 1956. Deaths in this group totalled 2,360 in 1957, 29 more than in 1956 and 131 more than the average for the period 1950 to 1955. The trend of the rate during that period was as follows :—

RATE PER MILLION.					
1950	...	2,006	1954	...	2,063
1951	...	2,002	1955	...	2,139
1952	...	2,055	1956	...	2,151
1953	...	2,053	1957	...	2,360

The following table, which relates the deaths from cancer to the total deaths from all causes for each sex and in each age group, shows the higher proportion of deaths from cancer among males and the

tendency of this proportion to increase, while that for females has till now remained fairly stable around 16 per cent.

DEATHS FROM CANCER AS PERCENTAGE OF DEATHS FROM ALL CAUSES
FOR EACH SEX AND IN EACH AGE GROUP.

		-15	-25	-35	-45	-55	-65	-75	75+	All Ages
MALES—										
1930/32	...	0.17	1.83	2.78	6.80	12.79	17.95	15.38	8.12	8.73
1950/52	...	1.38	6.93	12.76	16.76	22.07	22.24	18.34	11.96	16.10
1953	...	1.90	11.83	13.16	23.96	26.06	24.78	21.48	11.39	18.35
1954	...	2.35	10.84	12.24	16.54	25.21	23.61	21.04	14.47	18.35
1955	...	1.27	10.97	8.13	18.14	24.82	26.04	19.31	13.05	17.92
1956	...	1.17	16.66	11.11	20.52	25.29	25.82	19.91	14.45	18.75
1957	...	2.80	15.71	10.49	18.86	25.62	24.90	20.15	13.92	18.41
FEMALES—										
1930/32	...	0.12	0.65	3.91	11.76	21.41	21.69	15.31	8.19	10.24
1950/52	...	0.98	3.43	8.94	22.76	27.05	25.02	17.36	9.24	15.11
1953	...	1.50	3.89	14.39	24.62	29.68	27.60	18.01	9.24	16.24
1954	...	2.44	8.69	11.96	27.27	33.07	24.54	17.80	10.20	16.63
1955	...	1.45	11.53	15.96	32.71	33.26	26.55	17.97	10.44	16.98
1956	...	1.60	8.47	9.43	33.86	34.36	24.81	19.02	9.33	16.45
1957	...	2.80	5.77	17.14	49.09	31.04	26.59	19.30	10.74	17.34

The ratio of male to 100 female deaths rose steadily from 1931 to 1953 and has since shown a tendency to fall. This trend received a temporary check in 1956 but was resumed in 1957 when the ratio was again reduced to 121.

RATIO : MALES TO 100 FEMALES.

1931	...	...	97	1954	...	...	126
1941	...	...	103	1955	...	...	120
1951	...	...	113	1956	...	...	128
1952	...	...	121	1957	...	...	121
1953	...	...	129				

This male preponderance obtains throughout the age groups with the exception of the 35 to 44 age period when deaths from cancer of the breast and the genital organs increase the mortality among females.

MALE DEATHS AS A RATIO OF 100 FEMALE DEATHS.

		-15	-25	-35	-45	-55	-65	-75	75+	All Ages
1930-32	...	114	271	60	66	76	102	111	68	92
1950-52	...	180	150	120	83	126	123	118	106	116
1953	...	183	367	100	105	137	142	140	99	129
1954	...	144	150	129	68	124	143	132	188	126
1955	...	117	150	53	70	133	151	118	103	120
1956	...	100	180	140	86	117	167	117	120	128
1957	...	145	367	83	77	139	141	116	105	121

In the age period 45-55 there occurs in both sexes a sharp rise in the number of cancer deaths. As will be seen from the table on page 60, the heaviest mortality (in both sexes) is in the age groups 55 to 75 with some reduction in the over 75s. In 1957, 56.7 per cent. of all the male deaths occurred between the ages of 55 and 75 and 20.1 at over 75. In 1956 the respective ratios were 57.8 and 20.8. In females there was little change in the younger age group, 53.8 compared with 53.3 but

the proportion of deaths at ages over 75 was higher, 23·1 per cent. compared with 22·1.

The following table shows the age distribution as a percentage of the total cancer deaths in each sex :—

1957	—15	—25	—35	—45	—55	—65	—75	75+	All Ages
Males ...	1·2	0·8	1·2	3·9	16·0	28·3	28·5	20·1	100·0
Females ...	1·0	0·3	1·7	6·1	14·0	24·2	29·6	23·1	100·0

Apart from a slight recession in 1954 male mortality from cancer has increased steadily since 1951 and continued to do so in 1956. In 1957 however there was a small decrease, 1,292 deaths as against 1,307 in 1956. Mortality from cancer in females is now showing a tendency to increase also and following a small reduction in 1956, again increased in 1957 with 1,068 deaths compared with 1,024.

Of the total male deaths from cancer, 514 (39·8 per cent.) were due to cancer of the respiratory organs, the corresponding percentage among females being only 9·8 per cent. The trend of this form of cancer is clearly shown in the following table which compares the male and female deaths from cancer of the respiratory and of the digestive organs over a period of some years :—

	1932/41	1942/51	1952	1953	1954	1955	1956	1957
MALES—								
Respiratory Organs	96	244	421	486	460	498	526	514
Digestive Organs	491	554	522	496	487	494	499	499
FEMALES—								
Respiratory Organs	38	69	73	84	83	110	105	105
Digestive Organs	429	473	468	459	454	470	468	468

In 197 of the 499 male and 201 of the 468 female deaths from cancer of the digestive organs, the site of the disease was located in the stomach and small intestine. This is a decrease of 7 from the 1956 figure of 223 male and 182 female deaths. The deaths from cancer of this site from 1952 onwards are compared, as follows, with the average for each of the two preceding ten-year periods :—

DEATHS FROM CANCER OF THE STOMACH AND INTESTINE.

	1932/41	1942/51	1952	1953	1954	1955	1956	1957
Males ...	190	219	207	208	183	205	223	197
Females ...	161	179	176	203	149	188	182	201

There were fewer deaths from cancer of the rectum, 105 compared with 124 in 1956. The male deaths numbered 59 as against 46 female deaths. Deaths from cancer of the liver and biliary passages were more

numerous, 61 as against 56 in 1956, and of these 29 were females. There was an increase in the number of deaths from cancer of the pancreas, 81 as against 75 in 1956 and of these 45 were males and 36 females. The sub-group " Other Digestive Organs " accounted for 247 deaths, three more than in 1956.

The 44 deaths from cancer of the buccal cavity and pharynx were three less than in 1956, the female deaths four fewer than last year, while the male deaths increased by one. Male deaths from cancer of this site have shown a marked decline since the 1930's in comparison with the female mortality, which, after a tendency to increase in the years 1933 to 1943, has shown little variation since.

DEATHS FROM CANCER OF THE BUCCAL CAVITY AND PHARYNX.

	1932/41	1942/51	1952	1953	1954	1955	1956	1957
Males ...	70	57	48	37	65	28	35	36
Females ...	11	13	19	12	16	15	12	8

There was an increase of 28 deaths from cancer of the breast, which after cancer of the stomach is the most common form of death from cancer in the female, accounting for 202 deaths in 1957. Almost half this number occurred in the age groups 45 to 65, and 82 at ages over 65. In addition there was one death from cancer of the breast in males.

Deaths from cancer of the lymphatic and haematopoietic tissues were again more numerous, 98 in 1957 as against 77 in 1956 and 94 in 1955. These 98 deaths were almost equally divided between the sexes (50 males and 48 females) and eleven were under 15 years of age.

Most of the deaths in this group are due to leukaemia, a form of cancer which has attracted some attention in recent years owing to the fact that a larger proportion of the cases than in other kinds of malignant disease, occur in children. Since 1951 deaths from leukaemia have varied between 34 and 40 a year but in 1957 there was a sharp increase, 50 as against 34 in 1956. Of these 50 deaths (28 male and 22 female), seven were under five years of age. In 1956 only one death was in this age group. The distribution throughout the age groups is shown as follows for 1956 and 1957 :—

	—1	—2	—5	—20	—45	—55	—65	—75	75+	All Ages
1956 ...	—	—	1	4	6	5	4	9	5	34
1957 ...	1	1	5	2	4	6	7	15	9	50

Details of the age and sex distribution of cancer with respect to the site of the disease are given in the table on the next page. The totals for both sexes for certain earlier years are shown for comparison.

GLASGOW, 1957—DEATHS FROM CANCER IN THE DIFFERENT SITES AS GIVEN IN THE INTERNATIONAL LIST OF CAUSES OF DEATH

SITE OF LESION	MALES											FEMALES											Both Sexes		
	MALES											FEMALES											Both Sexes		
	-15	-25	-35	-45	-55	-65	-75	75+	Total	-15	-25	-35	-45	-55	-65	-75	75+	Total	1957	1956	1946	1936			
Buccal Cavity and Pharynx ...	—	—	—	1	2	4	13	16	36	—	—	—	—	1	—	3	2	2	8	44	47	71	83		
Digestive Organs and Peritoneum—	—	—	—	3	5	9	15	12	44	—	—	—	—	2	6	9	8	25	69	52	74	58			
(a) Oesophagus ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
(b) Stomach and small Intestine including Duodenum ...	—	—	2	7	39	50	61	38	197	—	—	—	—	5	13	52	73	56	201	398	405	392	359		
(c) Rectum ...	—	1	1	1	9	8	19	20	59	—	—	—	—	1	2	10	15	18	46	105	124	143	97		
(d) Liver and Biliary Passage ...	—	—	—	—	4	7	7	14	32	—	—	—	—	2	7	10	8	29	61	56	70	85			
(e) Pancreas ...	—	—	—	2	8	15	7	13	45	—	—	—	—	1	3	8	12	36	81	75	54	37			
(f) Peritoneum ...	—	—	—	—	1	1	—	—	2	—	—	—	—	—	1	—	—	4	6	11	7	7			
(g) Other Digestive Organs ...	—	—	2	4	13	19	36	46	120	—	—	—	—	1	4	27	39	44	127	247	244	344	274		
Respiratory Organs ...	—	1	4	22	104	203	133	47	514	—	—	—	—	1	7	22	38	21	105	619	631	225	124		
Uterus ...	—	—	—	—	—	—	—	—	—	—	—	—	—	1	10	24	15	5	75	75	99	105	109		
Other Female Genital Organs ...	—	—	—	—	—	—	—	—	—	—	—	—	—	1	8	17	20	11	79	79	51	32	32		
Breast ...	—	—	—	—	—	—	1	—	1	—	—	—	—	5	15	44	56	36	202	203	175	160	135		
Male Genito-Urinary Organs ...	—	1	2	1	1	9	27	27	68	—	—	—	—	—	—	—	—	—	—	68	78	65	67		
Skin ...	—	—	1	—	1	2	4	2	10	—	—	—	—	1	—	3	2	1	8	18	19	23	21		
Lymphatic and Haematopoietic Tissues ...	5	5	1	4	10	11	10	4	50	6	2	2	4	4	9	15	6	48	98	77	—	—	—		
Other or Unspecified Organs ...	11	3	2	5	10	27	35	21	114	5	—	2	7	9	14	20	18	75	189	187	159	124			
Totals ...	16	11	15	50	207	365	368	260	1,292	11	3	18	65	149	259	316	247	1,068	2,360	2,331	1,924	1,612			

SECTION III.

MATERNITY AND CHILD WELFARE.

All members of the staff of the Maternity and Child Welfare Department had a very busy year. The attendances at the child welfare centres again showed a gratifying increase and for the first time since 1948 the numbers of expectant mothers attending ante-natal clinics rose and did not decrease ; 5,937 expectant mothers came for supervision compared with 5,608 in 1956. The attendances at the post-natal clinics are still comparatively low and it is evident that there is urgent need for continued education of mothers with regard to the importance of a post-natal check-up.

The health visitors were particularly busy and it was regrettable that throughout the year there were vacancies in the staff. Health visitors are the key workers in the field of health education, particularly through their home visits to all families in the City where there are young children. Staff shortages reduce the amount of time which they can spend " on the district ". Concern is felt at the delay by the Government in implementing the recommendation in the Report of the Working Party on the Field of Work, Training and Recruitment of Health Visitors. Stimulation of recruitment of health visitors is urgently required.

It is most disappointing to have to record an increase in infant deaths from 720 in 1956 to 774 in 1957. This number represents an infant mortality rate of 35 compared with 33 in the previous year. Analysis of the deaths shows the increase is entirely in the deaths of infants in the early days and weeks of life—neo-natal deaths. The causes of these deaths are connected with the health of the mother and her confinement and their prevention lies mainly in the field of maternal care, the standard of her ante-natal supervision and her confinement. There was actually a decrease of 7 in the number of deaths of infants after the first month of life. The neo-natal death rate accounts for 67 per cent. of the total infant mortality rate and of these early deaths approximately 82 per cent. occur in the first week of life. Two wards which normally have infant mortality rates in the twenties, Park and Knightswood, had sharp increases in the rates to 53 and 45 respectively. An analysis of the deaths in these wards showed that of the 20 deaths in Park Ward, compared with 10 in 1956, 14 were associated with the pregnancy and confinement of the mother and only 6 occurred in the

later months. In Knightswood Ward where there were 39 deaths compared with 19 in 1956, again 31 were neo-natal, 2 due to regurgitation of vomit, 1 burning accident and 5 from infection.

Prematurity and congenital malformation are the two main causes of infant deaths and deaths from the latter cause are increasing year by year. The present position with regard to infant mortality in the City highlights the working and administration of the maternity services under the National Health Service. Difficulties have arisen in most areas in the country but the problems in Glasgow are particularly pressing. The two main deficiencies are the serious inadequacy of maternity-bed accommodation in the City and the large number of expectant mothers who are not receiving mothercraft training during their pregnancy. At only one maternity hospital are such classes held and at Corporation ante-natal clinics where such teaching is available the numbers are considerably less than before 1948. It is hoped that the report by the committee which is presently investigating the working of the maternity services in Scotland will contain recommendations about these two important aspects of the service.

The services of all members of the staff were freely available for talks on health matters. Many requests came to the Department for speakers at various meetings and help was given to Girl Guides, Girls Training Corps and the British Red Cross Society in their schemes for the training of young girls in child care.

MATERNAL DEATHS.

In attendance at the ante-natal clinics were 5,677 patients whose pregnancy (excluding abortions) terminated in 1957. Among these, 3 deaths occurred, giving a death rate of 0.53 per thousand births compared with 0.71 in 1956. Causes of death among these 3 women were as follows:—

Delivery complicated by disproportion or malformation of foetus	... ..	1
Puerperal Phlebitis and Thrombosis	... ..	2

The maternal death rate of mothers attending the clinics was 0.53 compared with 0.47 for the *city* as a whole.

The following table, based on figures supplied by the Registrar General, compares the rates from each cause for the *whole city* with those of previous years.

STATEMENT SHOWING MATERNAL DEATHS AND RATES PER 1,000 BIRTHS
IN GLASGOW AND SCOTLAND IN THE YEARS 1953-1957.

	Deaths					Rate per 1,000 (live and still) Births				
	1953	1954	1955	1956	1957	1953	1954	1955	1956	1957
Accidents of Pregnancy ...	6	6	1	4	3	0.29	0.28	0.05	0.18	0.13
Puerperal Haemorrhage ...	4	2	2	5	1	0.19	0.09	0.09	0.22	0.04
Puerperal Septicaemia, including Post-abortive Sepsis	5	3	1	2	6	0.24	0.14	0.05	0.09	0.26
Toxaemia of Pregnancy, Albuminuria, Convulsions	5	4	2	4	1	0.24	0.18	0.09	0.18	0.04
Other Puerperal Diseases	2	1	1	1	—	0.10	0.05	0.05	0.04	—
Totals— Glasgow ...	22	17	7	16	11	1.06	0.74	0.33	0.71	0.47
Scotland ...	85	70	43	50	46	0.9	0.7	0.5	0.5	0.5

INFANT MORTALITY.

There were 528 more births in 1957 than in 1956 and a corresponding increase in the number of infant deaths, 774 as against 720. This is the highest figure recorded since 1951 when there were 831 deaths under one year of age. The mortality rate rose from 33 to 34.5 per 1,000 births.

The increase was common to both sexes, with, as always, a heavier mortality in the male infants. The rate for males was 39.3 and for females 29.6 per 1,000 births as against 37.6 and 27.9 respectively in 1956.

The trend of infant mortality in Glasgow over the past twenty-seven years has been as follows :—

1930-34	...	...	102	1952	...	...	41
1935-39	...	...	93	1953	...	...	36
1940-44	...	...	95	1954	...	...	35
1945-49	...	...	64	1955	...	...	36
1950	...	...	44	1956	...	...	33
1951	...	...	46	1957	...	...	35

Infant Mortality in Municipal Wards.—The deaths under one year and the infant mortality rates for 1957 and 1956 for each ward of the city are shown in Appendix Table X.

Park Ward had the highest rate (53), a sharp increase on the rate of 28 for 1956. Kingston followed closely with a rate of 52 as against 47 in the previous year. Other wards with high rates were Mile End (46), Knightswood (45), Cowcaddens (44), Hutchesontown (44), Maryhill (42), Pollokshaws (41), and Cowlairs (40). Fifteen wards in all had rates above the city average and only one, Townhead, the same rate. The lowest rate was that of Kelvinside (12). Other low rates were those of Dennistoun (14), Langside (16) and Pollokshields (18).

Details of the cause of death for each sex and each quarter of the first year of life are given in Appendix Table XI.

MALES—		Rate per 1,000 Births				
<i>Causes of Death</i>	1952	1953	1954	1955	1956	1957
I and II. Immaturity ...	26.9	26.9	27.1	27.8	25.1	28.4
III. Diseases of Respiratory System ...	5.4	4.8	3.9	4.9	4.7	4.8
IV. Diseases of Digestive System ...	4.3	2.4	2.5	2.3	1.9	0.9
V. Diseases of Nervous System ...	0.9	0.4	0.8	0.2	0.5	0.4
VI. Tuberculosis ...	0.6	—	0.3	0.1	0.1	0.1
VII. Infectious Diseases ...	0.6	0.4	1.1	0.4	0.4	0.4
VIII to XI. All other causes ...	5.0	5.3	4.9	3.7	4.9	4.3
All causes ...	43.7	40.2	40.6	39.4	37.6	39.3

FEMALES—		Rate per 1,000 Births				
<i>Causes of Death</i>	1952	1953	1954	1955	1956	1957
I and II. Immaturity ...	24.9	19.2	19.0	21.8	19.1	20.8
III. Diseases of Respiratory Systems ...	4.4	2.8	4.3	5.0	4.0	3.1
IV. Diseases of Digestive System ...	2.2	2.4	1.3	2.0	1.4	1.5
V. Diseases of Nervous System ...	0.9	0.2	0.4	0.4	0.1	0.4
VI. Tuberculosis ...	0.8	0.1	0.2	—	0.1	0.1
VII. Infectious Diseases ...	0.5	1.4	0.7	0.3	0.3	0.2
VIII to XI. All other causes ...	4.0	4.8	3.3	3.7	2.9	3.5
All causes ...	37.7	30.9	29.2	33.2	27.9	29.6

Ratio—Males to 100 Females	116	130	139	119	135	133
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Deaths from respiratory disease were again fewer, 89 as against 96 in 1956, and the rate fell from 4.30 in that year to 3.97 in 1957. This decrease was wholly confined to the female deaths (nine less than in 1956), the male deaths increasing by two. The respective rates were

4.8 per 1,000 births for males and 3.1 for females. Of these 89 deaths, 41 male and 21 female were due to pneumonia (excluding pneumonia of the newborn), 5 male and 6 female to bronchitis, one male and 3 female to influenza, and 8 male and 4 female to various forms of respiratory disease grouped under "Other Respiratory Disease".

There was another decrease in the deaths from digestive disease in 1957 due to fewer deaths from this cause among males (10 in 1957 as against 21 in 1956). There were 16 deaths of female infants, one more than in 1956. Of the 26 deaths in all, 4 male and 9 female deaths were due to diarrhoea.

Deaths from the various causes grouped under diseases of the nervous system were nine in all (five male and four female), two more than in 1956.

There were two deaths in the group—Malignant Neoplasms, one male from reticulosis and one female from acute leukaemia.

Tuberculosis was responsible for two deaths, a male infant seven months old who died from tubercular meningitis, and a female of nine months from the pulmonary form of the disease.

Deaths in the infectious disease group were few in number, seven in all, the same total as for 1956. Of these, whooping-cough accounted for three males and one female, and cerebro-spinal fever for two males and one female. All the males were under nine months and the female infants under six months of age.

"Violent causes" ranks fifth as a major cause of death in children under a year. During the past ten years (1948 to 1957) the lowest number recorded was 36 in 1948 and it has been as high as 58 (in 1953). The average for the period was 43, and the total for 1957, 47, was four more than in the previous year. Of these 47 deaths, 22 were male and 25 female infants and in each more than half (16) of the deaths occurred at ages between one and six months.

All but six of the deaths were due to asphyxia, and of these, 27 were due to inhalation of vomit or regurgitation of food. Suffocation by blankets accounted for one death, one infant was smothered in a pram, and overlaying caused the death of other three. In the remaining nine, the manner or cause of the accidental suffocation was not stated. Of the other six deaths from violent causes, two were the result of burning accidents, three were due to lack of care, and one was attributable to homicide.

The major cause of death in children under one year is still immaturity, and in 1957 553 or 71 per cent. of all the infant deaths were so attributable. This is 67 more than in 1956. Two-thirds of the increase was in the male deaths (326 as against 281), while the female deaths (227) were only 22 more than in 1956. In males increases were noted in the following :—Premature births (70 as against 50), congenital malformations (77 and 63), and injury at birth (62 and 50). Pneumonia of the new-born (17 and 9) accounted for almost twice the number of such deaths in 1956. The major increases, small as they were, in females were congenital malformations (63 and 56), diarrhoea of the new-born (7 and 0), premature birth (37 and 32) and haemolytic disease of new-born (8 and 4). The rate for males (28·4) is the highest recorded since 1951 (30·6) and 3·3 higher than the record low rate of 1956. The female rate was 20·8 as against 19·1 in 1956 and is only a little above the average for the previous four years.

Neonatal Mortality. Neonatal deaths numbered 516, an increase of 61 on the 1956 figure of 455. This is equivalent to a rate of 23·02 per 1,000 births as compared with 20·79 in 1956, the lowest so far recorded for the city. The rate for males was 27·17 per 1,000 births (24·23 in 1956) and the female rate 18·66 (17·19 in 1956). The rate for Scotland was 20 per 1,000, one above that for 1956.

The rates per 1,000 births for each sex and for each of the four chief causes of death in this age group, from 1952 onwards, are as follows :—

		1952	1953	1954	1955	1956	1957
Premature Birth	M.	5·91	5·55	4·52	6·89	4·29	6·10
	F.	5·69	3·99	5·03	5·72	2·80	3·38
Atelectasis	M.	5·33	5·74	6·08	7·44	6·80	6·62
	F.	4·78	4·29	3·85	4·44	5·42	4·66
Injury at Birth	M.	4·00	4·79	4·89	4·32	4·47	5·31
	F.	4·07	2·66	1·78	2·47	2·80	3·02
Congenital Malformations	M.	3·52	3·83	4·15	2·76	4·20	4·61
	F.	3·96	3·47	4·05	3·55	2·99	3·38

These infant deaths were analysed in more detail and the results, for 1957, were as follows :—

ANALYSIS OF INFANT AND NEONATAL DEATHS, 1957.

There was an increase in the actual number of deaths of children under 1 year—there being 774 against 720 in 1956 and 765 in 1955.

No information was available in 23 cases. An analysis was made of the remaining 751 and of this number 563 (75 per cent.) occurred in the first four weeks of life.

The age at time of death was as follows :—

1 week	...	...	...	422
2 weeks	...	...	...	52
3 weeks	...	...	...	25
1 month	...	...	...	64
2 months	...	...	...	52
3 do.	...	...	...	44
4 do.	...	...	...	24
5 do.	...	...	...	16
6 do.	...	...	...	15
7 do.	...	...	...	11
8 do.	...	...	...	8
9 do.	...	...	...	11
10 do.	...	...	...	1
11 do.	...	...	...	6
				751

The commonest causes of death were as follows :—

	No.	Per-centage
Congenital abnormality	142	= 18.9
Prematurity associated with some other condition	130	= 17.3
Prematurity (unqualified)	108	= 14.3
Pneumonia	82	= 10.9
Cerebral haemorrhage	45	= 5.9
Asphyxia neonatorum	42	= 5.5
Accidental asphyxia	41	= 5.45
Atelectasis	27	= 3.5
Respiratory disease (other than pneumonia)	23	= 3.1
Convulsions	22	= 2.9
Gastroenteritis	20	= 2.6

The number of cases of accidental asphyxia i.e. from inhalation of gastric contents, overlaying and smothering with blankets or pillows, give great concern and everything is being done to train the mothers of young children in order to prevent these tragedies occurring.

A further analysis was made of the 422 deaths in the first week of life.

It was found that 313 or 74.1 per cent. occurred during the first 24 hours.

Ante Natal Care.

General Practitioner	227
Hospital Clinic	99
Local Authority Clinic	85
No Ante Natal Care	11
	<hr/>
	422
	<hr/>

Attendance at Birth.

Institution	365
Domiciliary	57
	<hr/>
	422
	<hr/>

Cause of Death.

	Institution	Domiciliary
Prematurity with some other condition	109	4
Prematurity (unqualified)	95	9
Congenital abnormality	57	9
Cerebral haemorrhage	33	8
Asphyxia	24	12
Atelectasis	22	8
Rh. factor	9	—
Pneumonia	6	1
Haemorrhagic disease of newborn	6	1
Peritonitis	1	2
Neonatal infection	1	—
Placental infection	1	—
Meningitis	1	—
Cerebral anoxia	—	1
Cardiac failure	—	1
Inattention at birth	—	1
	<hr/>	<hr/>
	365	57
	<hr/>	<hr/>

This analysis shows that compared with 1956 there was an increase of 11 in the deaths from congenital abnormality, 13 more deaths from prematurity and 8 more from other causes.

Illegitimate Mortality. Deaths of illegitimate infants numbered 39 in 1957, three less than in 1956. There were 1,045 illegitimate births during the year, a decrease of 6, and the illegitimate mortality rate was 37.32 compared with 39.96 per 1,000 births. This compares with 734 deaths among 21,368 legitimate births and a rate for 1957 of 34.35. In 1956 the legitimate mortality was 32.54. There was one death for which the requisite information was not available.

Stillbirths. There was an increase in the number of stillbirths registered in the city in 1957, 637 as compared with 612. There were 65 outward transfers and 28 inward transfers so that the total for the city was 600 compared with 576 in 1956 and 578 in 1955. The rate of 26 per 1,000 live and stillbirths remains unchanged. From information obtained under the Notification of Births Act, it appears that 12 per 1,000 of all births attended at home by doctors were stillbirths and of those attended in institutions and nursing homes 35 per 1,000.

A special analysis was made of these stillbirths and the results were as follows :—

STILLBIRTHS, 1957.

There was a total of 600 stillbirths compared with 576 in 1956.

No information was available in 21 cases so that 579 fell to be investigated and analysed. The results are as follows :—

Male	275
Female	304
	<hr/>
	579
	<hr/>

Ante-Natal Supervision.

General Practitioner	308
Hospital Clinic	138
Local Authority	119
No Ante-Natal Care	14
	<hr/>
	579
	<hr/>

Position in Family.

1st	199
2nd	100
3rd	81
4th	59
5th	52
6th	26
7th	19
8th	17
9th	12
10th	4
11th	5
12th	3
13th	2
	<hr/>
	579
	<hr/>

Age of Mother.

17 years	...	...	3
18 "	...	...	11
19 "	...	...	12
20 "	...	...	23
20-25 years	...	...	118
25-30 "	...	...	172
30-35 "	...	...	115
35-40 "	...	...	92
40-45 "	...	...	29
45 plus	...	...	4
			579

Attendance at Birth.

Hospital	...	...	...	447	} 473
Nursing Home	...	...	...	26	
General Practitioner and Midwife	...	...	...	7	92
Midwife alone	...	...	...	7	} 14
Outdoor Maternity Staff	...	...	...	4	
Nobody in attendance	...	...	...	3	

Cause of Death in Relation to Place of Confinement.

	Institution	Domiciliary
Congenital abnormality	104	16
Maternal haemorrhage	90	10
Toxaemia in mother	41	1
Asphyxia	39	9
Condition associated with placenta	26	12
Condition associated with cord	25	7
Maceration	25	6
Cause unknown	22	9
Cerebral haemorrhage	20	4
Rh. factor	18	2
Prematurity associated with other conditions	14	7
Difficult labour	14	2
Prematurity (unqualified)	12	11
Maternal illness	6	2
Atelectasis	5	4
Malpresentation	5	2
Post Maturity	4	—
Rupture of Uterus	1	—
Intrauterine pneumonia	1	—
Suprarenal Haemorrhage	1	—
Congenital Debility	—	1
Precipitate labour	—	1
473		106

Mortality among Toddlers. There were more deaths in the age group 1 to 5 years in 1957, 100 compared with 85 in 1956 and 99 in 1955. The most common cause of death at these ages is accidents and violence, and deaths in this group in 1957 totalled 22. This is one more than in 1956 but eleven less than in 1955, and is equivalent to 22 per cent. of all the deaths in this age group. Of these 22 deaths, 15 were males and 7 females, two of the males and two of the females being under two years of age and the others under five.

Ten of the deaths (7 male and 3 female) were the result of road accidents. Three children died when the house went on fire, one from burns and two from suffocation. Two little girls died from burns, one, two years old, when her clothing was ignited at the fire, and the other, three years old, when her nightdress came in contact with an electric heater. There were three deaths from drowning, a boy of two years in a pond and other two boys of three years in the Forth and Clyde Canal. Accidental suffocation was cause of death in a one-year-old boy, and another of the same age was killed in his pram by falling masonry. A boy of two years and a girl of one year and eight months died as a result of assault.

Pneumonia accounted for eleven deaths (7 male and 4 female), bronchitis for one male, influenza for three males and one female, and "other respiratory diseases" for one male and one female death. Meningococcal infection resulted in the death of three males and three females. There were two deaths from pulmonary tuberculosis, one from dysentery, two from enteritis, one from whooping-cough, one from measles and two from acute infectious encephalitis. Twelve deaths were allotted to the group, "other nervous diseases," and there were nine deaths from congenital malformations. Deaths were much more numerous in the group, malignant neoplasms, with a total of 15 (9 male, 6 female) compared with only two in 1956. This unusually high figure should be compared with the deaths allotted to this group from 1951 onwards :—

	1951	1952	1953	1954	1955	1956	1957
Number of Deaths ...	6	6	6	12	3	2	15

Of these 15 deaths, three male and three female deaths were due to leukaemia.

The following table compares the infant mortality rate with that of toddlers and shows, with the exception of 1957, the progressive reduction in both since 1900 :—

Year	Infant Mortality Rate per 1,000 Births	Deaths 1-5 Years : Actual Number	Rate per 1,000 Population at Ages 1-5 Years
1900	153	2,754	39.2
1911	139	1,862	26.7
1921	106	1,494	19.2
1931	105	1,341	17.2
1941	111	635	8.3
1951	46	171	2.1
1952	41	140	1.8
1953	36	118	1.5
1954	35	92	1.2
1955	36	99	1.3
1956	33	85	1.1
1957	34.5	100	1.2

CHILD WELFARE SCHEME.

Child Welfare Centres, etc. There are now 51 ante-natal, 28 post-natal, 10 consultative, 93 child welfare, and 4 ultra-violet ray treatment sessions. In addition, three child welfare clinics still continue to be held at the Royal Maternity and Women's Hospital.

The time-table of the clinics as now organised is as follows :—

WELFARE CENTRES FOR EXPECTANT AND NURSING MOTHERS AND CHILDREN UNDER FIVE YEARS OF AGE.

	Clinics for Children and Nursing Mothers	Clinics for Expectant Mothers	Consultative Clinics and Clinics for Post-natal Mothers
20 COCHRANE STREET—	Thursday, 9 a.m.	—	—
33 RICHARD STREET—	Monday, 1.30 p.m.	Monday, 9 a.m.	Monday, 9 a.m.
	Wednesday, 9 a.m.	Tuesday, 1.30 p.m.	†Wednesday 1.30 p.m.
	Thursday, 9 a.m.	—	—
	Friday, 9 a.m.	—	—
12 SANDY ROAD—	Monday, 9 a.m.	Monday, 1.30 p.m.	Monday, 1.30 p.m.
	Wednesday, 1.30 p.m.	Thursday, 9 a.m.	†Friday, 9 a.m.
	Thursday, 1.30 p.m.	—	—
18 PLEAN STREET—	Tuesday, 9 a.m.	Monday, 1.30 p.m.	Wednesday, 1.30 p.m.
	Tuesday, 1.30 p.m.	Wednesday, 1.30 p.m.	†Thursday, 1.30 p.m.
	Wednesday, 9 a.m.	—	—
BLACKWOOD STREET—	Tuesday, 1.30 p.m.	Wednesday, 9 a.m.	Wednesday, 9 a.m.
	Friday 1.30 p.m.	—	—
15 HALBEATH AVENUE—	Monday, 1.30 p.m.	Monday, 9 a.m.	Monday, 9 a.m.
	Wednesday, 1.30 p.m.	Thursday, 9 a.m.	—
	Thursday, 1.30 p.m.	—	—
ROYAL HOSPITAL FOR SICK CHILDREN—	Tuesday, 9 a.m.	—	—
	Friday, 1.30 p.m.	—	—
15 GLENBARR STREET—	Monday, 9 a.m.	Monday, 1.30 p.m.	Monday, 1.30 p.m.
	Wednesday, 9 a.m.	Thursday, 9 a.m.	†Tuesday, 9 a.m.
	Friday, 9 a.m.	—	—
	Friday, 1.30 p.m.	—	—
194 FERNBANK STREET—	Monday, 1.30 p.m.	Monday, 9 a.m.	Monday, 9 a.m.
	Tuesday, 9 a.m.	Thursday, 1.30 p.m.	†Tuesday, 1.30 p.m.
	Thursday, 9 a.m.	—	—
101 DENMARK STREET—	Monday, 1.30 p.m.	Friday, 9 a.m.	†Wednesday, 9 a.m.
	Wednesday, 9 a.m.	—	Friday, 9 a.m.
	Friday, 1.30 p.m.	—	—
120 LIDDESDALE ROAD—	Wednesday, 1.30 p.m.	Monday, 9 a.m.	Monday, 9 a.m.
26 GLENFARG STREET—	Monday, 9 a.m.	Tuesday, 1.30 p.m.	Friday, 9 a.m.
	Tuesday, 9 a.m.	Friday, 9 a.m.	†Friday, 1.30 p.m.
	Wednesday, 1.30 p.m.	—	—
	Thursday, 9 a.m.	—	—
	Thursday, 1.30 p.m.	—	—

WELFARE CENTRES FOR EXPECTANT AND NURSING MOTHERS AND CHILDREN UNDER FIVE YEARS OF AGE—*Continued.*

	Clinics for Children and Nursing Mothers	Clinics for Expectant Mothers	Consultative Clinics and Clinics for Post-natal Mothers
60 AVENUEPARK STREET—	Tuesday, 1.30 p.m. Wednesday, 9 a.m. Friday, 9 a.m.	Tuesday, 9 a.m. Thursday, 1.30 p.m. —	†Monday, 1.30 p.m. Friday, 1.30 p.m. —
106 ORR STREET—	— — — — —	Monday, 9 a.m. Tuesday, 9 a.m. Wednesday, 9 a.m. Thursday, 1.30 p.m. Friday, 9 a.m.	Monday, 9 a.m. †Tuesday, 1.30 p.m. — — —
10 REDAN STREET—	Monday, 1.30 p.m. Tuesday, 1.30 p.m. Wednesday, 9 a.m. Wednesday, 1.30 p.m. Thursday, 9 a.m. Friday, 9 a.m. Friday, 1.30 p.m.	— — — — — — —	— — — — — — —
150 WELLSHOT ROAD—	Monday, 1.30 p.m. Tuesday, 9 a.m. Tuesday, 1.30 p.m. Wednesday, 9 a.m. Wednesday, 1.30 p.m. Friday, 1.30 p.m.	Monday, 9 a.m. Tuesday, 1.30 p.m. Thursday, 1.30 p.m. — — —	†Wednesday, 1.30 p.m. Thursday, 9 a.m. — — — —
MOBILE UNIT, CARNTYNE—	Tuesday, 1.30 p.m. Friday, 9 a.m. Friday, 1.30 p.m.	Tuesday, 9 a.m. — —	Tuesday, 9 a.m. — —
5 CRAIGLOCKHART STREET—	Monday, 9 a.m. Friday, 1.30 p.m.	Wednesday, 1.30 p.m. —	Wednesday, 1.30 p.m. —
74 WELLHOUSE CRESCENT—	Tuesday, 1.30 p.m. Thursday, 9 a.m.	Tuesday, 9 a.m. —	Tuesday, 9 a.m. —
26 FLORENCE STREET—	Monday, 9 a.m. Monday, 1.30 p.m. Tuesday, 1.30 p.m. Thursday, 1.30 p.m. Friday, 1.30 p.m.	Monday, 9 a.m. Tuesday, 1.30 p.m. Wednesday, 1.30 p.m. Friday, 9 a.m.	Tuesday, 9 a.m. †Friday, 1.30 p.m. — —
12 FAULDHOUSE STREET—	Thursday, 9 a.m.	Wednesday, 9 a.m.	Wednesday, 9 a.m.
39 BENGAL STREET—	Tuesday, 1.30 p.m. Wednesday, 1.30 p.m.	Friday, 1.30 p.m. —	Friday, 1.30 p.m. —
46 BALVICAR STREET—	Monday, 9 a.m. Monday, 1.30 p.m. Wednesday, 1.30 p.m. Thursday, 9 a.m.	Friday, 1.30 p.m. — — —	Friday, 1.30 p.m. †Friday, 9 a.m. — —
183 PROSPECTHILL ROAD, MOUNT FLORIDA—	Monday, 1.30 p.m. Tuesday, 1.30 p.m. Thursday, 9 a.m. Thursday, 1.30 p.m.	Wednesday, 9 a.m. Friday, 9 a.m. — —	†Tuesday, 9 a.m. Friday, 9 a.m. — —

WELFARE CENTRES FOR EXPECTANT AND NURSING MOTHERS AND CHILDREN UNDER FIVE YEARS OF AGE—*Continued.*

	Clinics for Children and Nursing Mothers	Clinics for Expectant Mothers	Consultative Clinics and Clinics for Post-natal Mothers
22 ARNPRIOR QUADRANT—			
Monday,	1.30 p.m.	Thursday,	1.30 p.m.
Thursday,	9 a.m.	—	—
BARLIA DRIVE—			
Tuesday,	9 a.m.	Tuesday,	1.30 p.m.
Friday,	1.30 p.m.	—	—
NETHERPLACE ROAD, POLLOK—			
Monday,	1.30 p.m.	Monday,	9 a.m.
Wednesday,	1.30 p.m.	Wednesday,	9 a.m.
Thursday,	1.30 p.m.	Thursday,	9 a.m.
Friday,	1.30 p.m.	—	—
132 WEIR STREET—			
Tuesday,	9 a.m.	—	—
Thursday,	9 a.m.	—	—
401 GOVAN ROAD—			
Tuesday,	1.30 p.m.	Monday,	9 a.m.
Wednesday,	1.30 p.m.	Tuesday,	9 a.m.
Friday,	9 a.m.	Thursday,	1.30 p.m.
20 ARKLET ROAD—			
Monday,	1.30 p.m.	Monday,	9 a.m.
Wednesday,	1.30 p.m.	Tuesday,	9 a.m.
Thursday,	1.30 p.m.	Tuesday,	1.30 p.m.
Friday,	1.30 p.m.	—	—
74 BERRYKNOWES ROAD—			
Friday,	1.30 p.m.	Monday,	9 a.m.
CRAIGMUIR ROAD, PENILEE—			
Wednesday,	1.30 p.m.	Monday,	1.30 p.m.
Friday,	1.30 p.m.	Wednesday,	9 a.m.
MATERNITY HOSPITAL—			
*Monday,	9 a.m.	Monday,	1.30 p.m.
*Wednesday,	9 a.m.	Tuesday,	1.30 p.m.
*Friday,	9 a.m.	Wednesday,	1.30 p.m.
—	—	Thursday,	1.30 p.m.
—	—	Friday,	1.30 p.m.
—	—	Saturday,	9.30 a.m.

† Consultative Clinics.

* Clinics for infants under One Year of Age.

INFANT CONSULTATIONS.

There was an increase of 244 in the number of sessions, 4,577 in 1957 compared with 4,333 in 1956.

The total number of primary attendances of all children was 15,516 and subsequent attendances 129,792 compared with the corresponding figures of 14,945 and 120,680 in 1956. Despite the decreased numbers recorded at some of the clinics primary attendances of children under one year of age were on the whole higher, 11,750 against 11,086 in 1956, and subsequent attendances, 108,669 also higher by 9,839, an increase of 5.5 and 9.05 per cent. respectively.

The following table gives the attendances at each consultation centre during 1957, with the corresponding total figures for the previous year :—

ATTENDANCES AT INFANT CONSULTATIONS, 1957.

	No. of Con-sulta-tions held	Children - 1 year		Children + 1 year		Total No. of Attendances		1956—Total No. of Attendances	
		Prim.	Sub.	Prim.	Sub.	Prim.	Sub.	Prim.	Sub.
<i>Central—</i>									
Cochrane Street ...	52	80	591	35	209	115	800	143	979
Richard Street ...	202	444	4,048	315	1,057	759	5,105	770	4,332
Partick ...	150	497	3,960	169	494	666	4,454	669	4,447
Blawarthall ...	153	447	4,385	228	1,276	675	5,661	608	4,735
Royal Hospital for Sick Children ...	102	134	1,608	95	631	229	2,239	255	2,359
Netherton ...	96	230	1,937	90	347	320	2,284	280	2,079
Drumchapel ...	151	396	3,582	186	628	582	4,210	521	2,968
<i>North—</i>									
Provan ...	200	552	4,117	174	657	726	4,774	731	4,689
Springburn ...	152	474	4,403	40	325	514	4,728	468	4,061
Denmark Street ...	148	294	2,930	75	209	369	3,139	341	2,747
Milton ...	50	173	1,475	31	89	204	1,564	173	1,376
Cowcaddens ...	299	590	5,529	180	1,096	770	6,625	760	6,959
Maryhill ...	153	540	4,363	195	1,067	735	5,430	693	5,520
<i>East—</i>									
Redan Street ...	353	1,227	9,877	194	1,899	1,421	11,776	1,594	12,172
Shettleston ...	301	705	7,158	108	1,690	813	8,848	952	9,171
Mobile Unit Carntyne ...	152	334	3,528	58	638	392	4,166	442	3,678
Garthamlock ...	98	122	1,154	85	378	207	1,532	257	1,403
Easterhouse ...	62	140	981	34	141	174	1,122	—	—
<i>South-East—</i>									
Gorbals ...	229	775	5,891	209	883	984	6,774	862	5,375
Pollokshaws ...	101	198	1,898	72	442	270	2,340	270	2,336
Balvicar Street ...	194	405	5,359	170	1,263	575	6,622	524	6,140
Oatlands ...	52	205	1,811	40	240	245	2,051	219	1,847
Mount Florida ...	202	447	5,219	164	1,314	611	6,533	556	6,016
Arnprior Quadrant	100	286	2,817	119	423	405	3,240	286	2,584
Barlia Drive ...	18	60	262	16	56	76	318	—	—
<i>South-West—</i>									
Pollok ...	200	466	4,302	139	1,315	605	5,617	623	5,420
Weir Street ...	104	196	1,822	62	376	258	2,198	250	2,207
Govan ...	153	466	3,579	185	580	651	4,159	591	4,037
Elderpark ...	200	501	5,943	166	613	667	6,556	642	6,459
Penilee ...	100	204	2,604	98	627	302	3,231	278	2,873
Berryknowes ...	50	162	1,536	34	160	196	1,696	187	1,711
	4,577	11,750	108,669	3,766	21,123	15,516	129,792	14,945	120,680

Infant Consultations are also held at the Maternity Hospital and attendances at these in 1957 numbered 1,892. This is a considerable decrease compared with the figure of 2,259 in 1956 and 2,608 in 1955. Part of this decrease is due to the hospital being closed for a short period, and mothers, under the impression that the consultations had also been discontinued, did not attend during this time. There has, however, been a noticeable falling off in the attendances recently, probably because mothers find it more convenient to attend the child welfare centre in their own area.

Ante-Natal Consultations. Sessions at ante-natal clinics numbered 2,605 compared with 2,516 for the preceding year. The total attendances were 52,097 compared with 49,722 in 1956; primary attendances were 5,937, or 329 more than the previous year (1956), subsequent attendances numbered 46,160 an increase of 2,046. Consultations and attendances at each of the Centres are shown in the following table:—

ATTENDANCES AT ANTE-NATAL CLINICS, 1957.

	No. of Clinic Sessions	Number of Attendances			Hospital Cases
		Primary	Subsequent	Total	
Richard Street ...	99	243	1,622	1,865	9
Partick... ..	100	259	1,942	2,201	5
Blawarthill ...	98	225	1,606	1,831	3
Netherton ...	50	81	753	834	1
Drumchapel ...	95	144	1,137	1,281	6
Provan ...	100	141	941	1,082	4
Springburn ...	100	137	921	1,058	15
Denmark Street ...	52	112	1,004	1,116	21
Milton ...	48	34	340	374	7
Cowcaddens ...	100	178	1,311	1,489	48
Maryhill ...	104	351	2,936	3,287	44
Orr Street ...	254	611	5,411	6,022	141
Shettleston ...	203	336	2,336	2,672	36
Mobile—Carntyne ...	52	62	470	532	—
Garthamlock ...	50	38	330	368	—
Easterhouse ...	32	38	168	206	—
Gorbals ...	202	601	3,493	4,094	12
Pollokshaws ...	52	99	712	811	8
Balvicar Street ...	52	136	1,048	1,184	8
Oatlands ...	51	146	964	1,110	—
Mount Florida ...	52	133	1,309	1,442	36
Arnprior Quadrant ...	52	105	762	867	9
Barlia Drive ...	8	18	42	60	—
Pollok ...	150	274	2,314	2,588	32
Govan ...	152	669	5,203	5,872	59
Elderspark ...	151	569	5,077	5,646	30
Penilee ...	98	114	1,182	1,296	7
Berryknowes ...	48	83	826	909	15
	<u>2,605</u>	<u>5,937</u>	<u>46,160</u>	<u>52,097</u>	<u>556</u>

ATTENDANCES AT POST-NATAL AND CONSULTATIVE CLINICS, 1957.

	No. of Consultations		Primary		Subsequent		Total	
	Post-natal	Consultative	Post-natal	Consultative	Post-natal	Consultative	Post-natal	Consultative
Richard Street ...	48	34	97	89	71	35	168	124
Partick ...	48	49	122	301	36	32	158	333
Blawarthill ...	49	44	84	127	11	78	95	205
Netherton ...	50	—	34	—	25	—	59	—
Drumchapel ...	48	—	42	—	22	—	64	—
Provan ...	48	39	51	50	44	11	95	61
Springburn ...	48	47	25	21	1	75	26	96
Denmark Street ...	52	50	28	92	6	133	34	225
Milton ...	48	—	10	—	1	—	11	—
Cowcaddens ...	52	47	45	106	28	72	73	178
Maryhill ...	50	48	126	166	152	179	278	345
Orr Street ...	48	41	130	231	157	36	287	267
Shettleston ...	52	31	84	84	22	36	106	120
Mobile—Carntyne	52	—	32	—	24	—	56	—
Garthamlock ...	50	—	13	—	9	—	22	—
Easterhouse ...	32	—	4	—	2	—	6	—
Gorbals ...	52	50	91	355	41	378	132	733
Pollokshaws ...	52	—	27	—	9	—	36	—
Balvicar Street ...	52	28	64	87	18	10	82	97
Oatlands ...	51	—	37	—	22	—	59	—
Mount Florida ...	52	28	80	112	32	20	112	132
Arnprior Quadrant	52	—	39	—	3	—	42	—
Barlia Drive ...	8	—	3	—	—	—	3	—
Pollok ...	52	51	119	265	169	267	288	532
Govan ...	50	48	131	365	49	177	180	542
Elderpark ...	52	52	102	451	129	163	231	614
Penilee ...	48	—	64	—	19	—	83	—
Berryknowes ...	48	—	20	—	10	—	30	—
	1,344	687	1,704	2,902	1,112	1,702	2,816	4,604

COURSES IN MOTHERCRAFT.

Courses in mothercraft are given in 26 of the centres, either during ante-natal sessions or at a class held specially for this subject. The course covers physiology of pregnancy and labour; preparation for confinement; making of layette; preparation for breast and artificial feeding; general care of the new-born infant, including bathing. Simple instruction on basic breathing is given by health visitors. Classes are open to any expectant mother in the City. They need not be attending the Local Health Authority ante-natal clinic for supervision. Efforts have been made to encourage general practitioners to refer expectant mothers to the centres for this teaching and the response has been a

little better during the past year. The importance of this educational work cannot be over-emphasised, and the mothers who attend appreciate very much this side of the work. It is during pregnancy that the mother is particularly responsive and at these classes she learns a great deal about child welfare, which helps her to be an intelligent mother.

"Health of Mother and Child" A new edition of this publication was issued in 1957, but only after a delay of some weeks. Accordingly, the number sold at clinics, 2,605, was lower than in 1956. The booklet is also sold at city hospital ante-natal clinics and to other Local Authorities in Scotland and in England. Requests for copies continue to be received from all parts of the world.

ULTRA-VIOLET RAY CLINICS.

It is still necessary and desirable to continue the arrangements for light treatment of certain children. The housing of the city is such that large numbers of families are still living in a bad environment, and ultra-violet light treatment is most beneficial in the prevention or early treatment of rickets and malnutrition.

RECORD OF ATTENDANCES AND CONSULTATIONS DURING 1957.

	Number of Clinics held	Children -1 year Number of Attendances		Children +1 year Number of Attendances		Mothers Number of Attendances		Total Number of Attendances	
		Prim.	Sub.	Prim.	Sub.	Prim.	Sub.	Prim.	Sub.
Provan ...	101	3	24	140	2,309	—	—	143	2,333
Govan ...	102	19	102	87	1,475	—	—	106	1,577
	<u>203</u>	<u>22</u>	<u>126</u>	<u>227</u>	<u>3,784</u>	<u>—</u>	<u>—</u>	<u>249</u>	<u>3,910</u>

DENTAL TREATMENT OF EXPECTANT AND NURSING MOTHERS.

Under the provisions of the National Health Service (Scotland) Act, 1947, dental treatment was again made available to expectant and nursing mothers on application and free of cost to the patient.

In the following table a summary is shown of the work during 1957 with comparative statistics for each of the previous years back to 1951. New cases were fewer than in any year since 1952, and total attendances for treatment were also much reduced. Extractions were

more numerous than in 1956 and slightly more fillings were done. The total number of dentures provided, although smaller than in 1956, compared favourably with that supplied in previous years.

SUMMARY OF CLINIC ATTENDANCES AND TREATMENTS.

	1957	1956	1955	1954	1953	1952	1951
First Attendances ...	635	744	726	711	668	618	673
Total Attendances ...	3,244	3,684	3,413	3,491	3,352	3,158	3,062
Extractions ...	3,326	3,256	3,450	3,779	3,316	3,305	3,722
Fillings ...	291	288	274	355	414	371	209
Dentures Completed	552	672	552	523	513	515	490

Scalings totalled 80 and other operations amounted to 939.

PROBLEMS CLINIC.

The Problems Clinic had another busy year. The number of cases referred were 93 children and 9 adults—a total of 102.

Children—

Behaviour Problems ...	27
Nocturnal Enuresis ...	19
Speech Defects... ..	9
Soiling	6
Emotional disturbance in Spastic and Post-polio, child- ren	4
Emotional disturbance follow- ing hospitalisation	4
Feeding Difficulties	4
Sleep Disturbances	4
Excessive masturbation	3
Abnormal Appetites (eating hair or coal)... ..	3
Eczema	2
Irrational Fears	2
Asthma	1
Lies	1
Wandering	1
Abdominal pains	1
Depression	1
Deafness	1

Adults—

Depression	6
Anxiety during pregnancy ...	2
Marital disharmony	1

The number of children referred with enuresis as the presenting symptom were subdivided as follows:—Two children 'enuretic' since infancy and showing no other associated symptoms of anxiety did not require treatment—both were dry before the end of the year; ten children presented associated symptoms of anxiety; five who were dry for varying periods began wetting following the birth of another child; and the remaining two had recommenced wetting following the mother's hospitalisation due to illness.

Good work has been carried out in connection with handicapped children. It is hoped that cases will continue to be referred from the

Orthopaedic Clinic as a number of spastic children and some of those disabled from poliomyelitis are found to be still further handicapped by emotional problems. It is most satisfactory that both clinics are held in the same building so that transport of the children to the Problems Clinic presents no difficulty.

Of the adult patients, three were referred for psychiatric treatment, one mother was admitted to hospital as a case of puerperal psychosis, and two were referred to a psychiatric out-patient department.

The number of cases dismissed during the year was 52.

DAY NURSERIES (INCLUDING 24-HOUR NURSERIES) AS AT END OF 1957.

	Approved for training	No. of Approved Places		No. of Children on register at end of year		Average daily attendances during year		Waiting lists at end of year	
		0-2 yrs.	2-5 yrs.	0-2 yrs.	2-5 yrs.	0-2 yrs.	2-5 yrs.	0-2 yrs.	2-5 yrs.
"Bedford Street," 42 Bedford Street, C.5 ...	—	10	30	12	24	7	20	7	3
"Bridgeton," 106 Orr Street, S.E. ...	Yes	20	30	21	34	15	28	68	123
"Broompark," 7 Broompark Circus, E.1 ...	Yes	25	35	30	38	21	28	49	47
"Clutha Street," 36 Clutha Street, S.W.1 ...	Yes	20	30	16	29	16	24	39	40
"Cowcaddens," 91 Dunblane Street, C.4 ...	Yes	15	30	17	32	14	30	65	55
"Craigielee," 2 Craigpark, E.1 ...	Yes	20	30	21	31	16	27	43	47
"Crail Street," 60 Crail Street, E.1 ...	Yes	15	35	20	35	12	26	5	25
"Elderpark," Arklet Road, S.W.1 ...	—	10	30	8	33	7	23	15	20
"Hamiltonhill," 101 Ellesmere Street, N.1 ...	Yes	20	30	24	20	16	25	16	31
"Holmlea," 77 Holmlea Road, S.4 ...	Yes	20	30	19	31	18	24	48	42
"Kingston," 132 Weir Street, C.5 ...	—	8	32	6	34	3	28	22	18
"Onslow Drive," 6 Onslow Drive, E.1 ...	Yes	20	40	22	40	15	30	48	30
"Pollokshaws," 11 Greenbank Street, S.3 ...	—	10	30	10	40	4	24	8	12
"Quarrybrae," Pharonhill Street, E.1 ...	Yes	21	—	24	—	17	—	30	—
1 Sandyford Place, C.3 ...	Yes	22	28	24	30	20	22	80	40
*1107 Gt. Western Road, W.2 ...	Yes	15	25	15	25	12	19	72	88
Total ...		271	465	289	476	213	378	615	621

* Weekly Nursery.

Total attendances numbered 143,688 compared with 149,323 attendances in 1956.

Each nursery is visited routinely every fortnight by a medical officer of the Child Welfare Staff and any emergency visits are dealt with by medical staff from the Central Office.

TRAINING OF NURSERY STUDENTS.

The scheme of training undertaken by the Health and Welfare Department (in conjunction with Nursery Schools and Further Education Departments) continues to be very popular. Many girls from outlying districts apply for residential vacancies, but only a few can be accommodated as the Nursery Nurses' Hostel at 152 Monreith Road East is always full to capacity.

During 1957 there were approximately 93 girls in various stages of the two years' training course for the Nursery Nurses' Certificate; 48 students sat the examination and 45 were successful.

RESIDENTIAL HOMES.

SCOTSTOUN HOUSE.

During 1957, the number of admissions to this Home was 153, including 23 babies of 6 months of age and under.

There is an increasing demand for the admission of very young children in the age group of 6 months to 2 years, but unfortunately the accommodation for this group is very limited and children may require to wait for a considerable time before admission.

Children are recommended mainly from Child Welfare Clinics but, in addition, a few are recommended from various hospitals for convalescence after illness.

The average period of residence in the Home is two months. In most cases there is a striking improvement in the health of the children before dismissal.

RESIDENTIAL SHORT-STAY NURSERIES.

During 1957, the two short-stay nurseries at 9 Winton Drive and 47 Maxwell Road were again used for the admission of children under 5 years of age for a period not exceeding one month, while the mother was in hospital.

The number of admissions was 374 to 47 Maxwell Drive and 420 to 9 Winton Drive.

The demand for admission is sometimes in excess of the available accommodation and it is obvious that these two nurseries are fulfilling a real need among the health services provided.

MILLBRAE HOME.

This Home admits babies under one year of age for B.C.G. vaccination or for segregation following vaccination in the maternity units of various hospitals. During 1957, the number of children admitted from their own homes as contacts of tuberculosis was 67. The number of cases admitted in the neo-natal period from hospital was 106, making a total of 173 admissions for the year. In the contact group, the average period of residence in the Home is 3 months. In the neo-natal group, the period of residence is up to 6 weeks after the date of vaccination.

There is now no waiting list for admission which can usually be arranged immediately on request.

CARNBOOTH HOME.

During 1957, the number of children admitted for the purpose of B.C.G. vaccination was 56. As the available accommodation was not all required for this group, 78 children from the waiting list of those recommended from Child Welfare Clinics for convalescence were also admitted, making a total of 134 in all. The convalescent children remain on an average about two months and the group for B.C.G. vaccination about 3 months.

All the children show a very great improvement in general health at the end of their stay in the Home.

CHILDREN'S DEPARTMENT HOME.

During 1957, the medical care of children in four Homes in Glasgow has again been carried out by the Child Welfare staff. These Homes are Eglinton, Lochgarry, Eversley and Castlemilk. The medical examination of children requiring admission after office hours is also the responsibility of the Child Welfare doctors from whom a rota is maintained for this, as well as for emergency visits to Homes.

In each Home, routine medical supervision of all children is carried out, special attention being paid to all new admissions. In addition, such preventive measures as vaccination, immunisation against diphtheria and whooping cough and B.C.G. vaccination are carried out where necessary.

NURSERIES AND CHILD MINDERS.

The Nurseries and Child Minders Regulation Act which came into operation in August, 1948, provides for the regulation of certain nurseries and of persons who for reward receive children into their homes to look after them.

Two new applications were received and granted in 1957. One was in respect of a Toddlers' Play Centre in Church Hall, Barlanark, but closed down shortly after. The other was in respect of a Nursery at Partickhill Road. One nursery class and one toddlers' play centre closed during the year.

The following were registered prior to 1957 and were still in operation at the end of the year :—

29 Oakfield Avenue, W.2	...	...	Nursery Class.
30 Burnbank Gardens, N.W.	...	...	Nursery School.
40 Clouston Street, N.W.	...	...	Nursery.
24 Regent Park Square, S.1	...	...	Nursery School.
Barony Kirk House, Black Street, C.4	...	...	Toddlers' Playground.

INFANT VISITATION.

Under the scheme of infant visitation every birth is visited and the following table shows the record of those visited, together with certain information obtained :—

	1957	1956	1955	1954	1953
Inquiry cards returned	23,187	22,684	21,813	21,552	20,982
Full information obtained	22,906	22,458	21,575	21,235	20,672
Others	281	226	238	317	310
<i>Of those for whom full information was obtained—</i>					
Legitimate	22,321	21,716	20,918	20,485	19,886
Illegitimate	675	625	692	804	792
Born at full term	21,420	20,782	20,077	19,653	19,230
Premature births	1,576	1,586	1,533	1,448	1,636
<i>Nature of Feeding at First Visit—</i>					
Breast	7,386	7,604	8,070	8,841	9,157
Artificial	13,857	13,000	11,742	10,922	9,484
Breast and Artificial	702	749	811	851	1,085
Still-born	600	579	571	637	556
Dead at First Visit	464	437	425	403	406

VISITATION BY NURSES.

Altogether the health visitors made 308,059 home visits during the year, compared with 305,041 during the preceding year. Of these totals the respective numbers for infants under one year of age were 113,102 and 115,241. First visits numbered 22,918. In addition 77,826 visits were made to houses in respect of toddlers, while 31,580 other toddlers were seen during the course of routine visitation of infants. Other visits were made for special enquiries, etc., as shown in the following table :—

VISITS MADE BY NURSES.

	1957	1956
Infants under one year—Primary visits ...	22,918	22,135
Infants under one year—Subsequent visits	90,184	93,106
	113,102	115,241
Children one to five years	77,826	78,712
Children seen while visiting infants ...	31,580	28,029
Ophthalmia Neonatorum	180	174
Puerperal Fever	457	438
Maternal Deaths Enquiries	23	23
Infant Deaths	356	362
Ante-natal Visits	2,483	2,492
Venereal Diseases	—	—
Light Treatment	33	50
B.C.G.	17,845	18,147
Pneumonia	—	—
Other Visits	2,931	2,230
Houses Shut	45,121	45,508
Final Visits	16,072	13,635
	308,059	305,041

THE HEALTH VISITING SERVICE.

The staff of the Health Visiting Service continue to be employed in the various specialised sections of the Department. Such an arrangement is still continued, partly owing to the size of the city and partly owing to the quite serious problems that are still arising in an industrial city the size of Glasgow. Tuberculosis is an obvious example. The incidence is still high and many intricate medical and social problems are involved.

The number of Health Visitors on the staff at the end of the year, including administrative staff, was 189. Of this number 104 are Child Welfare Health Visitors, 38 Tuberculosis Health Visitors, 3 Venereal Disease Health Visitors, and 42 Housing Inspectresses.

Though it is gratifying to record that there has been a slight increase in the number of the maternity and child welfare staff, the number is not yet sufficient to overtake really satisfactorily the full range of activities which must be carried out under the National Health Service (Scotland) Act, 1947.

In order to conserve the effective working time of the Health Visitor to the maximum, a scheme of decentralisation of the staff was initiated in 1955 and now at 13 of the centres the Health Visitors have their headquarters. The scheme has been found to be most effective and is much appreciated by the staff.

During the year the staff have continued to carry out special services in addition to their routine visiting and advising of the mothers. To mention only two, special surveys of deaf infants and premature infants.

PREVENTION OF BREAK-UP IN FAMILIES.

All health visitors continue to pay special attention to a number of families in their districts who present rather special and difficult problems. The following report, however, refers to the work of the health visitor who is giving her entire time to the study of and the guidance of particularly difficult families.

“ During 1957 the names of 60 families were added to an already extensive list of families needing help. Not all were problem families, but all were families with problems.

“ This by no means covers the number of families receiving extra counselling by health visitors in the course of their daily work, but gives an indication of the number requiring immediate and intensive assistance.

“ Most cases were referred from the health visiting staff, chiefly because of the many factors requiring investigation and the necessary handling being most time consuming.

“ The remaining cases consisted of parents who had heard of this service and came seeking help and advice.

“ The greatest factors in the causation of the disrupted home today are unemployment and debt. The unemployment is chiefly among those who are unable or unwilling to work.

" Some who could not pursue their former occupations were sent to rehabilitation centres and it is hoped to have them placed soon. The unwilling group presents a more serious problem but constant advice and encouragement have in a few cases had the desired results.

" The incurring of debt far beyond the earning capacity of the family caused much frustration, anxiety and great emotional upset."

These families were directed regarding the family budget and were urged to curb needless spending. Hire purchase firms were visited and arrangements made for the acceptance of smaller payment over longer periods.

Many cases were in difficulties over rent arrears and eviction notices were prevalent. Factors' offices were visited, terms arranged and families granted continuance of tenancy. Great co-operation has been met in dealing with house factors who have shown much sympathy and understanding.

The results are somewhat slow but evidence shows that many families who were at breaking point are now making some effort in their co-operation to prevent disruption.

Again, we are indebted to our many social agencies for their interest in providing financial and material help. These include the various church organisations, the Society of Social Service, all hospital almoners, the Glasgow Poor Children's Fresh Air Fund, the Earl Haig Fund and the R.A.F. Benevolent Fund, Edinburgh.

STUDENT HEALTH VISITORS' TRAINING COURSE, 1956-57.

In the '40's the training school as at present conducted was established in co-operation with the University Authorities and a full time Sister Tutor was appointed.

The number of places available for training students is 50, and not more than two-thirds can be assisted by the Corporation in any one year. During training a weekly remuneration is paid, thereafter each assisted student must give one year's service as a Health Visitor to the Corporation.

One third of the selected students are non-assisted and the majority of these are sent by neighbouring Local Authorities who are operating similar conditions. A second tutor was appointed in 1949.

The course commenced on 3rd September, 1956, with a complement of 42 students, 27 of whom were assisted, the remaining 15 non-assisted and terminated on Friday, 29th March, 1957.

As in former years a competitive examination was held for the Lady Helen Graham Award and other prizes.

These were duly presented by Bailie Mains and the function was presided over by the Hon. Mrs. Kenneth Weir.

In January, 1957, the Annual Study days were held in the Royal College of Science and Technology; the underlying theme was on Health Visiting and the Allied Services. Much of interest was brought to those attending.

The 1957-58 Course which began in the Autumn was lengthened by a third academic term—this extended course will be discussed in next year's report.

DOMICILIARY MIDWIFERY SERVICE.

In 1957 the number of registered midwives practising in the city was 170. Of these, 108 were full-time domiciliary midwives in the service of the Corporation; included in this number is the Chief Supervisor and nine Assistant Supervisors. Of the remainder, 21 were Queen's Nurses engaged in full-time midwifery. Forty-one midwives were variously employed, 27 in association with maternity homes, 2 in private practice and 2, who although actually resident in adjacent counties, occasionally conduct a confinement in the Glasgow area. Ten other midwives in the outdoor maternity service of the Royal Maternity Hospital attended cases confined at home.

The Corporation midwifery service has since its inception in 1940 been very popular with Glasgow mothers and many of them, having experienced the advantages of this service during their first confinement, now readily book a Corporation midwife for their second and subsequent pregnancies. Far too many women, however, delay booking a midwife for the approaching confinement until well into the seventh or eighth month. In 1956, of the 7,614 booked applications, 1,809 were not made till the seventh and 1,894 till the eighth month of pregnancy. No less than 545 applications were made as late as the ninth month. This militates against the mother receiving adequate ante-natal care and sufficient mothercraft teaching from the midwives.

During the year the municipal midwives attended 6,170 cases, paying 42,449 ante-natal visits and 75,763 during the puerperium, while the Queen's Nurses attended 1,745 cases, to whom they paid 46,362 visits.

A supervisor is always on duty, day and night, to deal with emergency calls and/or arrange for admission to hospital, etc. The close co-operation which exists between the hospitals and district staff is invaluable in an emergency and is very much appreciated. In addition, a considerable part of the work of the supervisors is the general supervision of midwives under the Midwives (Scotland) Act, 1951, and the inspection of the patients' homes with regard to their suitability for a confinement. All midwives are encouraged to report cases where the house is only a single apartment or overcrowded, so that arrangements may be made for the confinement to take place in hospital instead. Where necessary, the aid of the Department's Disinfecting Staff is invoked to have the house sprayed or disinfected and washings done prior to the confinement taking place—a much appreciated service.

Maternity outfits are available on application for women who are to have a home confinement and 9,137 of these costing 14s. 4d. each were issued free of charge in 1957.

The introduction of these sterilised dressings has been of the greatest benefit to both patient and midwife, not least as a practical demonstration of the value of personal hygiene.

Gas and Air Analgesia and Trilene can now be administered by midwives to those patients certified by their doctors as requiring this. Only midwives duly certified by the Central Midwives Board as being properly qualified to administer such analgesics are permitted to do so. During 1957 gas was administered in 4,464 cases and from 1st September Trilene was administered by midwives in 53 cases.

The domiciliary staff also undertake the training of pupil midwives from the Maternity Units of the following hospitals :—Stobhill, Southern General, Western District, Eastern District, Robroyston and Lennox Castle. The scheme provides that there is always a domiciliary midwife at each confinement. For this training 50 of the midwives are approved by the Central Midwives Board. During the year 184 pupils from the above hospitals attended 1,985 confinements. This figure does not

include a number from the Royal Maternity Hospital who attended 1,283 confinements and 5,002 puerperium visits. Training of pupil midwives is also carried out by the District Nursing Association and reference to this will be found in the Home Nursing Section of this report.

Post-graduate courses for midwives are held each year in one or other of the larger cities and four midwives are authorised to attend.

The following table shows the work carried out by the midwives during 1957 :—

- (i) Total number of births occurring in the area during year—that is before correction for mothers' residence :—
Live Births 22,671. Still Births 600. Total 23,271
- (ii) Total number of births in (i) occurring in institutions (including private maternity homes) 14,620.
- (iii) Total number of births in (i) occurring at home 8,651.
- (iv) Number of births in (iii) classified to show nature of attendance at birth :—

(1)	Cases dealt with under Section 23 (2) of the National Health Service (Scotland) Act, 1947.				Other domiciliary cases.			Total (8)
	Doctor present at actual confinement (2)	Doctor present at any time during Labour (3)	Doctor not present at any time (4)	Midwife alone (no doctor engaged) (5)	Doctor and midwife engaged (6)	Midwife alone (no doctor engaged) (7)	Without doctor or midwife (8)	
Midwives employed by the Authority (including those engaged on a fee-per-case basis)	2,960	956	1,515	739	—	—	—	6,170
Midwives employed by voluntary organisations	1,112	566	67	—	—	—	—	1,745
Midwives employed by Hospital Boards of Management	31	287	291	—	—	—	—	609
Private practising midwives	—	—	—	—	123	4	—	127
Totals	<u>4,103</u>	<u>1,809</u>	<u>1,873</u>	<u>739</u>	<u>123</u>	<u>4</u>	<u>—</u>	<u>8,651</u>

(v) *Medical Aid.*

- (a) Number of cases in which medical aid was summoned during the year by a midwife and a fee was payable by the Local Health Authority under Section 14 (2) of the Midwives (Scotland) Act, 1951 ... 160
- (b) Total number of cases in which medical aid was summoned during the year by a midwife, fee payable but not necessarily claimed 324
- (c) Number of cases in which medical aid was summoned during the year by a midwife where the medical practitioner had agreed to provide the patient with maternity medical services under the National Health Service, i.e. cases for which no fee was payable by the Local Health Authority Not applicable

(vi) *Administration of Analgesics.*

	Gas and Air	Trilene
(a) Number of domiciliary midwives in the area qualified to administer analgesia in accordance with the requirements of the Central Midwives Board for Scotland (including superintendents, non-medical supervisors of midwives, midwife teachers, midwives employed by the local health authority and by voluntary organisations, private practising midwives, and hospital midwives undertaking domiciliary cases under arrangements made by the local health authority and the Regional Hospital Board but <i>excluding</i> pupil midwives undergoing training on the district—		
(1) Number in (a) employed on local health authority work	217	197
(2) Number in (a) not employed on local health authority work	—	—
(b) Number of domiciliary midwives who received their training during the year	3	63
(c) Number of sets of Apparatus for the administration of analgesia in use in the area at 31st December, 1957—		
(1) Number in (c) in use by domiciliary midwives employed on local health authority work (including those in use by hospital midwives undertaking domiciliary cases)	42	18
(2) Number in (c) in use by domiciliary midwives not employed on local health authority work	—	—
(e) Number of cases in which gas and air was administered by midwives in domiciliary practice during the year (including cases attended by hospital midwives undertaking domiciliary cases)	5,770	174
(1) When doctor was not present at delivery 1,191		53
(2) When doctor was present at delivery ... 2,826		40
(3) When doctor was present during labour ... 1,262		75
(4) Midwife alone 491		6
(f) Number of cases in which pethidine was administered by midwives in domiciliary practice during the year (including cases attended by hospital midwives undertaking domiciliary cases)	3,420	
(1) When doctor was not present at delivery 470		
(2) When doctor was present at delivery ... 1,820		
(3) When doctor was present during labour ... 881		
(4) Midwife alone 249		
(vii) Number of cars in use by midwives at 31st December, 1957	—	

Fees to doctors attending emergency cases amounted to £444 6s.

CASES OF PUERPERAL FEVER OCCURRING IN THE PRACTICE
OF MIDWIVES.

Year	Midwives	Cases Notified
Average 1939-45	33	45
1949	14	14
1950	13	15
1951	8	9
1952	5	5
1953	7	8
1954	3	4
1955	1	1
1956	2	2
1957	—	—

OPHTHALMIA NEONATORUM.

The number of cases of ophthalmia neonatorum notified during 1957 again shows a decrease, there being only 37 compared to 46 in 1956 and 51 in 1955.

An analysis was made with the following result :—

Ophthalmia neonatorum	...	...	...	...	17
Dacryocystitis	...	...	...	...	3
Simple conjunctivitis	...	...	...	...	5
Purulent conjunctivitis	...	...	...	...	11
N.A.D.	...	...	...	...	1
					<hr/> 37

The cases were classified according to age at onset :—

—12 hours	...	...	...	...	1
—4 days	...	...	...	...	17
—8 days	...	...	...	...	10
+8 days	...	...	...	...	8
N.A.D.	...	...	...	...	1
					<hr/> 37

The attendance at birth was as follows :—

General practitioners	...	...	...	...	15
Institutions	...	...	...	...	11
Institution nurses	...	...	...	...	2
Midwives	...	...	...	...	9
					<hr/> 37

Bacteriological examination of the discharge was made with the following result :—

Gram. pos. diplococci	...	...	...	...	10
No organisms found	...	...	...	...	10
Diphtheroids	...	...	...	...	4
Gram. pos. diplococci and diphtheroids	...	...	...	...	4
Gonococci	...	...	...	...	3
Gram. neg. diplococci (not g.c.)	...	...	...	...	1
Koch weeks	...	...	...	...	2
No material	...	...	...	...	3
					37
					37

Twelve city cases and one from an outlying area were admitted to Baird Street hospital for treatment and all cleared up satisfactorily with no impairment of vision. The remaining 25 cases were treated at home or attended as out-patients at Baird Street. The Wasserman test was carried out in all hospital cases. All were negative.

PUERPERAL FEVER AND PUERPERAL PYREXIA.

During the year there were registered 102 cases of puerperal fever and 153 cases of puerperal pyrexia compared with 79 and 85 respectively for the preceding year. All but 2 cases of puerperal fever and 3 pyrexias were removed to hospital or other institution.

There were 3 deaths associated with cases of puerperal fever *notified* during the year. The fatality rate in 1957 was 2.9 per cent.

WELFARE FOODS.

The distribution of welfare foods was taken over from the Ministry of Food on 28th June, 1954.

Under the Ministry of Food, there were 25 distribution centres in Glasgow. There are now 33 centres. The additional centres are necessary to cover the outlying housing schemes.

The documents of entitlement to welfare foods are issued to beneficiaries by the Ministry of Pensions and National Insurance on application.

The following is the average weekly issue of each food at the centres during the year 1957 :—

Distribution Centre	National Dried Milk (tins)		Cod Liver Oil (bottles)	" A " and " D " Tablets (packets)	Orange Juice (bottles)
	Full Cream	Half Cream			
193 George Street, C.1 ...	1,371	38	183	67	960
Clinic, 551 Dumbarton Rd., W.1	1,186	25	164	70	1,022
Clinic, Halbeath Ave., W.5	129	2	24	6	132
Essenside Ave., W.5 ...	33	1	8	2	50
12 Lancefield St., C.3 ...	270	5	42	12	179
325 Sauchiehall St., C.2 ...	207	5	31	14	201
Clinic, Blackwood St., W.3	67	2	22	10	107
Community Centre, Dyke- bar Ave., W.3	33	—	12	4	68
Clinic, 60 Avenuepark St., N.W.	793	13	130	38	631
205 St. George's Rd., C.3 ...	1,209	26	186	81	970
17 Queenshill St., N.1 ...	1,091	21	142	44	775
89 Killearn St., N.2 ...	432	5	66	20	322
72 Edinburgh Rd., E.1 ...	197	4	57	19	272
Clinic, 152 Wellshot Rd., E.2	245	7	31	10	201
210 Westmuir St., E.1 ...	777	17	116	34	589
Clinic, 10 Redan St., S.E.	1,660	40	154	39	861
Garthamlock Clinic ...	77	1	13	3	91
Easterhouse Clinic... (opened, June, 1957)	26	—	3	1	21
Milncroft Prin. Annexe, Lamlash Cres., E.3. ...	82	1	9	3	68
45 Craigendmuir St., E.3 ... (opened Sept., 1957)	29	1	3	—	16
258 Nitshill Rd., S.W.3 ...	43	1	8	2	63
Clinic, 12 Fauldhouse St., C.5	52	1	7	2	45
132 Kingsbridge Dr., S.4 ...	35	1	14	6	90
Clinic, 22 Arnprior Quad., S.5	94	2	19	6	104
Clinic, 183 Prospecthill Rd., S.2	335	8	109	48	670
Clinic, 39 Bengal St., S.3 ...	266	9	50	16	290
90 Hospital St., C.5 ...	1,981	37	245	63	937
Melville St. School, S.1 ...	30	1	8	4	65
Govan Town Hall	1,318	39	151	43	711
Clinic, 27 Govan Rd., S.W.1	475	6	68	17	287
561 Mossbank Bvd., S.W.2	280	11	56	21	315
Clinic, Craigmuir Rd., S.W.2	73	1	15	6	84
Pollok Clinic, Netherplace Rd., S.W.3	305	13	46	17	267
Total Weekly Issues, 1957	15,201	344	2,192	728	11,464
Total Weekly Issues, 1956	19,532	428	2,510	824	11,207

During the year the uptake of the potential was as follows :—

Orange Juice	...	...	19.3 per cent.
Cod Liver Oil	...	...	13.1 per cent.
" A " and " D " Tablets			18.5 per cent.

No reasonable accurate figure of uptake in relation to potential can be given in regard to National Dried Milk because milk tokens can be used for either liquid milk or dried milk.

The Welfare price of National Dried Milk was increased from 10½d. to 2s. 4d. per tin from April, 1957, and there has been since a decrease of approximately 20 per cent. in the number of tins issued.

During the year there was received from waste paper merchants the sum of £302 for empty National Dried Milk cartons.

SECTION IV.

HOME HELP SERVICE.

The work carried out by the Home Help Service during the past four years is shown in the following table :—

GLASGOW—HOME HELP SERVICE.

				CASES ASSISTED.			
				1954	1955	1956	1957
Maternity	...	...	...	2,312	2,341	2,286	2,305
General, etc.	...	...	...	3,810	4,104	4,242	4,554
Tuberculosis	...	...	...	159	183	179	185
				<u>6,281</u>	<u>6,628</u>	<u>6,707</u>	<u>7,044</u>

The Home Help Service is not entitled to provide permanent domestic helps but to give an opportunity for families to make their own arrangements for securing assistance. There is therefore a limit to the period for which the home help is provided. As it is, present demand is such that the time given to individual cases has had to be considerably curtailed. The maximum period is eight weeks and 75 per cent. of the full-time helps attend two cases. In some instances only two hours daily help can be provided. There is, moreover, the problem of old folks living alone, the majority being old age pensioners with no relatives to provide assistance. It has been necessary to make provision for this special group and included in the general section of the service are 1,580 cases receiving extended service, of which some 93 per cent. are over 60 years of age.

A beginning was made during the year to supply a long felt want among many old folks living alone—a Sunday, evening, and night service. A two-hourly Sunday service for helpless old people living alone was introduced on 9th June and 30 helps are at present engaged in this type of work. A night service for the seriously ill unfit to be left alone was started on 1st August, with six helps as night sitters. In addition, it has been necessary to have a domestic help visit some cases for one hour in the evening to give a cup of tea and see the old person safely to bed. This service is given to patients who might otherwise sit up all night. Four women are at present employed as evening helps.

There are at present 1,518 domestic helps employed by the local health authority, 512 on a whole-time and 1,006 on a part-time basis. The charge for the Home Help Service to individual patients varies according to means. The sliding scale provides for a minimum charge of 3s. per day (1s. 6d. per half-day) and a maximum of six guineas per week of 5½ days. The maximum charge for one day is 24s. 2d.

The following is a detailed account of the work done by the Home Help Service during 1957 :—

There was some reduction in the number of applications for help in maternity cases in 1957, 2,796 compared with 2,902 in 1956. Of these, 2,050 were completed, 455 cancelled and 291 continued into 1958. Of the 1956 cases still outstanding, 255 were completed in 1957 and 141 were cancelled.

Applications for help under the General Scheme continue to increase with 3,403 in 1957 compared with 3,323 in 1956. Of these, 480 were cancelled, leaving 2,923 cases to be dealt with compared with 2,830 in 1956. Seventy-eight per cent. of the cases were over 60 years of age.

In a large number of instances there is no family or near relative to care for the applicant who is so incapacitated by illness or infirmity as to require assistance for a more prolonged period than that permitted by the General Scheme (eight weeks). A special " E " Scheme was devised to provide assistance for the duration of such person's incapacity. The number of new applications registered under this scheme in 1957 was 662, of which 13 were cancelled. The cases dealt with during the year totalled 1,580, including one case continued from 1947, three from 1948, six from 1949, 16 from 1950, 35 from 1951, 70 from 1952, 103 from 1953, 123 from 1954, 214 from 1955 and 360 from 1956. Of these cases, 1,462 or 92.5 per cent. were over 60 years of age compared with 91 per cent. in 1956 and 1,385 of them were unable to pay more than the minimum charge of 1s. 6d. a half-day.

It should be noted that as the number of the " E " Scheme rises, as it inevitably does, more helps are permanently employed on these long-term cases, which means fewer are available for the general cases. This position leads to difficulties at certain periods of the year when intercurrent illness, particularly respiratory infections, occurs in the population

Owing to the peculiarly crippling nature of their disability, a similar long-term scheme of assistance had to be arranged for certain

cases of disseminated sclerosis. At the end of 1957 there were 51 cases in this group, 8 under 40, 35 of them between 40 and 60, and 8 over 60 years of age. Twenty-eight were unable to pay more than the lowest charge of 1s. 6d. per half-day.

There are now 88 home helps engaged in the domiciliary care of tuberculosis patients. During 1957, 128 cases of tuberculosis applied for help, 105 were assisted and 23 applications were cancelled. Of the 185 cases attended during the year, 87 cases were under 40 years, 62 were 40-60 years, and 36 were over 60 years.

The following table shows the illness or other conditions in respect of which applications for home helps under the General and "E" Schemes were made.

Disease	General and "E" Schemes			Total
	-40 yrs.	40-60 yrs.	60+ yrs.	
Influenza	8	20	28	56
Cancer	4	25	84	113
Diabetes	—	7	37	44
Intracranial Vascular Lesion	2	19	264	285
Valvular Disease of the Heart	13	106	626	745
Circulatory	10	55	515	580
Respiratory	11	56	441	508
Digestive	7	13	79	99
Kidney Disease	9	4	37	50
Accident	5	38	296	339
Post Operative	32	132	229	393
Debility Post Illness	3	6	413	422
Nervous Diseases	10	38	79	127
Hemiplegia	1	13	50	64
Paraplegia	—	1	6	7
Paralysis Agitans	—	4	13	17
General Paralysis	—	8	33	41
Rheumatism	2	62	363	427
Senility	—	—	115	115
Disseminated Sclerosis	11	51	16	78
All Other Causes	3	14	27	44
	<u>131</u>	<u>672</u>	<u>3,751</u>	<u>4,554</u>

SECTION V.

HOME NURSING SERVICE.

The distribution of the staff for the year 1957 is shown in the following table :—

GLASGOW—HOME NURSING STAFF.

	1957
Senior Superintendent of Home Nursing	1
Superintendents of Homes	5
Assistant Superintendents	6
	<hr style="width: 100%;"/>
	12
Queen's Nurses on General Work	84
Queen's Nurses on Maternity Work	21
State-Registered Nurses in training for the Queen's Roll	10
State-Registered Nurses on full-time Nursing	4
State-Registered Nurses on part-time Nursing	13
Queen's Nurses undertaking Part II Midwifery Training on District	—
Queen's Nurses undertaking Part I Midwifery Training in Hospital	—
	<hr style="width: 100%;"/>
	144
	<hr style="width: 100%;"/>

The district nurses work in close co-operation with the general practitioners and carry out their instructions in the care of the patients.

During the year 1957 they nursed approximately 15,000 patients to whom they paid 403,000 visits. This included 46,000 visits to 1,700 maternity patients.

The following is a detailed report by the Superintendent of the work done by the nurses during the year.

THE GLASGOW DISTRICT NURSING ASSOCIATION

RECORD OF WORK FOR THE YEAR ENDED 31ST DECEMBER, 1957.

Work.—The report shows an increase in the number of new patients admitted during the year, and also an increase of 10,000 in the number of visits paid to them.

There is again a slight decrease both in the number of tuberculosis patients nursed and in the number of visits paid. The total number of visits paid to these patients was 57,264 as against 61,859 in 1956, and the number of patients attended was 1,181 as against 1,347.

There is a slight decrease in the number of patients in the older age group but the visits to these patients have increased by over 10,000.

NURSING APPLIANCES.

The number of appliances issued on loan during the year was 3,624 being a decrease of 26 on the previous year. There was a large increase in the number of articles loaned in 1956, and many of these are still in use on the district.

TRANSPORT.

Motor transport for Gas and Air appliances, and for midwives at night is supplied by the Corporation. There are now 28 bicycles in use on the district, chiefly in the new housing areas, and a cyclemaster is used by one of the male nurses.

DISTRICT TRAINING.

All applicants for training must be at least registered general nurses but the majority are also state certified midwives and a number have extra certificates such as the Health Visitor and the British Tuberculosis Association Certificates.

Three courses are held each year and are for a period of six months where the nurse is general trained only, otherwise the training is four months.

The student signs a contract to remain on the staff for a year after completion of training; she is then free to remain on the staff or seek a post elsewhere. Thirty-three students completed the course during the year and were successful in the Queen's Roll Examination.

The course is designed to help nurses to adapt hospital methods of nursing in the homes, and to give them an understanding of the social needs of the patients.

MIDWIFERY TRAINING.

The Association is recognised by the Central Midwives Board as a Training Centre for Part II Examination. Three pupils completed training and were successful in the examination.

Under the Scheme of co-operation with the Western Regional Board 26 Pupil Midwives from Cresswell Maternity Hospital, and 36 from the County Maternity Hospital, Bellshill, took extern training under the supervision of the senior midwives. In addition 79 cases were taken by the pupils of the Glasgow Royal Maternity Hospital.

REFRESHER COURSES.

A very successful course was organised by the Queen's Institute of District Nursing held in Glasgow during the month of September. This was attended by District nurses from all over Britain and was most interesting and stimulating.

Two Assistant Superintendents attended the Administrators' Course and four Midwives attended a Course organised by the Royal College of Midwives. The Senior Superintendent attended the Annual Conference for Superintendents of Training Homes. One Superintendent is in London at present studying for the District Nurse Tutor's Certificate. This Course which is organised by the Royal College of Nursing is for one academic year. After completion of training Miss Broadfoot will return to Glasgow as Tutor to the students.

Summary of Work for Year ended 31st December, 1957.

Cases on books at 1st January, 1957	...	...	2,492
Number of new cases added	...	...	12,475
Number of cases dismissed	...	...	12,312
Number of cases remaining at 31st December, 1957			2,655
Dismissed—			
Convalescent	...	...	6,743
Hospital	...	...	1,904
Died	...	...	1,610
Removed	...	...	265
<hr/>			
Total number of visits paid by Nursing Staff	...	...	403,636
Number of Teaching Rounds paid with Students with Administrative Staff	...	...	295
Number of Inspection of Nurses	...	...	184

ANALYSIS OF ALL CASES ATTENDED DURING 1957.

Bronchitis	1,340	
Pneumonia	690	
Cardiac	1,471	
Arthritis	250	
Hemiplegia	811	
Senility	821	
Carcinoma	618	
Diabetes	367	
Puerperal	8	
Infectious Diseases	13	
Gynaecological	76	
Other medical	4,367	
	—	10,832
Operations	51	
Post Operational Surgical	473	
Other Surgical	575	
	—	1,099
Pulmonary Tuberculosis	1,103	
Non-pulmonary	52	
Surgical	26	
	—	1,181
Midwifery	1,855	
	—	1,855

SUB ANALYSIS OF CASES.

Injections.

Insulin	361	
Penicillin	2,687	
Streptomycin T.B.	1,140	
Streptomycin others	47	
Liver Extract	962	
Diuretics	1,100	
Other injections	406	
	—	6,703

Patients 65 years and over.

Males	1,898	
Females	3,885	
	—	5,783

THE GLASGOW DISTRICT NURSING ASSOCIATION.

*Nursing Appliances issued on loan during the Year
ended 31st December, 1957.*

Appliance—	No. Issued
Wheel Chairs	255
Walking Machines	3
Water and Air Beds	28
Air Rings	703
Bed Pans	819
Bed Cradles	128
Commodes	199
Back Rests	322
Rubber Sheets	715
Urinals	293
Warral Sticks	116
Dunlopillo Beds	7
Dunlopillo Pillows	—
Adult Cot Beds	7
Bedsteads	7
Mattresses	13
Fracture Boards	1
Hospital Beds with Pulley	7
Spinal Carriage	1
Total	<u>3,624</u>

NURSES' AGENCIES (SCOTLAND) REGULATIONS, 1945.

In addition to home nurses from the local authority Home Nursing Service, nursing help is also available from nursing agencies. These organisations are controlled by the Nurses' Agencies (Scotland) Regulations, 1945, made under powers conferred by the Nurses (Scotland) Act, 1943. In 1947, 10 agencies were registered with the local authority, in 1956 the number of agencies on the roll was five. A Joint Committee representative of the Corporation, the nursing agencies and the nurses employed are responsible for advising on conditions to be attached to licences.

There were no new applications for licences during 1957 but one licence, applied for during 1956, was granted.

Five applications for renewal were made and granted after the premises were visited and found to be suitable.

There were therefore six agencies on the roll at 31st December, 1957.

NURSING HOMES REGISTRATION (SCOTLAND) ACT, 1938.

Two applications for registration were received during 1957. This however will not be granted in either case until satisfactory fire precautions are taken.

Two homes which applied for registration in 1956 were granted certificates in 1957 and two registrations were cancelled, both homes having changed their location.

The position of the Nursing Homes as at 31st December, 1957, was therefore as follows :—

Registered	...	...	23
Exempted	...	...	3
			<hr/>
			26
			<hr/>
Awaiting registration			2
			<hr/>

SECTION VI.

INFECTIOUS DISEASE.

There was more infectious disease in the City in 1957, a total of 29,058 cases being registered, 812 more than in 1956. This increase was due to the epidemic of influenza, and to the Mass Radiography Campaign which revealed a large number of hitherto undetected cases of pulmonary tuberculosis in the population. Measles showed an increase of some 1,080 cases from 1956 and cases of puerperal fever and puerperal pyrexia were more numerous than usual. Other diseases, however, showed some reduction. Food poisoning and dysentery were less prevalent, the latter showing a decrease for the second year in succession. This is in contrast to experience elsewhere as the provisional figures for the country as a whole are reported as showing an increase. The incidence of poliomyelitis was again lower, 28 cases as against 54 in 1956. One notable record has been achieved—1957 is the first year in which there was not a single case of diphtheria. No less than 127 suspected cases were notified but in no instance was the diagnosis of diphtheria verified. Other common childhood infections such as whooping cough, German measles and chickenpox, all showed a welcome reduction.

Admission to hospital during the year totalled 14,132, an increase of 386 on the 1956 figure. This includes 3,009 cases removed to hospital and ultimately diagnosed as non-infectious disease. In 1956 this figure was 2,921.

Pneumonia and dysentery made heavy demands on hospital accommodation during the year. Cases of pneumonia treated in hospital formed 43 per cent. of all infectious disease cases admitted in 1957, as against 39 per cent. in 1956. Although more cases of this disease were admitted to hospital, the proportion (81 per cent.) was less than that for the previous year. Sixty-one per cent. of all dysentery cases were treated in hospital, a proportion higher than in 1956 (54 per cent.). This is equivalent to 21 per cent. of all cases of infectious disease admitted during the year. The equivalent proportion in 1956 was 25 per cent.

Details of notifiable and non-notifiable diseases are given in Appendix Table XIV, while Appendix Table XV illustrates their seasonal prevalence. Appendix B includes the tables relative to admissions, dismissals and deaths in the four fever hospitals.

GLASGOW : INFECTIOUS DISEASE—CASE RATES PER MILLION

1937—1957

		YEAR.																					
		1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	
A.—Notifiable—																							
Typhus Fever		65	52	54	320	73	63	40	28	35	40	33	14	9	16	48	20	17	27	45	18	21	
Enteric Fever and Paratyphoid B		4	3	5		2	2	4	4		7	5	7	7	3	6	4	7	4	2	18	21	
Continued and Undefined Fever		492	483	398	384	33	359	382	309	264	280	284	229	176	140	212	191	186	163	108	73	94	
Puerperal Fever		303	264	276	233	252	200	253	189	187	176	131	112	105	103	96	97	116	135	97	78	142	
Smallpox		5,153	3,703	2,711	1,715	1,752	2,837	2,853	3,130	3,131	3,145	3,270	3,584	2,138	1,742	2,102	2,495	1,762	1,245	1,107	915	899	
Scarlet Fever		2,143	2,596	2,877	4,751	3,698	3,045	2,674	2,178	1,805	1,336	460	262	141	79	123	79	46	11	2	1	—	
Diphtheria and Membranous Group		955	886	763	600	615	668	650	517	481	441	434	440	281	259	207	218	203	195	182	197	107	
Erysipelas		97	81	74	418	374	181	113	118	119	208	121	89	93	105	116	93	113	83	88	61	53	
Cerebro-spinal Fever		732	711	653	565	497	614	570	487	300	312	280	241	121	160	171	131	92	70	47	43	34	
Ophthalmia Neonatorum		14	14	9	6	9	9	3	10	7	13	1	4	4	5	2	3	5	2	1	—	1	
Trachoma		27	7	5	3	6	4	8	3	4	5	4	5	4	1	2	4	2	2	2	2	3	
Acute Encephalitis Lethargica		1	1	—	1	1	2	1	1	—	2	17	1	2	5	1	—	—	—	—	—	—	
Acute Poliomyelitis		1	38	4	30	43	5	2	22	6	2	272	1	2	5	2	1	—	—	3	1	—	
Acute Primary Pneumonia		5,391	4,882	3,221	5,049	5,664	4,826	6,163	5,204	4,468	5,638	4,947	4,331	4,126	3,244	3,403	4,845	3,609	3,040	4,201	4,127	5,044	
Acute Influenzal Pneumonia		517	105	209	282	144	83	173	82	71	201	81	32	70	38	115	114	138	30	66	99	415	
Whooping Cough		8,018	3,776	5,776	801	10,059	1,076	5,119	3,381	2,543	2,499	5,002	1,562	3,620	4,938	6,673	1,296	6,083	3,050	1,255	3,400	2,699	
Malaria		13	10	10	46	23	26	14	15	23	60	29	26	13	8	13	27	22	15	10	7	15	
Dysentery		251	240	149	363	292	250	401	1,153	1,351	524	254	1,080	1,285	2,176	1,422	2,110	2,509	5,755	5,823	4,271	3,628	
Infective Jaundice		3	1	1	1	—	—	3	—	4	—	4	2	7	3	1	2	2	—	1	5	1	
Anthrax		—	3	—	—	—	—	—	1	—	1	1	—	—	—	—	—	—	—	—	—	—	
Pulmonary Tuberculosis		1,522	1,599	1,440	1,747	1,892	2,128	2,544	2,527	2,420	2,575	2,535	2,545	2,595	2,244	2,025	2,083	2,182	2,029	2,010	1,868	3,635	
Other Forms of Tuberculosis		591	640	513	612	605	654	673	615	509	466	469	342	358	339	326	277	272	222	256	178	159	
Leprosy		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Food Poisoning		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	
		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	330	229	
B.—Not Notifiable—																							
Measles		2,090	14,492	1,338	10,095	1,477	7,604	7,184	5,831	5,509	8,887	3,878	7,457	3,698	6,272	3,934	6,323	4,496	5,298	3,516	4,248	5,263	
German Measles		190	447	3,470	598	214	385	3,618	658	542	1,001	1,032	201	249	3,027	588	242	1,599	296	354	637	352	
Chickenpox		5,727	5,805	3,533	1,874	3,748	7,549	5,124	6,885	4,831	4,473	5,091	6,305	3,394	6,426	7,390	5,474	6,771	6,847	4,149	5,446	4,016	
Others—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mumps		45	42	25	301	120	109	57	146	68	62	111	55	44	41	83	57	135	89	85	42	57	
Pemphigus Neonatorum		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Totals		34,346	40,881	27,514	30,765	31,893	32,708	38,626	33,492	28,681	32,347	28,746	28,931	22,562	31,656	29,111	26,217	30,416	28,644	23,638	26,069	26,912	

Whooping Cough became notifiable as from 1st January, 1950

Leprosy " " " 1st July, 1951

Food Poisoning " " " 1st July, 1956

IMMUNISATION CENTRE.

This centre situated at 20 Cochrane Street provides intending travellers from the West of Scotland with immunisation against yellow fever and certain other infectious diseases likely to be met with in a foreign country. Since the centre was established in 1947, 35,120 travellers have been inoculated against yellow fever, 4,192 being inoculated during 1957. These figures include the crews of several ships to a total of 1,890. In the case of a large crew where it is not feasible for them to attend at one time at the centre, arrangements are made for a medical officer and assistant to visit the ship and carry out the necessary inoculations on board.

In 1950 the services of the centre were extended to cover also inoculations against enteric, plague, typhus, cholera and smallpox, where the travellers' own doctor was not available. In 1957, 1,638 persons received 2,148 inoculations against these diseases.

SMALLPOX AND VACCINATION.

There has been no case of smallpox in Glasgow since 1950, and none in 1957. Compulsory vaccination or declaration of conscientious objection ceased with the inception of the National Health Service (Scotland) Act on 5th July, 1948. Notification of vaccination is now made by medical practitioners, and in 1957, 5,414 notifications of primary vaccination were received and 4,991 of revaccinations. In addition, primary vaccinations are carried out at the Child Welfare Clinics, and these in 1957 totalled 4,619. In all, 10,033 primary vaccinations were done during the year as compared with 9,632 in 1956 and 8,362 in 1955.

The following table shows the age of distribution of those vaccinated for the first time in each of the years from 1950 to date :—

Year of Vaccination	Age Group				Not Stated	All Ages	Revacci- nations
	—1	—5	—10	10 & Over			
1957	5,290	3,562	246	935	—	10,033	4,991
1956	5,290	3,806	173	356	7	9,632	3,877
1955	4,621	3,352	121	269	9	8,362	2,695
1954	5,112	3,500	128	254	12	9,006	3,460
1953	4,633	3,266	110	298	21	8,328	3,551
1952	4,450	3,079	92	472	8	8,101	3,463
1951	4,589	3,593	94	453	16	8,745	3,697
1950	2,946	4,097	983	1,947	78	10,051	23,442

In 1950, following the outbreak of smallpox, mass vaccination of the population was carried out and the figures for that year are not therefore strictly comparable with those of other years.

In all, 72,258 primary vaccinations were carried out in the course of the eight years 1950 to 1957—far too small a number in a city of the size of Glasgow and one that is a port of call for ships from parts of the world where smallpox is rife.

The distribution of the pre-school and other age groups of the population protected by vaccination in the eight years 1950 to 1957 may be expressed as follows :—

In 1957, of the city's population aged—

Under 5 years, 38,559 or 37·5 per cent.	} have been vaccinated in the course of the eight years 1950-1957.
10 years, 26,132 or 27·1 per cent.	
15 years, 2,294 or 2·5 per cent.	
Over 15 years, 5,122 or 0·6 per cent.	

The proportion of children under one year of age vaccinated at the Child Welfare Clinics since 1951 was as follows :—

	No.	Percentage of Births.
1951	3,193	15·9
1952	3,055	15·0
1953	3,455	17·1
1954	3,716	17·7
1955	3,515	16·7
1956	4,449	20·3
1957	4,619	20·6

LEPROSY.

Under the Public Health (Infectious Diseases) (Scotland) Amendment Regulations of 1951, this disease became compulsorily notifiable from 1st September, 1951. This means that every medical practitioner must notify the Medical Officer of Health of any case of leprosy coming to his notice.

This is a disease of rare occurrence in this country and such cases as have been found in Glasgow were foreign seamen or students from tropical countries where this disease is prevalent. In the twenty years prior to notification only five cases came to the notice of this Department.

In 1957 only one case was notified in Glasgow. This was a 26 year old male, temporarily resident in Glasgow, who had contracted the disease in India.

Since 1951 the incidence of the disease has been as follows :—

1951-1953	...	...	...	...	Nil.
1954	...	...	...	...	1
1955	...	...	...	...	2
1956	...	...	...	...	2
1957	...	...	...	...	1

MALARIA.

This disease, like smallpox and leprosy usually occurs in servicemen returning to the City from abroad or foreign visitors. During 1957 there were 16 cases as against 8 in 1956. All were males, and nine were in the age group 20 to 25. Incidence in recent years was as follows :—

(Average) 1930-38	...	15	1953	...	...	24
1939-45	...	24	1954	...	...	16
1946-50	...	30	1955	...	...	11
1951	...	14	1956	...	...	8
1952	...	29	1957	...	...	16

TYPHOID, PARATYPHOID AND DYSENTERY.

Typhoid.—Only six cases were registered. These were an Oriental seaman who arrived ill in the Port ; a boy, aged 13, who had been camping in a large boys' camp ; a woman, aged 27, who was the first case detected in the group described below ; a man aged 27 and two girls aged 4 and 14. The Glasgow cases all lived in the southern part of the City but at widely separated addresses. No cases arose in institutions ; and there were no deaths.

In December the male typhoid carrier first detected in 1953 originated a small outbreak among his neighbours in spite of the fact that he occupied his own clean and commodious flat provided with excellent sanitary facilities. The principal owner abandoned the tenement, the ground-floor house entered from another street was vacated and children and adults from other houses gained access to the basement, damaging the sewage pipes. From this source, it is presumed, infection was conveyed to a sub-let house upstairs. The cases were a man who received

chemotherapy and yielded only one positive specimen ; the woman mentioned above ; an ex-Service man whose excreta were negative but whose blood was positive to the Vi test ; and a girl, aged 2, whose only positive specimen was obtained on the first day of her very mild illness. The cases sickened on 14th and 17th December and 5th and 10th January and were removed to hospital on 16th and 25th December and 7th and 14th January respectively. All the cases recovered ; and the carrier was rehoused. The episode is a reminder of the importance of the environmental circumstances of carriers. It also suggests that those concerned with diarrhoeal illness should bear in mind the possible elusiveness of the typhoid bacillus, especially under chemotherapy or after prophylactic inoculation.

Paratyphoid.—There were sixteen registrations spread over the five Divisions. No deaths were recorded. One patient was regarded as having contracted his infection in an institution ; this was a boy aged 12 who sickened twelve days after admission from a county address to a Glasgow general hospital. There were several other sporadic cases (including a man aged 74) and four family groups with two cases in each. These groups consisted of mothers and their children. In one pair a boy aged 5 sickened six days after his mother ; in another a boy aged 5 and his mother sickened on the same day ; in another a boy aged 4 months fell ill sixteen days before his mother.

The fourth pair registered consisted of an Asiatic woman, aged 39, who was found to be a chronic carrier and her son who was born in hospital in January. He weighed 8 lb. 2 oz. at birth. When he was three days old his stools were seen to be green and a specimen taken two days later was reported positive. It was then discovered that the mother was also excreting the organism. She had suffered from paratyphoid in Karachi in 1947 and had arrived in Glasgow in 1953 with her husband and her two sons then aged two and four. The family together with two adult male relatives occupied a good four-apartment house equipped with bath, w.c. and hot-water installation.

Another chronic carrier detected was a man aged 82 admitted to a general hospital for suspected pyloric stenosis following an afebrile illness of several weeks' duration with vomiting, a loss of appetite and weight and slight looseness of the stools. His carrier state had probably begun sixty years earlier when he was treated at home for " typhoid fever ". In 1956 he suffered from perforated gall-bladder from which he successfully recovered. He had resided for many years in a good house with only one other occupant.

Bacillary Dysentery.—There were 3,918 cases. Although there was an appreciable fall for the second year in succession, the total is larger than any recorded prior to 1954. These infections have thus prevailed at an unprecedented level during the past four years. The seasonal incidence was as follows :—

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Home	999	1,246	641	620	3,506
Institutional	226	108	42	36	412

A striking decrease is seen in the figures for the second half of the year when compared with the first half. Dysentery, however, is a disease in which large fluctuations may take place from quarter to quarter and it cannot be claimed that an ending of the City's prolonged epidemic is yet in sight.

Every municipal ward was concerned but under twenty cases were registered from Craigton, Fairfield and Yoker and again from Camphill and Kelvinside. The most heavily affected areas, with over 200 cases each, were Ruchill, for the second year in succession, and the wards of Kingston and Hutchesontown.

Wide variations in the incidence of dysentery are almost certainly due to uncontrollable changes in the infecting power of the organisms ; but there are two other factors that make its spread hard to restrict. One is the frequent mildness of the illness. In one school for example, only two cases were notified but when an investigation was made thirteen other positive cases were discovered, five of them attending with mild symptoms and the remainder absent but untreated and unnotified. In another school three cases were notified but on investigation 25 other positive cases were found. Two of these were notified during the enquiries but the other 23 cases were all back at school after short periods of absence varying from one to eleven days. The other factor is the length of time during which the patient may carry the organism after recovering from the initial illness. One four year old boy twice admitted to hospital was found to be carrying the bacilli for eleven months, and although this is a highly exceptional case, periods of two months are common and periods of three months not uncommon. On the other hand a ready method of detection is available in the form of bacteriological examination of the stools. By this method, in fact, several symptomless children have in recent years been found infective on admission to children's institutions although they have not been known to be either cases or contacts. These features of the disease point to the need for adequate notice to be taken of diarrhoeal indispositions of children by parents, teachers and doctors. As regards

diarrhoea cases in general, bacteriological examination should be carried out whenever the patients or the home contacts, are in a position to infect numbers of others, especially children or invalids, or to contaminate food.

Institutional cases were more numerous but the total cannot be termed high. They came from 37 institutions of diverse kinds—18 hospitals, 11 children's homes, 4 common lodging-houses, 2 hostels, a hotel and the Harbour. The cases arising in the first two groups numbered 338 and 63 respectively: fifteen institutions each yielded only a single case during the year.

A large hospital for children provided 182 cases in the course of the year. These included 112 patients and 26 staff members involved in a Sonne outbreak which commenced in the middle of February. Ten wards were then in use with a total capacity of 312 patients. Every ward was affected and the first cases included the milk storeman. Treatment of the infected children was conducted in the hospital which had to be closed to visitors and for new admissions excepting surgical and medical emergencies. Normal routine, however, was resumed after four weeks. None of the cases died. The epidemic was traced to missed cases on a county farm which supplied unpasteurised certified milk, bottled and in bulk, to the institution.

The next highest number of institutional cases, amounting to 54 for the year, came from a large mental hospital. Among these were 34 women affected by a Sonne outbreak which lasted from the end of May until the end of July. Twenty-eight were inmates of one ward; the remainder came from two neighbouring wards. The patients were treated in the hospital by oral streptomycin, one gramme six-hourly for six days; and all recovered. The outbreak, however, proved difficult to check because nearly all the patients were old and restless and many were also confused. The source of the infections was not discovered but once it was introduced case-to-case spread readily occurred.

The age distribution of the year's cases and the mortality are shown in the following table:—

				Years					
				—1	—5	—15	—55	55+	Total
Home	...	...	...	400	1,585	823	587	111	3,506
Institutional	...	...	...	29	116	89	92	86	412
Deaths	...	...	...	—	1	—	1	1	3

Thus although the disease is a social nuisance it is rarely a cause of death. It can be seen that if the unnotified cases and the symptomless

temporary carriers were taken into account the death-rate would be extraordinarily low and of the order of one fatality in thousands of infections.

DIARRHOEA AND ENTERITIS.

These infections are not yet notifiable and, as information regarding their prevalence was not readily available, comment has up till now been limited to the mortality from this infection in children under two years of age. The increasing prevalence of dysentery and food poisoning in recent years has focused attention on all illness of this type and from 1953 onwards all cases of diarrhoea and enteritis coming to the attention of the Department have been recorded.

The following table shows the age distribution of all cases so recorded since 1953 but is not a complete picture of the incidence of diarrhoeal infection in the City :—

Year	Age Distribution.				
	1953	1954	1955	1956	1957
—1	398	352	401	398	220
—2	14	24	17	18	11
—5	3	1	1	5	2
5 and over	4	7	4	12	11
	<u>419</u>	<u>384</u>	<u>423</u>	<u>433</u>	<u>244</u>

In spite of the very different weather conditions in each of these years the incidence has varied little. Hot, dry summers favour the breeding of flies by whose agency these infections are largely spread. In 1957, as in 1956, the summer was both cool and wet. The seasonal distribution of the cases in these five years was as follows :—

	1957	1956	1955	1954	1953
1st Quarter	69	56	84	67	110
2nd Quarter	66	108	95	89	82
3rd Quarter	64	145	113	100	112
4th Quarter	45	124	131	128	115
	<u>244</u>	<u>433</u>	<u>423</u>	<u>384</u>	<u>419</u>

Mortality from these infections, which, as recently as 1947, were responsible for no less than 574 deaths in children under two years of age, has been considerably reduced in recent years and in 1957 there were only 23 deaths, one less than in the previous year. All were less than a year old and there was a noticeable preponderance of females,

16 in all. Diarrhoea of the newborn was responsible for three male and seven female deaths. The mortality rate was 1.0 per 1,000 births as against 1.1 in 1956 and 1.2 in 1955. The steady decrease in the number of deaths and in the mortality rate is shown in the following table:—

	Males		Females		Total	— 1 year per 1,000 Births
	—1 year	—2 years	—1 year	—2 years		
1947	339	5	221	9	574	22
1948	156	5	86	3	250	11
1949	100	13	57	6	176	7
1950	50	2	39	3	94	4
1951	37	2	27	1	67	3
1952	42	1	24	1	68	2
1953	27	—	22	—	49	2
1954	20	2	11	1	34	1.6
1955	22	1	14	1	38	1.2
1956	14	1	9	—	24	1.1
1957	7	—	16	—	23	1.0

FOOD POISONING.

1957 was the first full year of official notification of food poisoning. At the same time a return has been submitted at four-weekly intervals to the Department of Health for Scotland giving numbers and details of cases and incidents occurring in Glasgow. Considering this extra effort it is surprising, and all the more gratifying, that the incidence of food poisoning in the City showed a considerable fall compared with previous years.

	Incidents.			Cases Comprised.		
	1955	1956	1957	1955	1956	1957
Outbreaks	5	14	6	119	517	67
Family Outbreaks ...	40	26	27	133	87	73
Sporadic Cases ...	165	81	102	165	81	102
	<u>210</u>	<u>121</u>	<u>135</u>	<u>417</u>	<u>685</u>	<u>242</u>

It will be noted that outbreaks, associated with communal cooking, were few and the number involved in these incidents was small. This feature largely accounts for the small total number of cases (242). For the second successive year no death was known to be caused or precipitated by food poisoning.

The number of cases and incidents occurring in each month (according to the date of sickening) was as follows:—

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Cases ...	14	6	42	39	22	13	17	34	13	14	4	24	242
Incidents	3	3	22	23	18	12	13	14	5	10	4	8	135

These figures present an unusual picture. The peak incidence, such as it is, occurred in March and April. The usual high summer incidence was missing. This upset of the normal seasonal variation has been noted before in regard to dysentery but has not previously occurred with food poisoning. The absence of the summer increase was no doubt related to the low annual total.

Infection with *Salmonella typhi-murium* again contributed largely to the total. There were 90 cases of this infection during the year, a very marked decrease compared with 1956 (186 cases) and 1955 (175 cases). It is seldom that a year passes without a large outbreak of this infection but in 1957 no such incident occurred, only single families or single individuals were involved.

The other organisms of the *Salmonella* group were also less active than in past years. A family of four were infected with *Salm. saint paul*. There were four sporadic cases of *Salm. newport* infection and two of *Salm. enteritidis*. Single infections with *Salm. stanley*, *Salm. thompson*, *Salm. bovis morbificans* and *Salm. senftenberg* were recorded.

Poisoning due to *Staphylococcus aureus* toxin was also less prevalent involving only fifteen people compared with 58 in 1956 and 55 in 1955. Twelve of these cases occurred in a small outbreak in January in a training school for the hotel industry. Perhaps the pupils benefitted from this unrehearsed lesson in food hygiene. Cold meats eaten on the day after preparation were apparently responsible. Samples of these meats were available and examination gave a growth of *staph. aureus* coagulase positive in all the samples. The same organism was recovered from the nasal swab of a girl student who had taken part in preparing the meats.

The remaining three cases were in one family, who had partaken of cold silverside. The stock in which the meat had been cooked and in which it had remained after cooking produced a growth of the *staphylococcus*.

A peculiar outbreak occurred at the beginning of December in a students' hostel. Suspicion fell upon roast pork which had been cooked on a Thursday and eaten after reheating on the following Saturday and Sunday. Four waitresses employed in the hostel had symptoms which might have fitted a staphylococcal outbreak on the Sunday and Monday, but ten students whose illness also resembled food poisoning sickened

between Tuesday and Friday. Specimens submitted by the ill people were all negative. The wide spread of the times of sickening was puzzling and no conclusion as to cause was reached.

An explosive outbreak of diarrhoea occurred in a medical ward of a hospital at the beginning of August. Those involved were nine out of fifteen of the patients on light diet. They had eaten cold chicken at lunch and the symptoms came on about 8 p.m. A ward maid who had consumed the remainder of the cold chicken was also ill and her illness provided a clue to the cause, but there was no chicken left for examination. *Clostridium welchii* was grown from eleven specimens out of sixteen taken from those at risk. (This outbreak only came to the notice of the Health Department when an account was published some months later).

Another outbreak occurred in a seamen's hostel and this was not reported till ten days after the event. Not surprisingly the investigation was inconclusive. Notification by post, even if conscientiously practised, can only occasionally lead to satisfactory investigations of such outbreaks.

It is notable that 39 out of the 242 cases of food poisoning, 16 per cent. of the total, were single sporadic cases of unknown cause. Many of these are recorded following postal notification. In the absence of a positive specimen result for salmonella or dysentery little can be decided on the evidence of an isolated case. The cause of the gastro-intestinal upset might fall within the province of food poisoning or it might not. There remains a need for prompt information about incidents where more than one person is involved.

SCARLET FEVER.

In 1957 there were 971 cases registered compared with 991 in 1956. This is the lowest number of cases ever recorded in the annals of the City and is 20 fewer than the previous lowest figure, that of 1956. The total number treated in hospital was 544 while 416 were cared for at home and 11 in other institutions. The actual number of cases hospitalised continues to steadily decrease, the percentage ratio of hospital to home cases being 56 per cent. to 43 per cent.

The age distribution has maintained a constant pattern, almost 95 per cent. of the cases occurring between 2 and 15 years and 3.4 per cent. beyond the age of 15 years.

The seasonal incidence of the disease is shown in Appendix Table XV.

No ward in the City was entirely free from the disease, the largest number of cases occurring in the Cathcart Ward with 64 cases, followed by Knightswood with 61 cases. The lowest, once again, was Park Ward with only 4 cases.

The disease continues to exist in a mild form. During the past 8 years, 1950-57 inclusive, only 4 deaths have occurred, in marked contrast to the 102 deaths recorded as recently as 1932.

ERYSIPELAS.

There was a reduced incidence of this disease in 1957, 115 cases compared with 213 in 1956 and 197 in 1955. Female cases numbered 71 against 102 in 1956 and male cases 44 and 111 respectively. There was one death, a 62 year old woman.

The decline in mortality in recent years is as follows :—

	Deaths		Deaths
1930-39 (average)	... 46	1953	... 1
1940-45 (average)	... 8	1954	... —
1946-50 (average)	... 6	1955	... 2
1951	... —	1956	... —
1952	... 2	1957	... 1

PUERPERAL FEVER AND PYREXIA.

As in previous years these conditions have been discussed in the section "Maternity and Child Welfare" (page 92). As a result of alterations in the International Classification of Causes of Deaths, deaths from these two infections no longer appear under separate headings in the "Short List" but are now included in the group "Complications of Pregnancy, Childbirth and the Puerperium."

DIPHThERIA.

This will stand out as a momentous year in the recorded history of this disease in the City. For the first time no cases were reported during the year.

The following table shows the case incidence and mortality since 1940 and graphically represents within a period of 18 years the complete disappearance of the disease from the City at the moment. This remarkable achievement, however, must in no way permit relaxation of the immunisation campaign upon which the control of the disease ultimately depends.

Year	Cases	Deaths
1940	5,190	226
1941	4,039	155
1942	3,325	90
1943	2,919	81
1944	2,377	62
1945	1,970	33
1946	1,458	37
1947	502	13
1948	286	8
1949	148	5
1950	86	—
1951	130	4
1952	86	7
1953	50	—
1954	10	1
1955	2	—
1956	1	—
1957	—	—

Immunisation.—The following table shows the progress of the immunisation campaign during the past ten years :—

	No. of Children Immunised			No. of Reinforcing Doses				
	—5 yrs.	+5 yrs.	Age not Stated	Total	—5 yrs.	+5 yrs.	Age not Stated	Total
1948	12,701	9,819	16	22,536	691	6,959	7	7,657
1949	11,403	6,106	14	17,509	24,283	65	—	24,348
1950	7,624	5,771	28	13,423	84	19,758	3	19,845
1951	11,864	7,832	1	19,697	130	23,851	—	23,981
1952	9,859	7,375	1	17,235	76	17,794	—	17,870
1953	11,053	8,058	16	19,127	95	21,657	—	21,752
1954	11,380	9,499	16	20,895	99	23,839	—	23,938
1955	9,893	8,274	9	18,176	106	21,539	1	21,646
1956	12,512	8,167	6	20,685	119	26,126	5	26,250
1957	10,458	5,790	3	16,251	104	20,078	9	20,191

The figures for 1950 and 1951 are not comparable as those of 1950 are for only eight months of that year. Acute poliomyelitis was very prevalent from July to October, 1950, and the immunisation campaign was discontinued as a precautionary measure during that period. The figures for 1955 are not strictly comparable with those of the previous three years for the same reason—the temporary discontinuance of immunisation from July till November because of the prevalence of poliomyelitis in the City.

Birthday letters are sent to parents of children who have reached their first birthday and to parents of toddlers known to Health Visitors to be unprotected.

	Letters Sent		Total	Number Immunised under 5 years of age
	Infants	Toddlers		
1948	7,490	8,972	16,462	12,710
1949	6,204	10,030	16,234	11,403
1950	5,044	8,371	13,415	7,624
1951	5,296	9,114	14,410	11,864
1952	4,462	7,720	12,182	9,859
1953	3,352	6,108	9,460	11,053
1954	2,852	5,326	8,178	11,380
1955	1,261	3,170	4,431	9,569
1956	996	3,293	4,289	12,512
1957	704	2,227	2,931	10,458

The number of children immunised during 1957 was 16,251, a reduction of 4,434 from 1956, and the lowest number yet for any complete year. By the end of 1957 less than half (39.5 per cent.) of the population under five years of age had been given some measure of protection from diphtheria although it is estimated that *at least* 75 per cent. of pre-school children should be protected if it is to be kept under control.

It would appear that the very success of the immunisation campaign to date in reducing the incidence of this disease (to nil in 1957) is now militating against its future effectiveness. By its very rarity the effects of diphtheria are now less familiar to the present generation of parents who are, as a result, lulled into a false security against a disease which can result in disablement and in its more virulent form, even prove fatal.

Commenting on the fact that no virulent strain of *C. diphtheriae* was isolated in the laboratory in 1957 the City Bacteriologist attributed this result to the efficacy of the immunisation campaign. There is a stage when the ratio between immune and susceptible members of the community is such that the infection tends to die out of its own accord. " This quantitative ratio must however *be maintained* . . . and can only be achieved by rigorously continuing prophylactic inoculation to keep the number of susceptibles in the population as low as possible ". A strongly immunised community is the only guarantee against the reappearance of this disease in the city.

Reference should be made elsewhere in this Report to Section XI Bacteriological Laboratory (pages 250-253) where the incidence of the

disease and the prevalence of the various strains over a period of years is discussed.

DISEASES OF THE CENTRAL NERVOUS SYSTEM.

Cerebro-spinal Fever.—There were again fewer cases of this disease in 1957, 57 compared with 66 in 1956. Of these, 30 were male and 27 female cases. Fifty-one were children in the following age groups :—

	—1 year	—2 years	—5 years	—10 years
Males ...	10	8	8	2
Females ...	9	6	3	5

This infection has been decreasing steadily since 1953, when there were 123 cases. From the returns received by the Department of Health however it appears that Glasgow, with the Western Region have shown relatively high notification rates in recent years.

The cases were fairly evenly distributed throughout the City with some concentrations in wards 25, 26 and 27. The three wards with the highest incidence were Anderston, Cowcaddens and Hutchesontown, each with 4 cases. The seasonal incidence was as follows :—

	1957	1956	1955	1954
1st Quarter ...	16	22	40	26
2nd Quarter ...	24	16	17	31
3rd Quarter ...	8	11	17	19
4th Quarter ...	19	17	22	14
	<u>57</u>	<u>66</u>	<u>96</u>	<u>90</u>

In their report for 1957 the Department of Health emphasizes the dangerous character of this disease. "This infection is always to be treated with respect. It remains a dangerous and killing disease of young children and in its more acute forms is not only puzzling to the clinician but liable to cause the sudden death of a child."

On the Short List of Causes of Death this infection appears under the heading "Meningococcal Infections." During 1957 there were nine deaths so recorded, compared with eight in 1956 and 13 in 1955. Of these nine deaths, five were males and four females, their ages being as follows :—

Males—2 months, 3 months, two aged 1 year and one of 2 years.
Females—3 months and three aged 1 year.

POLIOMYELITIS, 1957.

In presenting statistics of poliomyelitis there has always been an element of difficulty and doubt. The object is to enumerate persons who have a recognisable illness caused by a specific infective agent, the polio. virus. Until recently this agent could not be identified by laboratory tests and therefore it was necessary to rely entirely on clinical diagnosis. In the type of case with paralysis this is a comparatively straightforward matter, although not entirely so. For example, in a patient with paralysis affecting the face only, the cause of the illness may be a matter of debate and to say that the facial palsy is a Bell's palsy does not settle the issue as to causation. However, in the very large majority of paralysed cases a confident diagnosis of poliomyelitis can be made. It has been a very different matter with non-paralytic cases. For many years a certain mild type of illness has been called by various names; "lymphocytic meningitis," "benign lymphocytic meningitis" or "aseptic meningitis." These are mere labels and do not give any hint as to the aetiology of the illness and in fact, as was suggested in the 1956 report, lymphocytic meningitis is an aetiological hotch-potch. A proportion of these cases is known to be non-paralytic poliomyelitis but the great difficulty is to decide what the proportion is. In the past to state a proportion would have been sheer guesswork without evidence to support the guess. Even to say that a case occurring in August was poliomyelitis and a case occurring in February was not, was to gamble with unknown probabilities. To exclude all non-paralytic cases was to admit that the infection was invariably crippling—pessimistic and untrue. The only reasonable method appeared to be to include all "lymphocytic meningitis" as non-paralytic poliomyelitis while signifying that this was not scientific truth. In 1957, thanks to the work of the Virus Laboratory, it is possible to come slightly nearer the truth of this matter.

It is proposed, therefore, to divide the cases for 1957 into the following group:—

	Cases.
1. Paralytic poliomyelitis	19
2. "Lymphocytic meningitis"	
(a) Positive virus result (polio. virus)	6
(b) Positive virus result (other viruses)	6
(c) No virus result and negative results	34

The six cases of group 2 (*a*) can be classified with some assurance as non-paralytic poliomyelitis. The number seems small but it should be remembered that 1957 was a non-epidemic year for poliomyelitis. The majority of positive results in this and the paralytic group were Type 3 polio. virus but there were also some cases with Type 1 virus. Group 2 (*b*) are cases of virus meningitis clinically indistinguishable from non-paralytic poliomyelitis. The positive evidence comprised Coxsackie virus (3 cases), Echo virus (2 cases) and Adenovirus (1 case).

The 34 cases of Group 2 (*c*) remain in no-man's land. In five of these no specimen was received for virus examination, three of the five being in the peak poliomyelitis months of August and September. It would still seem possible that some negative cases may be poliomyelitis, the negative results being due to the small amounts of polio. virus present and/or the limited efficiency of current virology methods. In support of such a view is the fact that polio. virus is not always isolated from paralytic cases which are nevertheless accepted as poliomyelitis. More probably the majority at least of Group 2 (*c*) are due to some other cause, possibly some virus as yet undiscovered.

There was no death from poliomyelitis during the year.

The numbers of paralytic cases since the first post-war epidemics are as follows :—

1947	262	1953	31
1948	6	1954	32
1949	27	1955	170
1950	212	1956	20
1951	31	1957	19
1952	25		

The numbers occurring in each month according to the date of sickening and the grouping described above were as follows :—

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group (1)	—	1	1	—	2	1	4	6	2	1	1	—	19
Group 2 (<i>a</i>)	—	—	—	—	1	—	1	2	1	1	—	—	6
Group 2 (<i>b</i>)	1	—	—	1	1	2	1	—	—	—	—	—	6
Group 2 (<i>c</i>)	4	—	3	5	4	2	5	6	2	—	2	1	34

There is no point in giving column totals as was done in previous years except that Group 1 (Paralytic) and Group 2 (*a*) (Non-Paralytic) might be combined. It will be noted that if this were done the totals for July, August and September would be 5, 8 and 3 respectively.

The numbers in Group 2 (*b*) (Other viruses) suggest an earlier seasonal incidence but are too small to warrant any conclusion.

Again Group 2 (*c*) (unknown causation) suggests a biphasic seasonal curve with high incidence in April-May and again in July-August. The former might be due to other viruses and the latter to polio. virus but again the numbers are too small for firm conclusions.

The further sub-division of cases to show age and sex distribution becomes somewhat cumbersome but it is set out below to preserve continuity in the records.

		AGE GROUP IN YEARS.									
		-1	1-2	3-4	5-9	10-14	15-19	20-29	30-39	40+	Total
1. Paralytic ...	M.	—	4	2	3	1	—	2	1	—	13
	F.	—	1	—	2	—	2	1	—	—	6
2. (<i>a</i>) Non-paralytic	M.	—	1	1	1	1	—	—	—	—	4
	F.	—	1	1	—	—	—	—	—	—	2
" Proven Polio " (1. + 2 (<i>a</i>)) ...	M.	—	5	3	4	2	—	2	1	—	17
	F.	—	2	1	2	—	2	1	—	—	8
Both Sexes—Total ...		—	7	4	6	2	2	3	1	—	25
2. (<i>b</i>) Other Viruses	M.	2	—	1	3	—	—	—	—	—	6
	F.	—	—	—	—	—	—	—	—	—	—
2. (<i>c</i>) Cause unknown	M.	—	2	1	10	3	3	4	2	—	25
	F.	1	1	—	1	2	2	1	1	—	9
2. (<i>c</i>) Both sexes ...		1	3	1	11	5	5	5	3	—	34

There was a marked preponderance of males in all groups of cases.

There was no case in any group over forty years of age. The age incidence of lymphocytic meningitis of unknown cause (2 (*c*)) is very similar to that of poliomyelitis (1 and 2 (*a*)). This is not unexpected if the lymphocytic meningitis be due to a virus infection, widespread in the community and with a stable immunity.

Geographically the accepted poliomyelitis cases were spread through the city with two in the Eastern Division, six in the North, five in the Central, seven in the South-East and five in the South-Western. There was some grouping in Wards 24 (Knightswood) and 26 (Gorbals) with four and three cases respectively.

The six cases due to other viruses were divided equally between Eastern and Northern Divisions with none elsewhere but this is of very doubtful significance.

The distribution of lymphocytic meningitis of unknown cause was seven in the East, 12 in the North, two in the Central, nine in the South-East and four in the South-West. Five of the South-East cases were in Hutchesontown Ward. It is notable that apart from Knightswood Ward mentioned above the Central Division was very free from these infections.

There was no instance recorded of two cases in any one household.

Thirteen of the nineteen paralytic cases required orthopaedic treatment in Mearnskirck Hospital but of these six cases have made an almost complete recovery within a few months. Three cases are wearing a support on one leg. One case has supports on both legs; one has a leg support and a weak shoulder; one has weakness of both arms and hands and the remaining case is still confined to bed with extensive paralysis. This last case is an adult male who initially required treatment in a respirator.

Vaccination against Poliomyelitis.—Due to problems of manufacture vaccine in 1957 did not become available until March and supplies continued to be erratic. By the end of the year 16,054 children, born between 1947 and 1954 inclusive, had been vaccinated with two injections which with the 2,860 children vaccinated with two injections in 1956, gave a total of 18,914 children who had been protected.

The original proposal of the Secretary of State offered vaccination to children born between the years 1947 and 1954 inclusive. In May, 1957, this offer was extended to include children born in 1955 and 1956 and later in November to children born in 1943 to 1946 inclusive, to children born in 1957 and who had reached the age of six months, and to expectant mothers. Other persons, specially exposed to infection, general practitioners, hospital and ambulance staffs and their families, were also included.

ENCEPHALITIS.

Encephalitis Lethargica.—There have been only sporadic cases of this infection since the small outbreak which occurred in 1937. There were no cases in 1957. There were three deaths during the year, a woman of 41 and two boys of two years of age.

Post Encephalitis Lethargica.—A group of cases, 26 in number, the remaining survivors of a Glasgow Epidemic which affected 70 persons

in all, has been under the continuous supervision of Dr. Ashie Main since 1923, and the following tables show the physical capacity of these cases in the Spring of 1958 :—

PHYSICAL CONDITION.

	Males	Females	Total
Fit for housework	—	8	8
Fit for employment	6	2	8
Unfit but going about	1	1	2
Bedridden at home	—	1	1
Cases in General Hospital	3	—	3
Cases in Mental Hospital	2	—	2
Cases untraced	1	—	1
	<u>13</u>	<u>12</u>	<u>25</u>

There has been little change in the condition of these patients in recent years.

	Spring 1957	Spring 1958
Group I. Recovery complete	4	4
Group II. Recovery incomplete :—		
Class A. Mental Retardation	2	2
Class B. Mental Instability ...	1	1
Class C. Nervous Instability ...	10	10
	—	13
Group III. Perversion of Conduct ...	—	—
Group IV. Parkinsonians :—		
Class A. Normal Mentality ...	2	2
Class B. Abnormal Mentality	7	6
	—	8
Group V. Died	—	—
	<u>26</u>	<u>26</u>

The condition of one case in Group IV, Class B, a 49 year old woman, improved in 1957. She was admitted to Woodilee Hospital (Observation Ward) in June with suicidal tendencies but was discharged after three months' treatment.

There was one death in this same group, a 47 year old man who died from broncho-pneumonia following an abdominal operation.

MEASLES.

Cases of measles registered in 1957 totalled 5,783 and of these 416 (or 7·3 per cent.) were treated in hospital. In 1956 the comparable figure was 8·7 per cent.

There has been a gradual decrease in recent years in the number of cases treated in hospital, which probably reflects the mildness of the present day disease.

There were three deaths, all females, aged 1, 5 and 6 years respectively.

In the table which follows, the registered cases, deaths and fatality rates are given in quinquennial periods for the past 27 years.

Period	Registered Cases	Deaths	Fatality per cent.
1930-34 ...	58,906	1,387	2.35
1935-39 ...	40,662	607	1.49
1940-44 ...	35,151	220	0.63
1945-49 ...	32,102	94	0.29
1950-54 ...	28,621	40	0.14
1955 ...	3,815	5	0.13
1956 ...	4,603	—	0.00
1957 ...	5,683	3	0.05

As shown in Appendix Table XV (Cases of Infectious Disease registered in each month of the year) the months of January, February and March provided the greatest number of cases. The following table shows the quarterly incidence of measles during the last 3 years :—

QUARTERLY INCIDENCE OF MEASLES, 1955, 1956 and 1957.

	1955		1956		1957	
	Registered Cases	Per-centage of Total	Registered Cases	Per-centage of Total	Registered Cases	Per-centage of Total
1st Quarter ...	2,380	62.7	402	8.7	4,461	78.5
2nd Quarter ...	1,059	27.3	947	20.6	1,156	20.4
3rd Quarter ...	108	2.9	283	6.2	42	0.7
4th Quarter ...	268	7.1	2,971	64.5	24	0.4
	<u>3,815</u>	<u>100.0</u>	<u>4,603</u>	<u>100.0</u>	<u>5,683</u>	<u>100.0</u>

In 1957 the sex and age distribution was as follows :—

CASES ACCORDING TO SEX AND AGE GROUPS, 1957.

Age in Years	Male	Female	Total
—1	108	112	220
—2	252	215	467
—5	793	780	1,573
—10	1,688	1,611	3,299
10+	52	72	124
	<u>2,893</u>	<u>2,790</u>	<u>5,683</u>

Rubella or German Measles.—Cases of Rubella numbered 380 in 1957 compared with 690 in 1956 and 384 in 1955. The infection was

mostly prevalent in March, April and May in which period there were 223 cases. The age distribution was as follows :—

		Age					Total	
		—5	—10	—15	—20	—25	25+	
Males	...	18	144	20	1	3	—	186
Females	...	10	144	30	4	4	2	194

The association between Rubella in pregnant women and congenital malformations in the children they bear is still being investigated.

WHOOPIING COUGH.

There were 2,914 cases of whooping cough notified during 1957, of which 229 were treated in hospital.

There were five deaths during the year, three boys and two girls, and all but one, a girl aged four, were under one year of age.

The registered cases, deaths and fatality rates in quinquennial periods for the past 25 years are shown in the following table :—

Period	Registered Cases	Deaths	Fatality per cent.
1935-39 ...	39,169	917	2.94
1940-44 ...	22,316	460	2.06
1945-49 ...	16,607	160	0.96
1950-54 ...	23,972	63	0.26
1955 ...	1,362	—	0.0
1956 ...	3,684	2	0.05
1957 ...	2,914	5	0.17

The incidence of whooping cough was highest in the first quarter of the year. Distribution of the cases in each month of the year is shown in Appendix Table XV.

QUARTERLY INCIDENCE OF WHOOPING COUGH 1955, 1956 and 1957.

	1955		1956		1957	
	Notifi- cations	Per- centage of Total	Notifi- cations	Per- centage of Total	Notifi- cations	Per- centage of Total
1st quarter ...	562	41.3	376	10.2	1,407	48.27
2nd quarter	388	28.5	1,144	31.1	1,096	37.61
3rd quarter ...	176	12.9	1,080	29.3	278	9.57
4th quarter ...	236	17.3	1,084	29.4	133	4.55
	<u>1,362</u>	<u>100.0</u>	<u>3,684</u>	<u>100.0</u>	<u>2,914</u>	<u>100.0</u>

In 1957 the sex and age distribution was as follows :—

CASES ACCORDING TO SEX AND AGE GROUPS.

Age in Years	Male	Female	Total
—1	164	132	296
—2	144	148	292
—5	407	457	864
—10	638	724	1,362
10+	37	63	100
	1,390	1,524	2,914
	1,390	1,524	2,914

CHICKENPOX.

Chickenpox was less prevalent in 1957, with 4,336 cases compared with 5,901 cases registered in 1956. The incidence of this disease in recent years is shown as follows :—

1930-39 (average)	6,354
1940-49 (average)	5,377
1950	7,004
1951	8,053
1952	5,949
1953	7,347
1954	7,427
1955	4,502
1956	5,901
1957	4,336

Cases are removed to hospital only in special circumstances, e.g., when occurring in institutions, children's homes, etc. During 1957 150 cases were removed to hospital. The disease is probably much more prevalent than the bookings indicate, for it is mostly on information obtained from school attendance officers that cases are registered. The distribution throughout the City was as follows :—

East	1,056
North	739
Central	753
South-East	847
South-West	875
Institutions and Harbour	66
	4,336
	4,336

The wards chiefly affected were Cathcart (269), Craigton (248), Dalmarnock (230), Shettleston and Tollcross (213), Pollokshields (167) and Govan (164). The incidence was heaviest in March and May and in the first half of the year generally. (See Table XV of the Appendix).

PEMPHIGUS NEONATORUM.

There were only 8 cases during 1957, sixteen less than in 1956. Of these eight cases, three were male and five female.

RABIES.

No case of rabies is known to have occurred, but throughout the year numerous instances of persons having been bitten by dogs or other animals were reported by the police for investigation.

During 1957, 281 persons were bitten by dogs, 10 serious enough to require stitching of the wound. In 1956 there were 292 and in 1955. 303. One person was bitten by a rat.

TRACHOMA.

During the year one new case was notified as suffering from trachoma. In the table below is shown the number of cases notified and the number verified each year for the past eleven years.

Year			No. of New Cases Notified	Definite	Doubtful
1946-1950	...	...	27	25	2
1951-1955	...	...	15	10	5
1956	...	...	1	—	—
1957	...	...	1	1	—

During the year one case was transferred to an other area and two died, leaving 83 cases on the register at the end of 1957.

NUMBER OF CASES ON REGISTER.

Year			Definite Cases	Doubtful Cases	Total
1946-1950 (average)	...	...	123	2	125
1951-1955	...	...	97	—	97
1956	...	...	85	—	85
1957	...	...	83	—	83

Patients attending the special clinic made a total of 998 attendances and during the same period the nurse made 102 home visits. No home contacts developed the disease during the year. One patient required treatment in hospital.

INFECTIONS DUE TO L.ICTERO-HAEMORRHAGIAE AND L.CANICOLA.

No cases of illness due to either *L.ictero-haemorrhagiae* or *L.canicola* were reported to the Department during 1957. Two cases of interest from county areas were treated in Glasgow Fever Hospitals and these are reported as follows :—

INFECTIVE JAUNDICE.

A man, aged 64 years, was admitted to a fever hospital on 20th November, 1957, from a model lodging house in Glasgow where he had been staying for two days. Prior to that he had been working for a year in a piggery in Lanarkshire. He had had a preliminary illness of four days characterised by generalised aches and pains. The Schuffner Test was found to be positive for *L.ictero-haemorrhagiae* to 1 in 30,000 and for *L.canicola* to 1 in 10 dilution. He made an uneventful recovery in response to a large dose of penicillin and was dismissed to a convalescent home on 24th December, 1957. The Medical Officer of Health, Lanarkshire, received the notification of this case.

LEPTOSPIRA CANICOLA INFECTION.

A man, aged 25 years, resident in Dunbartonshire, was admitted to a fever hospital in Glasgow on 13th May, 1957, as a case of meningitis. Lumbar puncture revealed the meningitis to be of the lymphocytic variety. Apart from the signs of meningeal irritation the only other clinical finding of note was a degree of conjunctivitis.

The Schuffner Test was found to be positive for *L.ictero-haemorrhagiae* to 1 in 100 and for *L.canicola* to 1 in 30,000. He was employed by a farmer in the county area. *L.canicola* were isolated on bleeding several of the pigs on the farm.

The man made an uneventful recovery and was dismissed on 5th June, 1957.

ANTHRAX.

No cases of this infection were reported to the Department during 1957.

SCABIES.

A considerable increase has occurred in the number of cases of this disease during the year, 1,846 persons in 874 families being involved as against 1,129 persons in 481 families in 1956. Scabies has increased in incidence during the past four years.

The following table shows the position in 1957 in each of the five public health divisions as compared with 1956 :—

Division	No. of Families		No. of Cases	
	1956	1957	1956	1957
Central	53	71	150	166
Northern	113	309	252	662
Eastern	99	168	220	317
South-Eastern	113	208	288	459
South-Western	103	118	219	242
	<u>481</u>	<u>874</u>	<u>1,129</u>	<u>1,846</u>

RESPIRATORY DISEASES OTHER THAN TUBERCULOSIS.

During 1957, 5,447 cases of primary pneumonia and 448 cases of influenzal pneumonia were notified. The notification of primary pneumonia showed an increase of 21·8 per cent. over the 1956 figure while the notifications of influenzal pneumonia were about eight-and-a-half times those of 1956. These increases are related to the influenza outbreak of September and October, 1957.

The notifications of primary pneumonia in age groups, with the number and percentage treated in hospital, are shown in the following table :—

TABLE A.

NOTIFICATIONS OF PRIMARY PNEUMONIA AND NUMBER TREATED IN HOSPITAL.

Age in Years	Notifications of Primary Pneumonia	Number Treated in Hospital	Percentage Treated in Hospital
Under 1 year	898	837	93·2
1-5 years	905	813	91·0
5-45 years	1,405	1,147	81·8
45-65 years	1,265	1,032	81·6
65 years and over	974	758	77·8
All Ages	<u>5,447</u>	<u>4,587</u>	<u>84·2</u>

Of the 448 cases of influenzal pneumonia notified, 180 or 40·2 per cent. were treated in hospital.

Of the deaths from primary pneumonia 3·5 per cent. occurred between 5 and 45 years, while 25·8 per cent. of notifications and 25·0 per cent. of the cases treated in hospital occurred between these ages.

TABLE B.

NOTIFICATIONS OF PRIMARY PNEUMONIA.
AGE AND SEX DISTRIBUTION.

Age in Years	Male Notifi- cations	Per- centage of Total	Female Notifi- cations	Per- centage of Total	Notifi- cations for Both Sexes	Per- centage of Total
Under 1 year ...	510	16.7	388	16.2	898	16.5
1-5 years ...	524	17.1	381	16.0	905	16.6
5-45 years ...	714	23.3	691	29.0	1,405	25.8
45-65 years ...	787	25.7	478	20.0	1,265	23.2
65 years and over	526	17.2	448	18.8	974	17.9
All Ages ...	<u>3,061</u>	<u>100.0</u>	<u>2,386</u>	<u>100.0</u>	<u>5,447</u>	<u>100.0</u>

Male notifications exceed female notifications at all ages. Notifications of children under five years accounted for 33.1 per cent. of all notifications and 17.9 per cent. of notifications were of persons 65 years and over.

TABLE C.

AGE AND PERCENTAGE DISTRIBUTION OF THE NOTIFICATIONS OF
PRIMARY PNEUMONIA FOR THE YEARS 1955, 1956 AND 1957.

Age in Years	1955		1956		1957	
	Notifi- cations	Per- centage of Total	Notifi- cations	Per- centage of Total	Notifi- cations	Per- centage of Total
Under 1 year ...	797	17.5	500	11.2	898	16.5
1-5 years ...	787	17.3	696	15.5	905	16.6
5-45 years ...	1,282	28.1	1,242	27.8	1,405	25.8
45-65 years ...	889	19.5	1,060	23.7	1,265	23.2
65 years and over	804	17.6	974	21.8	974	17.9
All Ages ...	<u>4,559</u>	<u>100.0</u>	<u>4,472</u>	<u>100.0</u>	<u>5,447</u>	<u>100.0</u>

Under 65 years notifications were higher in all age groups in 1957 as compared with 1956, especially under one year.

As a rule notifications of primary pneumonia and deaths from pneumonia are highest in the first quarter of the year but this year, associated with the influenzal outbreak in the latter part of the year, the incidence of notifications and deaths fell most heavily on the last quarter.

TABLE D.

QUARTERLY INCIDENCE OF NOTIFICATIONS AND DEATHS OF PRIMARY PNEUMONIA AND INFLUENZAL PNEUMONIA AND OF DEATHS FROM BRONCHITIS.

Period	Primary Pneumonia				Influenzal Pneumonia				Bronchitis	
	Noti- fica- tions	Per cent. of Total	Deaths	Per cent. of Total	Noti- fica- tions	Per cent. of Total	Deaths	Per cent. of Total	Deaths	Per cent. of Total
1st Quarter	1,541	28.3	139	24.2	10	2.2	7	4.4	212	36.1
2nd Quarter	837	15.4	105	18.2	2	0.4	4	2.5	102	17.3
3rd Quarter	880	16.1	97	16.9	46	10.3	35	21.7	76	12.9
4th Quarter	2,189	40.2	234	40.7	390	87.1	115	71.4	198	33.7
	<u>5,447</u>	<u>100.0</u>	<u>575</u>	<u>100.0</u>	<u>448</u>	<u>100.0</u>	<u>161</u>	<u>100.0</u>	<u>588</u>	<u>100.0</u>

The death-rate per million for respiratory diseases, other than tuberculosis, was 1,310 compared with 1,283 in 1956 and 1,285 in 1955. (Pneumonia of the new-born is not included.)

TABLE E.

DEATHS FROM RESPIRATORY DISEASES OTHER THAN TUBERCULOSIS.

Year	Pneumonia and Bronchitis (excluding Pneumonia of the new born)			Influenza	Other Respiratory Disease
		
1946	1,055	160	153
1947	1,118	82	144
1948	738	37	140
1949	932	131	142
1950	1,205	57	137
1951	1,268	183	118
1952	1,222	119	134
1953	1,055	74	106
1954	977	26	113
1955	1,245	40	109
1956	1,235	50	105
1957	1,163	161	90

Deaths from pneumonia and bronchitis, 1,163 (Table E) were less than in 1956 due to the relatively small number of deaths in the first quarter of 1957 more than balancing the increase in deaths from both pneumonia and bronchitis in the last quarter. Of these 1,163 deaths, 575 were from pneumonia and 588 from bronchitis. Of the deaths from pneumonia and bronchitis 65.4 per cent. were male, 59.3 per cent. male deaths in pneumonia and 71.4 per cent. male deaths in bronchitis.

TABLE F.
DEATHS FROM PNEUMONIA AND BRONCHITIS, 1957.
AGE AND SEX DISTRIBUTION.

(i) Pneumonia and Bronchitis—Combined Deaths. (Corresponding figures for 1956 given in brackets).

Age in Years	Male Deaths				Female Deaths				Deaths—Both Sexes			
	Deaths		Per Cent. of Total		Deaths		Per Cent. of Total		Deaths		Per Cent. of Total	
Under 1 year ...	46	(47)	6.1	(6.2)	27	(37)	6.7	(7.7)	73	(84)	6.3	(6.8)
1-5 years ...	8	(4)	1.1	(0.5)	4	(8)	1.0	(1.7)	12	(12)	1.0	(1.0)
5-45 years ...	22	(27)	2.9	(3.6)	10	(12)	2.5	(2.5)	32	(39)	2.8	(3.2)
45-65 years ...	258	(266)	33.9	(35.2)	89	(89)	22.1	(18.6)	347	(355)	29.8	(28.7)
65 years and over	427	(412)	56.0	(54.5)	272	(333)	67.7	(69.5)	699	(745)	60.1	(60.3)
All ages ...	761	(756)	100.0	(100.0)	402	(479)	100.0	(100.0)	1,163	(1,235)	100.0	(100.0)

(ii) Pneumonia and Bronchitis—Deaths listed separately. (Percentages of column totals given in brackets).

Age in Years	PNEUMONIA			BRONCHITIS								
	Male	Female	Both Sexes	Male	Female	Both Sexes						
Under 1 year ...	41	(12.0)	21	(9.0)	62	(10.8)	5	(1.2)	6	(3.6)	11	(1.9)
1-5 years ...	7	(2.1)	4	(1.7)	11	(1.9)	1	(0.2)	—	—	1	(0.2)
5-45 years ...	14	(4.1)	6	(2.6)	20	(3.5)	8	(1.9)	4	(2.4)	12	(2.0)
45-65 years ...	81	(23.7)	48	(20.5)	129	(22.4)	177	(42.2)	41	(24.4)	219	(37.1)
65 years and over	198	(58.1)	155	(66.2)	353	(61.4)	229	(54.5)	117	(69.6)	346	(58.8)
All ages ...	341	(100.0)	234	(100.0)	575	(100.0)	420	(100.0)	168	(100.0)	588	(100.0)

Of the 85 deaths from pneumonia and bronchitis under 5 years, 73 were from pneumonia. Between 5 and 45 years, 20 deaths occurred from pneumonia and 12 from bronchitis. Between 45 and 65 years, of the 258 male deaths from pneumonia and bronchitis, bronchitis was responsible for 177, 68.6 per cent., of the deaths while, of the 89 female deaths, bronchitis was responsible for 41 or 46.1 per cent. Over 65 years bronchitis caused 229, or 53.6 per cent., of the 427 male deaths compared with 117, or 43.0 per cent., of the 272 female deaths from pneumonia and bronchitis.

Of the notifications and deaths from primary pneumonia in 1957, 29.1 per cent. of notifications and 32.0 per cent. of deaths occurred in the months of September and October, the comparable figures for 1956 being 10.3 per cent. of notifications and 11.7 per cent. of deaths, while of the 161 deaths from influenza and influenzal pneumonia 85.1 per cent. occurred at this time.

During September and October, 53.1 per cent. of the male notifications and 43.8 per cent. of the female notifications were over 45 years, the comparable figures for the year being 42.9 and 38.8. Of the male deaths from primary pneumonia in September and October, 82.6 per cent. were over 45 years compared with 81.8 per cent. for the year

as a whole, while for female deaths the corresponding percentages were 88.0 and 86.8.

TABLE G.

PROPORTIONATE MORTALITY PER CENT. OF DEATHS FROM ALL CAUSES,
OF DEATHS FROM PNEUMONIA, INFLUENZA AND BRONCHITIS.

Age in Years	MALE Pneumonia, Influenza and Bronchitis			FEMALE Pneumonia, Influenza and Bronchitis			BOTH SEXES Pneumonia, Influenza and Bronchitis		
	Deaths from All Causes	Deaths Propor- tionate Mortality per cent.		Deaths from All Causes	Deaths Propor- tionate Mortality per cent.		Deaths from All Causes	Deaths Propor- tionate Mortality per cent.	
Under 1 year ...	451	47	10.4	323	30	9.3	774	77	9.9
1-5 years ...	63	11	17.5	37	5	13.5	100	16	16.0
5-45 years ...	535	38	7.1	409	26	6.4	944	64	6.8
45-65 years ...	2,274	280	12.3	1,454	116	8.0	3,728	396	10.6
65 years and over	3,694	456	12.3	3,937	315	8.0	7,631	771	10.1
All Ages ...	7,017	832	11.9	6,160	492	8.0	13,177	1,324	10.0
All Ages, 1956	6,968	777	11.1	6,226	508	8.2	13,194	1,285	9.7

INFLUENZA, 1957.

It has been the practice for several years to give statistics covering the winter months, December to March, in each Annual Report. It was found that this period included any increased prevalence or epidemic of influenza such as the Virus B epidemic of February-March, 1952. This was a local epidemic and on past experience, local, regional or national influenza could be expected to conform to this winter epidemic pattern. In 1957 a quite different situation arose. The world pandemic of Asian influenza reached Britain during the summer and Glasgow at the beginning of September. Had the influenza coincided with the winter fogs and snow, and the normal peak period for pneumonia, the morbidity and mortality would surely have been more serious. When the epidemic tide receded, as it did very rapidly at the end of October, 1957, it was feared that another wave might occur during the winter months. This did not materialise. The Virus Laboratory at Ruchill continued to examine specimens from suspected cases of influenza. Their results showed that the Influenza Virus A/Asian 1957 almost, but not quite, disappeared during November and December, 1957. It reappeared at the beginning of January, 1958, and positive results in a considerable proportion of laboratory examinations persisted until the end of March, 1958. Reports of the continued presence of Influenza in the City were received from time to time but the disease did not occur in epidemic proportions. In certain semi-closed communities, e.g. Glasgow Royal Mental Hospital and Erskine Hospital small influenza epidemics occurred in February. The population as a whole would appear to have been immunised by the first severe epidemic and was resistant to further epidemic spread.

The following statistics are presented to cover the period under review, viz. winter '56-'57, winter '57-'58 and the intervening period of the epidemic.

TABLE I.

- (a) New claims to the Ministry of National Insurance.
 (b) Notifications of Acute Primary and Influenzal Pneumonia.
 (c) Deaths registered from Respiratory Diseases (excluding tuberculosis and tumours).

	Week	(a)	(b)	(c)
1956 ...	49	4,955	144	27
	50	4,125	163	22
	51	(2 wks.) 7,064	182	15
	52		166	25
1957 ...	1	5,962	197	40
	2	6,833	243	35
	3	6,261	187	38
	4	6,258	170	46
	5	5,720	146	32
	6	5,483	128	22
	7	5,260	135	23
	8	5,943	134	34
	9	6,472	123	30
	10	6,800	166	31
	11	6,913	161	34
	12	6,156	130	26
	13	5,301	126	24
Epidemic period Sept.-Oct.	36	4,972	65	10
	37	6,342	92	13
	38	9,488	115	21
	39	26,604	314	53
	40	30,039	392	108
	41	17,410	465	115
	42	8,488	452	69
	43	5,806	251	37
44	4,677	142	22	
1958 ...	49	4,932	187	23
	50	4,292	188	23
	51	(2 wks.) 7,964	252	38
	52		224	40
	1	4,295	199	43
	2	7,566	273	68
	3	6,044	181	42
	4	6,418	180	43
	5	6,398	168	66
	6	6,145	178	45
	7	6,794	166	51
	8	6,198	168	45
	9	6,653	173	45
10	6,373	189	39	
11	6,389	135	46	
12	7,243	150	62	
13	7,420	179	69	

The influenza spotting scheme run by the Virus Laboratory in co-operation with general practitioners was in operation in the winter

of 1956-57 and failed to reveal a single case of influenza in the city. The persistence of influenza in the early months of 1958 has been mentioned. The figures in Table I reflect these laboratory findings. It will be seen that the new insurance claims Table I (a), in the former winter never rose above 7,000 per week and fell below 6,000 in several weeks. In 1958 the claims topped 7,000 in the 2nd, 12th and 13th weeks and did not fall below 6,000 in the intervening weeks. Pneumonia notifications (b) were also on a somewhat higher level in 1958 than in 1957 and Respiratory deaths (c) similarly were higher, rising to more than 60 per week on four occasions in the 1957-58 winter period. None of these winter figures approaches the figures recorded during the epidemic of September-October, 1957, which will be discussed more fully below.

TABLE II.

DEATHS FROM INFLUENZA.

	1957			1956		
	M.	F.	Total	M.	F.	Total
Under 5 years ...	4	4	8	2	2	4
5-45 years ...	16	16	32	3	1	4
45-65 years ...	22	27	49	9	7	16
Over 65 years ...	29	43	72	7	19	26
	71	90	161	21	29	50

The comparison above is between a year when Virus A/Asian/57 was epidemic in the city and the previous year when Virus A (described as being of the Scandinavian group) was present but there was no epidemic. The considerable increase in influenza mortality is obvious.

Looking back over the records of past years it is found that in 1951 when there was an epidemic of Virus A influenza, small compared to that of 1957, there were 183 deaths from influenza. It is suggested that the greater number of deaths in 1951 was due to the peak of the epidemic occurring in January.

Further study of these three years, 1951, 1956 and 1957, shows an interesting change in the age distribution of influenza deaths. Taking the 5-45 years age group the proportions of the total are:—1951— $9/183 = 4.9$ per cent.; 1956— $4/50 = 8$ per cent.; 1957— $32/161 = 19.9$ per cent. Application of the usual tests shows that the difference between this age group proportion in 1957 and those in 1956 and 1951 is statistically significant. That is to say, it suggests a real difference in the age distribution of deaths with a higher proportion in the 5-45 years age group.

TABLE III.

MONTHLY RETURNS OF CORRECTED NOTIFICATIONS AND DEATHS FROM
INFLUENZAL PNEUMONIA.

	Notifications	Deaths
January	6	1
February	3	—
March	1	1
April	1	1
May	1	1
June	—	1
July	—	—
August	—	—
September	46	27
October	358	76
November	21	5
December	11	3
	<hr/> 448	<hr/> 116

As has been said in previous reports, notification of influenzal pneumonia is incomplete. The figures only give a rough indication of the extent to which influenza gave rise to respiratory complications. The figure for October, 1957 is a very high one and may be compared to January, 1951, the last Virus A epidemic month in which the corrected notifications numbered 77.

Turning to the deaths column, it may be noted that the total 116 is considerably short of the total in Table II of deaths from influenza (161). In other words there were 45 deaths certified as from influenza but without mention of respiratory complication. This is most unusual for in previous years practically all influenzal deaths made mention of pneumonia in the death certificate. It is difficult to know how much of this is due to inaccurate certification of death. A considerable number of death certificates showed "Influenza" as the only cause of death and some of these cases may have had pneumonia. Many other certificates showed "Influenza" plus some heart condition, acute or chronic, e.g. "Acute influenza," 1 day. Endocarditis, 10 years." It seems reasonable to suggest that the toxic condition of the influenza caused or precipitated a considerable number of deaths without a complicating pneumonia.

There follows a detailed report on the epidemic in Glasgow.

REPORT ON THE EPIDEMIC IN GLASGOW.

In view of the unusual nature of the influenza epidemic during the months of September and October, 1957, it would appear appropriate

to review the epidemiology of the pandemic and particularly as it affected Glasgow.

Development of the Pandemic.—The present influenza pandemic started in the North of China in the beginning of the spring of 1957 and penetrated into the interior. In March the virus had been isolated at Peking and its unusual features recognised. By the middle of April cases were appearing in Hong Kong, and the first notification in the World Health Organisation Weekly Epidemiological Record reporting the presence of numerous influenza cases was from Hong Kong on 4th May, 1957. The Record for the 10th May contained a note that an epidemic of respiratory disease had occurred in Hong Kong, that it had been confirmed as influenza, but that the type had not been determined. About 15-20 per cent. of the population were said to be infected. An extensive outbreak of influenza was reported from Singapore on 4th May, about 10 per cent. of the population being affected, the disease being said to be mild and the mortality nil. By 17th May the influenza virus had been isolated at Singapore, and the epidemic in Hong Kong had begun to subside during the first fortnight of the month of May.

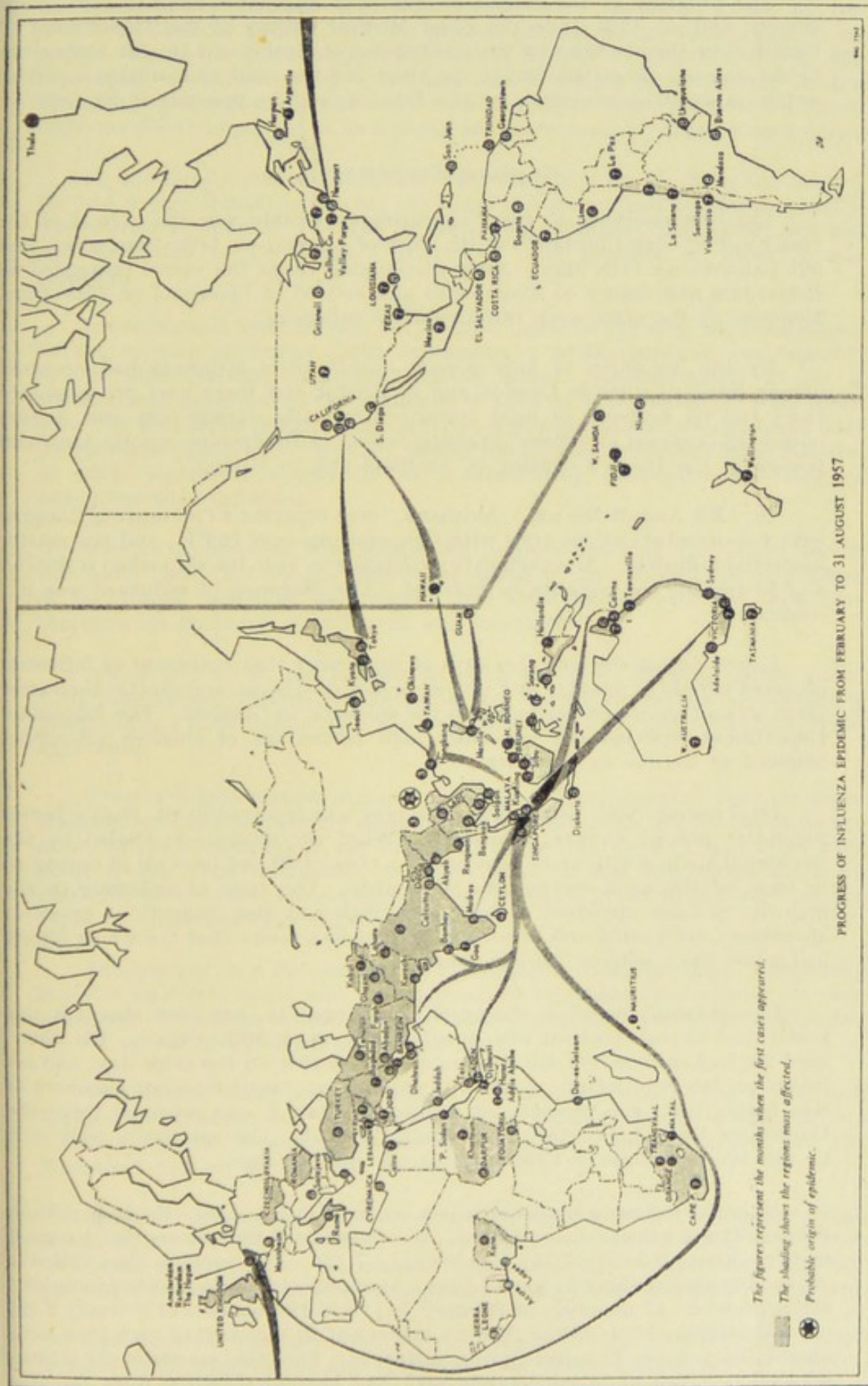
On 25th April a United States aircraft carrier from Hong Kong docked at a port in Japan with influenza on board. By the 22nd May, after analysis of the strains recovered in Japan, one from Hong Kong, and two strains from Singapore, the Walter Reed Army Institute of Research, Washington, announced that they were antigenically different from other influenza A viruses and that no detectable antibodies against the new virus were found in personnel selected at random. During the first ten days of May there were 100,000 cases in Taipeh and 10,000 cases in Chilung, and by 24th May the influenza had spread to the Western Pacific, to Manila and Taiwan. The symptoms were said to be severe headache, temperature about 101°-103°F. for about two to three days, followed by four days of disability. By May influenza had reached Cairns in Queensland and Melbourne in Victoria.

The confirmation of the unusual nature of the virus came from Singapore and from the World Influenza Centres in London and in Montgomery, Alabama. The epidemic spread rapidly to the seaboard of the West Indies, Indo-China and India, and by June it had been carried by sea from Tokyo to the Philippines and Hawaii to California, from Indonesia to Holland and from Holland to Newport, Rhode Island, from India to Persia and Aden.

Influenza was spreading rapidly in the Netherlands and an epidemic had been reported in Czechoslovakia. In Holland an outbreak of clinical influenza had been reported at a young girls' Institution in Bussum, near Amsterdam, affecting about 30 per cent. of the inmates. From there it spread to Naarden, Utrecht, Rotterdam, Amsterdam and Egmond. In schools the attack rate was especially high, reaching in some instances 100 per cent. Influenza had also reached Holland by way of the liner "Oranje," arriving at Amsterdam on 27th June, and the liner "Sibajak," arriving at Rotterdam on 2nd July.

By July it had spread through the Red Sea into Syria, Lebanon, Jordan and Egypt, and was appearing in East Africa and South Africa. It was also spreading across America, both North and South, and by August the infection was world wide.

One of the striking characteristics of the spread of the pandemic of influenza has been the importance of sea routes, as is illustrated by the map showing the progress of influenza throughout the world from February to August, 1957, contained in the Chronicle of the World Health Organisation for September. In this its resemblance to plague is remarkable. Dr. A. K. Chalmers wrote in 1900, "When plague appeared in our midst in the autumn of 1900 it abruptly reopened a record in which the last entry was contemporaneous with the period of the Restoration and of which the pages of Defoe and Boghurst may have been said to be regarded by generations as the closing chapters." Plague had reappeared after an absence of over 200 years in Hong Kong in 1894, and in less than six years it spread to both hemispheres.



The figures represent the months when the first cases appeared.
 The shading shows the regions most affected.
 Probable origin of epidemic.

PROGRESS OF INFLUENZA EPIDEMIC FROM FEBRUARY TO 31 AUGUST 1957

Reproduced from the W.H.O. Chronicle, September 1957

The progress of the spread of influenza had been watched with some anxiety and on 12th June the Chief Medical Officer of the Department of Health drew the attention of Medical Officers of Health and Health Authorities to the unusual characteristics of the virus and the need to maintain a careful watch on available statistics for the first signs of its presence in Scotland.

GLASGOW EXPERIENCE.

The first reference to cases appearing in Britain was the arrival of the vessel m.v. "Clan Chattan" at the Port of London on 14th June which had left Calcutta on 11th May. After discharging cargo the vessel proceeded to Rotterdam and thence to Avonmouth and arrived in Liverpool on 25th June. Members of the crew were suffering from influenza.

By the beginning of July several outbreaks of influenza had occurred among crews of ships in London and in Bristol, but there were no secondary cases and no evidence of local spread. Gradually during July and August outbreaks occurred in a Boys' Training School in Hampshire, among American airmen in the Home Counties, in Sheffield and in Belfast.

On 17th August the s.s. "Avisbank" was reported to be nearing Glasgow with two members of the crew with temperatures over 103°F., and the master suspected influenza. Arrangements were made to visit the ship when it docked and to remove the patients to hospital. The diagnosis of influenza was not confirmed.

It was during the first few days of September that outbreaks of influenza occurred mainly in primary and junior secondary schools, and shortly thereafter there was an explosive beginning to the epidemic in Glasgow. The Education Department reported the unusually high percentage of children off school believed to be due to influenza.

On Tuesday, 10th September, influenza was reported in St. Paul's Junior Secondary School Annexe, Whiteinch. When the school was visited by the Divisional Medical Officer 17 boys out of a class of 30 had been off ill during all or most of the week ending 6th September. The time of sickening in the majority of cases appeared to have been 30th and 31st August. A group of absentees were visited and in several cases it was found that the whole family had gone down with a 'flu-like illness.

In one family in which the pupil, a boy aged 14, had been absent it was found that he had sickened with cough and fever on 30th August. His sister, aged 23, had sickened on 4th September, his mother on the same day, and his father on 7th September. Gargles in saline were taken from all members of this family, and the presence of influenza Virus A was reported from the University Virus Laboratory at Ruchill Hospital. The specimens were sent to the World Influenza Centre for strain identification.

A similar influenza outbreak which occurred in St. Mary's Primary School, Forbes Street, was also investigated. It was reported that illness had occurred in two classes, Primary 7 (1) and Primary 7 (2). The average class roll was 40, the boys being about 11 years of age. It appeared that on Monday forenoon, 9th September, 17 members of Primary 7 (1) and 19 members of Primary 7 (2) did not attend school. Since then an average of 20 members of each class were absent, all stated to be suffering from influenza. The other classes in the school, which has a roll of approximately 400, had normal absentee rates for this time of the year, and all members of the staff were on duty and reported well.

Some of the children who were absent were visited at home by the Divisional Medical Officer, and the general clinical picture was found to be similar—headache commencing suddenly on Sunday or Monday, 8th or 9th September, accompanied by a dryness and a feeling of congestion in the nasopharyngeal region, and in some cases a definite upper tracheal irritation. Only one child complained of limb pains, and all recovered without complication.

In one family visited the father had returned from work feeling unwell. He had severe frontal headache, sweating and generalised joint pains and a temperature of 103.5°F. Gargles in saline were obtained from father and son and submitted to the Virus Laboratory. The presence of Virus A was reported.

Investigations were carried out in other parts of the city, as for example, on the evening of Friday, 20th September, a small outbreak was reported in the Bible Training Institute, Bothwell Street. Approximately 12 out of 100 students assembled at the beginning of term on 17th September were down with 'flu, and saline gargles obtained from a number of the patients were later proved to be positive for Virus A. One of the affected students died in hospital on 20th September apparently of a fulminating pneumonia following or associated with influenza.

Similar occurrences were happening in ships reaching the Clyde, and it was quite clear that by 9th September Glasgow, and in fact the population of the United Kingdom as a whole, had been seeded with the virus and therefore an epidemic of influenza was inevitable.

Action taken.—In the circular letter of the Chief Medical Officer dated 12th June already referred to indication had been given of the advantages of maintaining a close liaison with the general practitioners and with the hospital authorities.

From the information already available it was apparent that influenza would affect Glasgow possibly when the colder weather set in, but the incidence of an influenza outbreak in the schools in the second week of September gave point to the need to discuss with the Local Medical Committee the form publicity would take, particularly the advice to be given to patients and the types of assistance that might be required.

Discussions were also held with the Regional Hospital Board concerning hospital accommodation and the methods of increasing the number of beds available. As will be stated later, the hospital situation was much complicated by the spread of influenza among the staff.

In addition, there was the need to maintain the work of the Health and Welfare Department and arrangements were made to second health visitors to carry out the emergency duties of the Home Nursing Service and the Midwifery Service should that be required.

Advance preparation was also made for dealing with the vaccine which it was hoped would be available for priority groups, and a continuous watch was being maintained on the course that the epidemic would take. For this purpose the various sources of information available were carefully examined.

Incidence in Glasgow.—(See Table I (a), page 135). Information of the presence and progress of the epidemic was obtained from several sources. Each week the Ministry of Pensions and National Insurance reports the number of new claims for sickness benefit in the ten Glasgow offices. It is customary

for the offices to report where an unusual increase has occurred, something in the region of 30 per cent., and as a special arrangement the attention of the Medical Officer of Health was to be drawn where offices had increases of 200 per cent. or more. The average number of new claims during the months of September and October is about 4,000—4,500. For the week ending Tuesday, 10th September, the number was 4,972, and both Parkhead and Partick Offices indicated increases greater than 30 per cent. By 1st October the number of new claims had exceeded 26,000, and by the 8th October 30,000 the highest figure ever known to the Ministry of Pensions and National Insurance in Glasgow. Thereafter the incidence fell steadily until the number for the week ending Tuesday, 5th November, was back to 4,677.

The second source of information is from the attendance records of the Education Department. Of the 180,000 school children in the 320 Glasgow schools a maximum of 56,000 were reported as off school on 4th October suffering from influenza. This number had steadily risen from the first week in September, remaining above 50,000 for a fortnight and then rapidly falling by the end of the third week in October. Of the 7,000 school teachers some 650 were absent suffering from influenza during the week ending 4th October.

Table IV gives the number of children absent on certain days during September and October :—

TABLE IV.
GLASGOW — INFLUENZA, 1957.

	On the Following Days			School Children Absent
September 20	12,000
September 25	44,000
September 30	52,000
October 4	56,000
October 11	21,500
October 18	3,700

Information is not available of the total number of school children who were reported as suffering from influenza during the course of the epidemic. It is believed, however, that a certain proportion of the children did not suffer from influenza but had seasonal coughs and colds and perhaps in a few cases they were kept off school by their parents in view of the possible danger of contracting influenza.

Notifications of acute primary and acute influenzal pneumonia also provided information as to the incidence and progress of the epidemic. These groups of notifications are to some extent interchangeable and both rise during an influenza epidemic, the rise in influenzal pneumonia being relatively greater and more sudden. The weekly totals for the two groups combined are shown in Table I (b) page 135. In 1956 in the period under review the number of acute primary pneumonia patients notified remained between 50 and 70 per week and there were seldom any cases of acute influenzal pneumonia. In 1957 there were 65 notifications of acute primary pneumonia in the week ending 7th September and none of acute influenzal pneumonia. Thereafter notifications increased steadily to a peak in the two weeks ending 12th and 19th October (12th October—305 primary, 160 influenzal, total 465; 19th October—302 primary, 150 influenzal, total 452). These are uncorrected notifications. Subsequent alteration of diagnosis in hospital results in some deduction from the numbers. Table V gives the age and sex contribution of acute influenzal pneumonia and acute pneumonia cases after correction for the three epidemic months.

TABLE V.

GLASGOW — INFLUENZA, 1957.

Corrected Notifications of Acute Influenzal and Acute Primary Pneumonia during months of September, October and November.

		AGE GROUPS												Total
		-1	-2	-5	-10	-15	-25	-35	-45	-55	-65	-75	75+	
Acute Influenzal Pneumonia	M.	3	5	10	13	3	20	14	13	37	47	29	11	205
	F.	3	—	8	12	7	28	15	34	27	35	35	16	220
		6	5	18	25	10	48	29	47	64	82	64	27	425
Acute Primary Pneumonia	M.	115	59	88	64	29	63	56	70	151	195	159	49	1,098
	F.	72	35	62	48	24	86	83	74	90	134	95	49	852
		187	94	150	112	53	149	139	144	241	329	254	98	1,950

TABLE VI.

INFLUENZAL PNEUMONIA NOTIFICATIONS.

September-November, 1957				Year 1951			
Age	Number	Percentage		Age	Number	Percentage	
0-5 years	29	6.8		0-5 years	29	8.0	
5-45 years	159	37.4		5-45 years	28	22.4	
45-65 years	146	34.4		45-65 years	38	30.4	
65+ years	91	21.4		65+ years	49	39.2	
	425	100.0			125	100.0	

Table VI compares the age grouping of notifications of influenzal pneumonia during the epidemic with corresponding figures for the year 1951 when there was an epidemic of virus A influenza in January and February. It will be seen that in 1957 there was a large increase in the proportion aged 5-45 years, counterbalanced by a decrease in the 65+ years age group. These changes are by the usual tests statistically significant. A corresponding change in the age grouping of influenzal deaths was noted above. These figures agree with the finding by Mulder in Holland of antibody to the virus A/Asian/1957 in the serum of people aged 70-84 years.

The pressure on hospital accommodation became very acute by the end of September. The hospital situation had been much complicated by the fact that the nursing and domestic staff were themselves affected by influenza, and in the majority of hospitals about one-half to one-third of the nursing staff were off ill.

The number of cases of pneumonia admitted to hospital rose steeply from 14th September. By the end of September there was a waiting list of 120, and this number increased to 187 on 5th October. During the first twelve days of October over 600 cases of pneumonia had been admitted to hospital. Additional accommodation had been opened in Robroyston, Mearns Kirk and Roadmeetings, and the general hospitals were helping in great measure.

Considerable difficulty was being experienced at the Admission Bureau in deciding between the most and least urgent cases for the limited accommodation. At the request of the medical Officer on duty 12 health visitors were allocated to the Bureau to visit the patients on the waiting list, to carry out any nursing procedure that was necessary, and to report back on the urgent cases requiring immediate removal and the less urgent or improving cases that might be nursed at home. This work was continued until 21st October when the health visitors returned to their usual duties. The work of the health visitors was of inestimable benefit to the Admission Bureau and their assistance was very much welcomed by patients and doctors. From the peak number on the waiting list of 187 on 5th October the number fell rapidly until by Tuesday, 22nd October, there was no waiting list. In addition to the assistance which the health visitors gave to the Admission Bureau a number were transferred to the Department's Midwifery Section where influenza had reduced the numbers available.

The following table shows the number of cases admitted to hospital :—

TABLE VII.

GLASGOW — INFLUENZA, 1957.

Number of Cases of Acute Pneumonia admitted to Hospital during Weeks ending 14th September to 26th October, 1957.

	During Week Ending	Admitted to Hospital
September 14	101
September 21	211
September 28	408
October 5	379
October 12	377
October 19	205
October 26	102
		<hr/> 1,783 <hr/>

Mortality.—Table I (c) page 135 shows the number of deaths from influenza, acute influenzal pneumonia, acute primary pneumonia, and other respiratory diseases (excluding tuberculosis and tumours). The peak mortality occurred in the weeks ending 5th October and 12th October :—

Date	Influenza (and Inf. Pneum.)	Primary Pneumonia	Other Resp. Diseases	Total
5th October ...	40	40	28	108
12th October ...	41	58	16	115

The increase had commenced during the week ending 28th September and the number of deaths had returned to the usual level by the week ending 2nd November.

The age and sex incidence of patients dying from influenza is discussed above (see Table II and remarks) page 136.

Reports from Hospitals.—The epidemic of influenza in the city rose to a peak in the last week in September and the first week in October, and from then rapidly decreased until the beginning of November, the number of new claims for sickness benefit under the Ministry of Pensions and National Insurance had returned to the usual seasonal figure.

The Physician Superintendents of Ruchill and Belvidere Infectious Diseases Hospitals and Robroyston Hospital and the Medical Superintendent of the Victoria Infirmary* have kindly submitted short reports on the patients admitted to their hospitals suffering from acute influenzal and acute primary pneumonia during the period of the epidemic.

Many of the patients developed complications some 7-14 days after the onset of influenza. No patients were seen with the heliotrope or lilac cyanosis which was a feature of the 1918-19 pandemic, although acute fulminating influenzal broncho-pneumonia did occur with fatal results in 10 cases. These patients died within 36-48 hours where complications had not developed, and these signs of intense virulence also resembled the 1918-19 pandemic.

The predominant type of pneumonia patient admitted suffering from a patchy bilateral lobular pneumonia, although some cases had patchy lesions at one base and massive consolidation at the other.

*Dr. Jas. H. Lawson, Ruchill Infectious Diseases Hospital.
Dr. A. L. K. Rankin, Belvidere Infectious Diseases Hospital.
Dr. M. A. Foulis, Robroyston Hospital.
Dr. J. Smith, Victoria Infirmary.

Pneumonias associated with the present influenza appear to be of a mixed aetiology. Culture of sputa has given a variety of organisms, but the *Staphylococcus aureus* has been isolated from many cases, and the general impression is that the most severe cases of pneumonia have been due to this organism. Patients suffering from Staphylococcal pneumonia are usually severely ill on admission with prostration, breathlessness, cyanosis and cough. This type of pneumonia has also occurred in infants under one year, many of whom are very ill with symptoms similar to those of adults. There were also elderly patients with heart failure secondary to bronchitis and influenza, and also patients with chronic bronchitis and emphysema who had intercurrent infection which had given rise to broncho-pneumonia. The commonest organism found in the sputum of these chronic bronchitis patients was *H. influenzae*, the organism which was the most prevalent cause of death in the 1918-19 pandemic.

In addition to the patients suffering from the complications of influenza there were admitted also patients suffering from influenza alone, the large majority having a 2-4 day attack with no complications. An increase in severity did occur in patients in the age groups over 45 years with higher mortality.

Reports from General Practitioners.—The epidemic had been intensive while it lasted, but it varied in character from one part of the city to another. With the collaboration of certain general practitioners* a picture has been built up of the occurrence of influenza in various parts of the city.

In the Maryhill area the epidemic began in the second week of September with a rapid rise in the number of cases visited between 13th and 24th September. From the 24th to 30th the outbreak was in full swing, and from 30th September to 5th October there was a spectacular fall in incidence. The epidemic covered a period of exactly 22 days.

In this doctor's practice the patients were predominantly of school age, but when adults were affected the disease was by no means mild. The old chronics and the hypochondrial fringe seemed to escape by and large. The symptoms were severe headache, excessive pains particularly in the legs, backache, sickness, high fever, profuse sweating, and particularly intense and uncomfortable tracheitis. Part of the sickness might have been due to excessive consumption of aspirins. Where the illness was complicated it was mainly a chest condition or, in one or two cases, otitis media—middle ear disease. Ten patients had definite lobar pneumonia, and the most successful form of treatment was penicillin.

In a practice in Drumchapel and Partick the epidemic began on Sunday, 15th September, with 25 new calls, and steadily increased, reaching its peak on 29th September, when there were 150 new cases. This figure was more or less maintained for the next four days. From then there was a slight but progressive diminution in numbers until 9th October. During the week following the daily rate of new cases fell very rapidly, and by 16th October the epidemic was actually at an end. In this practice the period of the epidemic amounted to 32 days. The epidemic began in the Drumchapel area, the less densely populated and less industrial part of the practice, and was later in finishing there.

The cases first observed were in the 10-14 year age group, but the age incidence ranged from 7-8 years to 50 years, although the number attacked diminished as the age increased. In the extremely young there were few cases, but when they did occur they were usually severe. Very few old people developed influenza, but those who did and who were chronic bronchitics usually developed influenzal pneumonia. In large families of young children in most cases all became infected and were followed by the adults in the family.

*Dr. Andrew S. Barr, 25 Woodvale Avenue, Bearsden.

Dr. T. S. MacDonald, 13 Highburgh Terrace, Glasgow, W.2.

Dr. Angus Cameron, 34 Queen's Drive, Glasgow, S.2.

Dr. J. Baird Forrester, Hawthorn Lodge, Old Castle Road, Glasgow, S.4.

Dr. Jas. A. Lister, 549 Alexandra Parade, Glasgow, E.1.

Uncomplicated cases followed the usual pattern, but this doctor was struck by the number who became suddenly ill with high temperatures, 103°-104°F., and by the extremely profuse sweating and very persistent and intractable tracheitis. The average case was of short duration, being afebrile by the fourth day and out and about in a week from the start. In children nose bleeding was a common complication, as was also stiffness of the neck. Even these cases with a sharp onset seemed to recover as quickly as the less severe ones, but the sizable minority who did not had a relatively long convalescence. About 20-30 cases who came to the surgery feeling fit enough to "sign off" were found on routine examination to have developed chest conditions of varying severity up to silent consolidation—pneumonia. In all, this practice of some 9,000 patients had about 2,000 cases of influenza with about 40 cases of pneumonia.

During the epidemic the practitioners came across a fair number of patients, usually in the 50-60 age group, who were afebrile and able to go on with their work but who complained of being tired and listless, of sweating on the slightest exertion, and of vague muscular pains. The doctor asks, "Were these old people cases of minimal infection because of an existing degree of immunity?"

In the East of the city about 200 cases were seen in one practice, representing about 10 per cent. of those at risk, although there were undoubtedly cases who did not seek medical advice. The first case was seen on 8th September, and the peak period was the week 30th September to 6th October when about 50 cases were visited. Only one or two isolated cases have been found in the last fortnight of October. The distribution of cases was in the ratio of two in Riddrie to three in Dennistoun, corresponding closely to the distribution of the practice, and the peak periods in both areas coincided.

Whole households were not down at the same time. Children and adults of the working age groups were mainly affected, but of the dozen or so old folk who were seen six developed respiratory complications. Eighteen out of the 200 cases developed complications including pneumonia, bronchitis, middle ear infection, recurrence of an old pleurisy and post-influenzal rheumatism.

In the South of the city the first cases were seen about 16th September, but it was obvious by the 18th September that an epidemic was on its way. The day with most new visits was Monday, 30th September, and the next six days were the busiest of the outbreak. By 15th October the epidemic was waning, a span of thirty days.

All ages except infants were affected, although relatively people over 65 years of age seemed to have escaped. One striking feature was that many normally healthy adults of 20-40 years of age had severe attacks, but old people with chronic conditions did not seem to be seriously affected. This is a slightly different experience to that of the doctor in the Partick and Drumchapel area.

The disease appeared to be highly infectious. In the South of the city in many households almost every member of the family became a victim in succession rather than all at once. As has been noticed elsewhere the onset of symptoms was usually sudden and often dramatic and within one to two hours the patients were prostrated. It occurred at an exact point of time—for example, at a quarter past two. Early in the outbreak patients had high fever, but towards the middle of the epidemic the patients' temperatures were often in the region of 100°-101°F., and yet again towards the end of the epidemic high temperatures were found.

In addition to variations in temperature complications also varied according to the phase of the epidemic. During the first ten days of the epidemic, 18th to 28th September, patients had high fever for two to three days, then made a fairly quick recovery with no complications. However, after

28th September, i.e., during the peak of the outbreak in this doctor's area the pattern seemed to change. Patients' temperatures were not so high but they settled slowly even in the absence of complications, and the patients felt weak and tired for some considerable time and there was delay in returning to work.

From 30th September onwards quite a number of children, particularly in the Castlemilk part of this practice, developed inflammation of the lungs but responded well to treatment with antibiotics. Several of the older patients had elevated temperatures lasting for more than a week and eventually there were signs of consolidation at the lung bases. These cases did not respond so quickly to antibiotic treatment. A number of patients stated that they felt much weaker after the illness than after previous attacks of influenza, but very few felt depressed.

The impression was gained that the epidemic was worse in the Castlemilk than in the Hutchesontown part of the practice, but this may be because there were more large families in Castlemilk and therefore the infection was more apparent as it spread from one member of the household to another.

Another doctor in the South of the city reported that the epidemic started in his practice on 17th September, reaching a peak on the 24th and falling away sharply on the 9th October, to disappear in another week or so, again a span of approximately thirty days. The disease attacked predominantly children, young and middle aged adults, but very few old people. In many cases whole households were attacked at the same time or members sickened one after the other within a few days, but at least half the cases visited by this doctor did not suffer from influenza but from colds with little or no temperature. The symptoms were the same as found elsewhere, most of the patients having profuse sweating, but in some cases strangely enough, temperatures were high and returned to normal without sweating.

Incidence.—The limited information available and the fact that influenza is not a notifiable disease makes it impossible to obtain a firm figure for the incidence of influenza in the city during the epidemic. It is probable, however, that the number of cases were in the region of 300,000 to 350,000. The total number of deaths registered as due to influenza or influenzal pneumonia was 147 to which should be added 236 patients who died of acute primary pneumonia, making a total of 383 deaths.

The epidemic developed from the initial cases in the first week of September to an explosive increase between 14th and 30th September, the incidence remaining at a high level for a further week and then rapidly decreasing during the second week in October.

Influenza appears to have affected mainly children (but not infants) and the main working section of the population. The older folks by and large escaped, but when they did develop the infection, particularly if they suffered from asthma or bronchitis, they were liable to develop complications.

The Vaccine.—The other duty that fell to the Local Health Authority was the distribution of the influenza vaccine which the Government made available during the first week in October. As the vaccine was distributed in bottles of 10 cc. it was necessary to prepare a scheme with the co-operation of the Local Medical Committee for vaccination to be offered to doctors and their wives and secretaries at clinics to be held in the centre of the city. The dose was two injections one month apart. A week was set aside for this work during which the priority groups could come forward at their own time for vaccination, and as the general practitioners were still harassed arrangements were made for parking facilities to be made available at the clinic. A further week was devoted to the vaccination of Department staff, including midwives, district nurses, health visitors and others. During the second and third weeks of October some 700 persons received their first injections of vaccine, and during the same weeks in November the second injections were given.

THE SECOND WAVE.

The vitally important question at the end of the year was the possibility of a second wave of the influenza pandemic. There has been much reference to the experience of the last pandemic in which there were three distinct waves—a mild wave in the spring of 1918, an explosive outbreak with high mortality in the autumn of 1918, and a recrudescence early in 1919.

Further, as stated in the First Report of the World Health Organisation Expert Committee on Influenza (April, 1953), "Continued study of the antigens of influenza virus strains which may be isolated in the future is important because of the possible emergence of new strains which may have epidemiological significance. Nothing is known concerning the type of virus responsible for the 1918 pandemic of influenza, but the possibility of the recurrence of such an outbreak is always present. Such an event might be associated with a new antigenic variant which would need therefore to be detected at the earliest possible moment. There appears to be no stability of strains in nature, and the mechanism by which new virus variants emerge is not known."

There are four known immunological types of the influenza virus named A, B, C, D, the most important being the Virus A. Smith, Andrewes and Laidlaw in 1933 were able to find a laboratory animal, the ferret, in which the virus would grow. Since then the Virus A has been differentiated into four principal strains, families or sets.

There have been three pandemics of influenza in recent times, those in 1889 and 1918 and the present pandemic of 1957. It is believed that the virus of 1918 (an influenza virus A) remained in circulation for some 5-10 years as a cause of influenza and then vanished. A virus later found in pigs in the Middle West of America as the cause of swine influenza may have been the same virus as caused the pandemic of influenza in 1918-19.

The second set or strain is named after the prototype viruses WS (1933) and PR8 (1934), the type A influenza strains prevalent during the years 1933 and 1934, and was found to be distantly related to the swine group. It was completely replaced between 1946-47 by the A prime virus or FM1 (1947), and during the past ten years there have been variants within this set on a world-wide basis as the cause of influenza outbreaks.

The views expressed in the First Report of the WHO Expert Committee on Influenza were reinforced by the variations in the antigenic structure of the Virus A that were already proceeding, and early in 1956 new strains had been differentiated in Holland, Canada and elsewhere. These strains, called Dutch/56, although clearly of the FM1 set were similar to strains found in Japan during an influenza outbreak early in 1957. It was obvious therefore that as it had been forty years since the last pandemic of influenza had occurred another pandemic was possible or even imminent.

The variant found in the present pandemic—the new Singapore or Asian set Virus A/Asian/1957, or as the Americans call it, FE (Far East)/1957—was distinctly different from all preceding sets or strains, at least so it was thought, but Mulder in Holland has reported that serum obtained from people in the age range 70-84 contained antibody against the new strain, and this discovery has also been confirmed in America and in Australia. It would seem therefore that there may be a cycle in the strains of Virus A able to cause pandemics and that the present strain might have been the cause of the 1889 pandemic.

In view of the known variations that can occur in the antigenic structure of the influenza virus and particularly the continuing changing structure of a new strain, there is a considerable likelihood that only a limited immunity

has been developed by those patients who have already been attacked and that a second wave may be due to a strain with a different antigenic structure. The same holds good for the immunity produced by the vaccine. Influenza vaccines have been known to be of only limited value owing to this changing characteristic of the virus, and it is not improbable that the vaccine produced by one strain of virus will give only limited protection against another. Where we have the same strain with continuing changing antigenic structure a completely effective vaccine will not be obtained until the antigenic structure has become reasonably fixed.

What were the signs of another wave occurring? The weekly returns of new claims for sickness benefit in the ten Glasgow offices of the Ministry of Pensions and National Insurance had shown up to the week ending 24th December no sign of increased morbidity. The number of school children off school was average for the time of year, but while there was only an occasional case of acute influenzal pneumonia being notified the number of acute primary pneumonia had increased considerably since 9th November, reaching the figure of 248 for the week 21st December compared with 84 on 9th November. An analysis of the age grouping of these cases, however, showed that at least half were under one year of age and that the cause was not influenza but the seasonal incidence of baby pneumonia which occurs at the time of year in association with foggy weather.

A close watch was also being maintained by the University Virus Laboratory at Ruchill Hospital. The strain identification of the Asian type A Virus involves difficulties, and the work is being concentrated in the World Influenza Centre in London. The Virus Laboratory, however, was able to report within a fairly short time the presence of Virus A in a specimen, although the final strain identification takes a much longer period of time.

For some years there has been an influenza spotting scheme by which selected general practitioners send to the Laboratory pairs of sera, i.e., serum from a patient in an acute phase of an illness followed later by a sample of serum in the convalescent phase. Dr. N. R. Grist, the Lecturer in Virus Diseases and the Director of the Virus Laboratory, reported that since 19th October only one pair of sera was found positive to Virus A and that no influenza viruses were isolated during the last fortnight of December. The Laboratory is continuing to test all specimens of cases who develop influenzal symptoms in order that the recurrence of the virus will be detected at the earliest possible date.

The Weekly Epidemiological Record reported on 11th November a second outbreak of influenza in Japan. Succeeding reports stated that after a considerable decrease from June to August the incidence had increased in Japan since September but that the disease was mild and the death rate remained the same. The later report, dated 23rd December, stated that the second Asian influenza epidemic observed in Japan was decreasing and that the mortality rate was the same as in the first epidemic.

Cases of acute influenzal pneumonia were, however, still being notified in the city, and some general practitioners stated that the infection was "grumbling on."

The Chief Medical Officer of the Department of Health in a circular letter dated 1st October to Medical Officers of Health and Senior Administrative Medical Officers indicated the need for a careful watch on the incidence of illness during the winter and for collaboration between statutory authorities to review the preparations required.

In April, 1958, it was possible to say that there had been evidence of a second wave of low intensity during the first three months of the year and the reports from the Virological Laboratory confirmed this view.

TUBERCULOSIS.

Although this section is divided as before into (a) The General Trend of Tuberculosis in Glasgow ; (b) B.C.G. Vaccination ; and (c) the Work of the X-ray Unit, it must be observed at the outset that, in 1957, the year's activities were dominated and influenced by the Glasgow X-ray Campaign of 11th March—12th April. A separate report on the campaign appears elsewhere, but it may be noted that during this period of five weeks, almost 715,000 persons were X-rayed including 76 per cent. of the adult population of Glasgow, and that over 2,000 new cases of active pulmonary tuberculosis were detected.

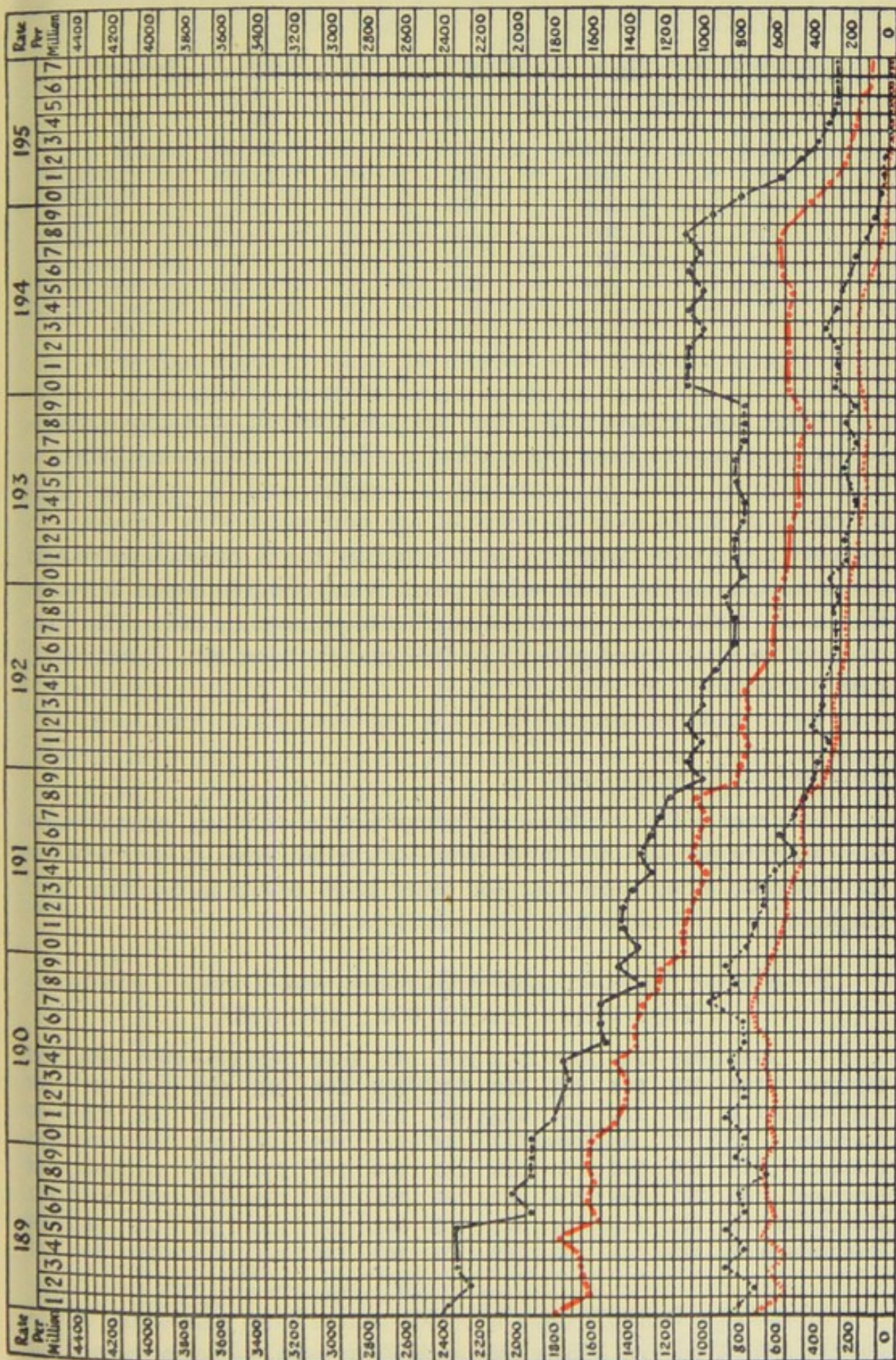
It is clear that the sudden addition of 2,000 cases must have a profound effect on the annual statistics, and the apparent marked deterioration in the trend of tuberculosis in 1957 should be interpreted in the light of the undoubted success of the X-ray Campaign. It is, however, something of a paradox that the greater the success of such a project, the worse the statistical situation of tuberculosis appears to be, at least temporarily.

THE GENERAL TREND OF TUBERCULOSIS.

Incidence.—There were 3,925 notified cases of pulmonary tuberculosis in 1957, compared with 2,024 in 1956. The notified cases of non-pulmonary tuberculosis were 172, compared with 193 in 1956. The general trends of incidence are shown below.

		Pulmonary	Non-Pulmonary	All Cases
1935-39 (Average)		1,650	657	2,307
1940-44	do.	2,367	690	3,057
1945-49	do.	2,764	468	3,231
1950-54	do.	2,297	312	2,609
1955	... ..	2,181	278	2,459
1956	... ..	2,024	193	2,217
1957	... ..	3,925	172	4,097

The total of 3,925 pulmonary cases is little short of twice the incidence of 2,024 cases in 1956, but, as noted above, the sudden rise may be interpreted simply as a measure of the success of the X-ray Campaign. For this reason, it is difficult to make valid comparisons with other years. The total of 172 non-pulmonary cases is 21 fewer than in 1956, and is 74 per cent. below the pre-war average compared with 71 per cent. below in 1956 and 57 per cent. below in 1955.



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 Pulmonary Tuberculosis Death-rate: Glasgow ————— Scotland 129
 Non-Pulmonary do. do. 21 do. 11

The cases notified show the following age and sex distribution :—

Age-Groups	Pulmonary		Non-Pulmonary	
	Males	Females	Males	Females
— 5 ...	9	10	9	5
—15 ...	50	61	16	12
—25 ...	372	463	20	42
—35 ...	358	380	15	28
—45 ...	378	336	4	2
—55 ...	508	186	4	6
—65 ...	391	80	1	3
65+ ...	280	63	1	4
	<u>2,346</u>	<u>1,579</u>	<u>70</u>	<u>102</u>

While comparison with other years is difficult, the above distribution continues to show the marked incidence of pulmonary tuberculosis in young adults but especially in females, and its sustained high incidence in males over 45 years of age compared with females. In the only age-group, however, not affected by the X-ray Campaign and therefore comparable with other years, viz., children under 5 years, there is a striking reduction in the number of pulmonary cases. The male cases fell to 9 compared with 23 in 1956 and the female to 10 compared with 19 in 1956.

PULMONARY TUBERCULOSIS.

Incidence.—The incidence of pulmonary tuberculosis, expressed as the case-rate per 100,000 population, for certain years is shown below for Glasgow, along with that for other large towns in Scotland and England.

PULMONARY TUBERCULOSIS : GLASGOW AND OTHER TOWNS. CASE-RATES PER 100,000 : 1941-1957.

	1941	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Glasgow	189	258	254	255	260	224	203	208	218	203	201	187	364
Edinburgh	111	129	125	134	135	139	135	152	169	170	136	129	90
Aberdeen	72	107	92	148	117	144	124	125	131	123	109	123	171
Dundee	148	160	198	196	229	287	186	156	164	171	161	140	148
Liverpool	190	201	196	204	202	196	195	108	175	144	139	131	133
Manchester	161	120	115	124	128	105	102	102	106	96	96	86	88
Birmingham	97	112	114	103	102	102	107	111	111	111	103	93	77

Mortality.—In 1957, there were 361 deaths from pulmonary tuberculosis, compared with 368 in 1956 and 369 in 1955. The corresponding death-rate per 100,000 is 33, compared with 34 in 1956 and 34 in 1955.

The trend of mortality for certain years in Glasgow is shown below, along with that for other large towns in Scotland and England.

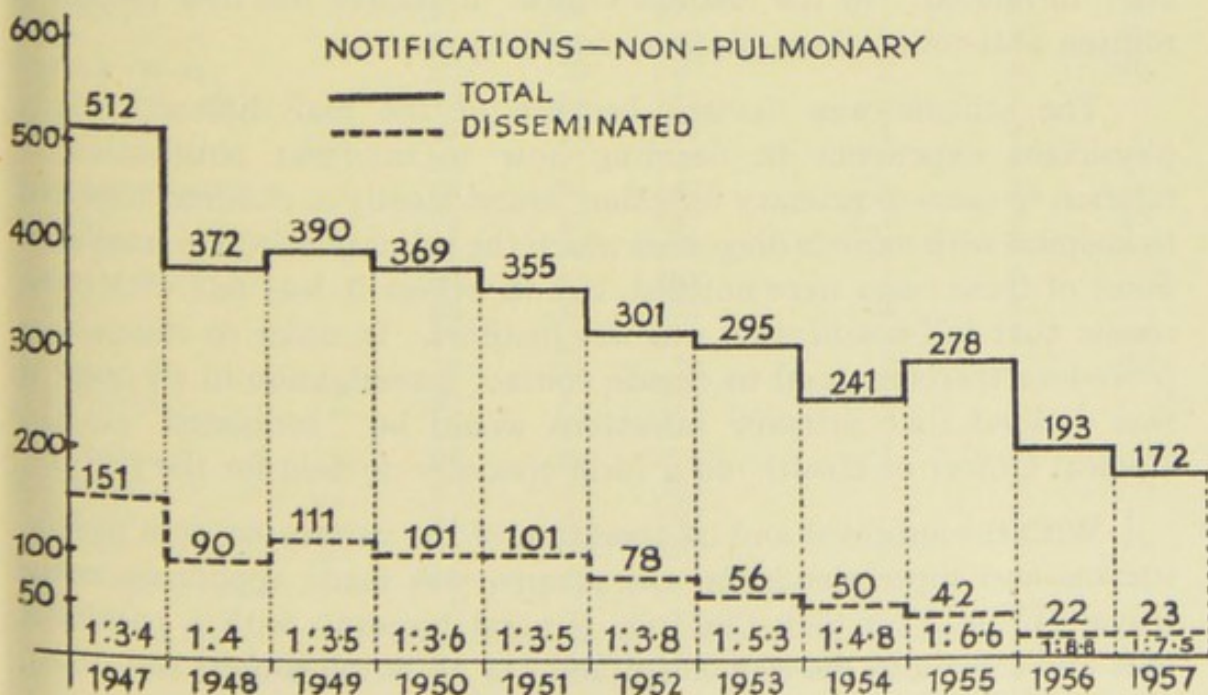
PULMONARY TUBERCULOSIS : GLASGOW AND OTHER TOWNS
DEATH-RATE PER 100,000 : 1941-1957.

	1941	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
Glasgow	110	110	107	114	101	87	64	52	43	39	34	34	33
Edinburgh	70	64	65	62	55	48	33	26	23	19	10	9	7
Aberdeen	48	40	35	33	35	20	20	20	14	10	8	10	5
Dundee	65	70	82	65	75	58	40	22	17	19	15	14	9
Liverpool	102	79	79	79	68	60	52	34	33	29	24	18	16
Manchester	113	69	66	69	60	58	45	38	28	27	19	15	14
Birmingham	90	61	64	59	54	43	34	25	24	20	19	14	12

It is thus apparent that the gratifying decline in mortality which first became obvious in 1950 has not continued and that the death-rate has remained largely static for the past three years. While this phase is probably temporary, the present position of mortality is somewhat disappointing compared with experience elsewhere.

NON-PULMONARY AND DISSEMINATED TUBERCULOSIS.

Incidence.—There were 172 notified cases of non-pulmonary tuberculosis in 1957 compared with 193 in 1956 and 278 in 1955. Of the 172 notifications, 23 were of tuberculous meningitis, a ratio of 1 in 7.5. This shows a slight recession from the corresponding ratio in 1956 of 22 out of 193, or 1 in 8.8, but the position remains nonetheless satisfactory both with regard to the general trend and also to the incidence of meningitis, especially in young infants. The trends of non-pulmonary tuberculosis and tuberculous meningitis since 1947 along with their relationship to each other, are shown in the following graph.



In 1957, only one infant, a male, was notified as a case of tuberculous meningitis, compared with two infant notifications for each of the years 1954, 1955 and 1956. It seems evident that tuberculous meningitis in the infant age-group at least has been practically abolished. This very gratifying position with regard to a form of tuberculosis which is still clinically menacing if not lethal is no doubt largely due to the intensive scheme of B.C.G. vaccination introduced from 1950 onwards.

The following table shows the trend of incidence of tuberculous meningitis since 1947 in each sex, according to the age-groups indicated.

TUBERCULOUS MENINGITIS : NOTIFICATIONS, 1947-57.

Males	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
0-1	10	5	7	4	4	6	—	1	1	1	1
1-5	24	20	22	26	27	8	12	9	9	3	6
over 5	44	18	22	25	21	17	20	16	13	2	3
Females											
0-1	7	3	3	4	3	5	—	1	1	1	—
1-5	19	21	22	16	24	17	11	4	6	4	2
over 5	47	23	35	26	22	25	13	19	12	11	11
	151	90	111	101	101	78	56	50	42	22	23

Mortality.—There were 22 deaths from non-pulmonary tuberculosis in 1957, compared with 27 in 1956 and 33 in 1955. The corresponding death-rate per 100,000 was 2 in 1957, compared with 2.5 in 1956 and 3 in 1955.

Intimation of Primary Tuberculosis.—Introduced experimentally in 1956, the scheme by which new cases of primary tuberculous infection are "intimated" to the Medical Officer of Health has now become a routine anti-tuberculosis measure in Glasgow.

The scheme was devised because of the real difficulty many physicians experience in deciding how to interpret notification in relation to cases of primary infection, found mostly in children admitted to hospital with various diagnoses which the primary infection simulates. Some of these cases were notified, but in others it was felt with some reason that full notification was not justified. In order to standardise procedure therefore, and to ensure contact investigation in all cases, it was decided that primary infections would be "intimated" to the Medical Officer of Health on a form specially devised for the purpose.

With the approval and co-operation of the various hospital paediatricians and superintendents, the scheme was made applicable to the Royal Hospital for Sick Children, general hospitals with a paediatric unit and infectious diseases hospitals. At all hospital units concerned,

the physicians have welcomed the arrangement and consider that it fulfils a useful function.

During 1957, intimations of primary infection were received for 48 males and 46 females, a total of 94. In every case, arrangements were made for investigation of the domiciliary contacts under the routine scheme of case-finding in operation for all notified cases of tuberculosis. The cases of primary infection, however, do not receive repeated routine visits by the tuberculosis health visitors after the contact investigation is completed, as notified cases do, unless there is any special indication for this procedure.

GLASGOW.—CASES OF TUBERCULOSIS NOTIFIED AND DEATH-RATE PER MILLION IN EACH MUNICIPAL WARD DURING 1957.

Ward	Pulmonary Cases		Death rate Both Sexes	Non-Pulmonary Cases		Death-rate Both Sexes
	Males	Females		Males	Females	
Shettleston and Tollcross	95	71	383	4	3	21
Parkhead	42	34	586	4	3	—
Dalmarnock	76	66	360	4	6	28
Calton	51	45	412	4	1	46
Mile-End	77	56	141	2	2	28
Dennistoun	50	34	370	2	4	—
Provan	97	85	328	2	3	—
Cowlairs	46	43	254	2	6	85
Springburn	70	45	458	3	5	—
Townhead	65	42	312	3	2	35
Exchange	33	23	517	2	1	74
Anderston	66	31	283	1	5	—
Park	43	31	265	2	2	53
Cowcaddens	51	33	222	—	5	—
Woodside	38	42	454	2	1	—
Ruchill	108	67	589	7	—	41
North Kelvin	43	30	301	2	—	—
Maryhill	56	34	310	1	4	—
Kelvinside	27	24	222	1	1	110
Partick (East)	32	18	52	1	2	52
Partick (West)	52	29	40	2	2	40
Whiteinch	45	35	187	—	1	—
Yoker	45	42	253	1	2	—
Knightswood	92	71	248	3	4	—
Hutchesontown	63	54	147	1	3	—
Gorbals	76	40	453	1	3	35
Kingston	63	36	260	1	4	86
Kinning Park	63	53	401	1	6	—
Govan	58	48	258	4	5	—
Fairfield... ..	41	28	577	—	3	48
Craigton... ..	70	43	79	2	—	26
Pollokshields	103	52	272	1	1	—
Camphill	40	16	341	—	1	—
Pollokshaws	92	60	278	1	2	—
Govanhill	40	31	294	—	4	—
Langside	44	25	367	—	3	41
Cathcart	84	54	287	3	2	29
Institutions	106	8	—	—	—	—
Harbour... ..	3	—	—	—	—	—
Total for City	2,346	1,579	334	70	102	21

B.C.G. VACCINATION.

There was another marked increase in the volume of anti-tuberculosis immunisation in 1957. Indeed, for the first time the annual total of B.C.G. vaccinations in Glasgow reached the 20,000 mark, while the cumulative total since 1950 exceeded 86,000.

Vaccinations in all three primary groups were well maintained and even increased, especially among contacts. Although there was some decline in the number of 13-year-old children vaccinated, the total remained the largest numerical entity of all groups immunised. In 1957, new-born infants in the Eastern District Hospital were incorporated into the scheme, and there was a further rise in the total vaccinations in this group.

Schools Campaign—The scheme for immunising 13 year old children followed the usual lines, the same two medical officers as in 1956 being seconded from the School Health Service to assist. Although the campaign in 1957 was begun much later than usual owing to the prevalence of influenza in the Autumn, it was finally completed just before the end of the school term.

The influenza outbreak began in September when preparations for the B.C.G. campaign were in hand, and within a few weeks school attendances fell to about 50 per cent. This and other factors required the cancellation of preparations and the campaign was postponed indefinitely. In late October, however, the rapidly improving position justified at least an attempt on the project even although the time available was now short. Preparations were therefore resumed and the campaign began on Thursday, 7th November. In the event, it was found possible to deal with all schools scheduled, including a 10 per cent. survey of pupils vaccinated in 1956, by Tuesday, 17th December, when the scheme was completed. As before, those pupils found to be Mantoux-positive were X-rayed.

The encroachment of the campaign on the end-of-term examination period complicated the preparation of a time-table. Nevertheless, the work was carried out smoothly in just over five weeks, a tribute to the fine co-operation and efficiency, which have become habitual, of the teams of health visitors, clerkesses, and medical officers as well as the Education Department and school staffs. The margin of time was not sufficient to arrange a supplementary time-table at the end to deal with the absentees, numbering some 1,200, as is customary each year, but these will be included in the 1958 scheme.

During the campaign, visits were paid to 91 public, 19 special and six private schools, and nine occupational centres, a total of 125 schools. Out of almost 14,000 children, parental consent to vaccination was received for 11,600, a public response of 83·4 per cent. compared with 81·9 per cent. in 1956. Almost 10,400 were tested and over 7,500 negative reactors vaccinated. The negative-reactor rate was 72·6 per cent. compared with 70·2 per cent. in 1956, an improvement of 2·4 per cent. Details of the results obtained are shown in the tables below.

1. *Public Response—Parental Consent to Vaccination.*

	Schools	Pupils	Consents	Response
Public Schools ...	119	13,587	11,308	83·2
Private Schools ...	6	332	305	91·8
	<u>125</u>	<u>13,919</u>	<u>11,613</u>	<u>83·4</u>

2. *Loss due to Absence from School.*

	(1) Consents	No. Absent 1st Visit	% of (1)	No. Tested	No. Absent 2nd Visit	% of (1)	Total No. Absent	% of (1)	No. of Tests Read
Public Schools	11,308	809	7·1	10,499	416	3·7	1,225	10·8	10,083
Private Schools	305	10	3·2	295	3	1·0	13	4·2	292
	<u>11,613</u>	<u>819</u>	<u>7·0</u>	<u>10,794</u>	<u>419</u>	<u>3·6</u>	<u>1,238</u>	<u>10·6</u>	<u>10,375</u>

3. *Results of Mantoux Tests (P.P.D. 1 : 1,000).*

	Tests	Positive	%	Negative	%
MALE—					
Public Schools ...	4,810	1,412	29·3	3,398	70·7
Private Schools ...	139	22	15·8	117	84·2
Total ...	<u>4,949</u>	<u>1,434</u>	<u>28·9</u>	<u>3,515</u>	<u>71·1</u>
FEMALE—					
Public Schools ...	5,273	1,376	26·1	3,897	73·9
Private Schools ...	153	31	20·3	122	79·7
Total ...	<u>5,426</u>	<u>1,407</u>	<u>25·8</u>	<u>4,019</u>	<u>74·2</u>
All Results ...	<u>10,375</u>	<u>2,841</u>	<u>27·4</u>	<u>7,534</u>	<u>72·6</u>

4. B.C.G. Vaccinations.

				Negative Reactors	Not Vaccinated	%	Vaccinated
MALE—							
Public Schools	...	...		3,398	7	0·2	3,391
Private Schools	...	...		117	—	—	117
Total ...	...	...		<u>3,515</u>	<u>7</u>	<u>0·2</u>	<u>3,508</u>
FEMALE—							
Public Schools	...	...		3,897	8	0·2	3,889
Private Schools	...	...		122	—	—	122
Total ...	...	...		<u>4,019</u>	<u>8</u>	<u>0·2</u>	<u>4,011</u>
Total—Both Sexes	...	...		<u>7,534</u>	<u>15</u>	<u>0·2</u>	<u>7,519</u>

These results show a decline in the total vaccinations and a rise in the absentee rates compared with 1956. Both features are no doubt directly due to some residual prevalence of influenza at the end of the main outbreak. In general, however, the results may be considered very satisfactory since at one time it appeared likely that no immunisation of school children at all would be possible.

Infant Vaccination. In 1957, a sixth hospital obstetric unit was added to the scheme for immunising new-born infants, when B.C.G. vaccination was started from 1st August in the Eastern District Hospital. As in the case of the Southern General Hospital in 1956, the absence of the post of Obstetric Registrar caused some difficulty in completing arrangements for the vaccinations, which are usually performed by a senior member of the hospital staff. In this case also, it was agreed that the Divisional Medical Officer might undertake to visit the hospital twice weekly for the purpose. Thus, while arrangements are generally similar for all hospitals, the Eastern District and Southern General Hospitals are exceptional in that the infants there are vaccinated by the respective Divisional Medical Officers instead of the hospital staff. By the end of the year, the number of infant vaccinations in the Eastern District Hospital had reached the satisfactory total of 219.

In spite of the addition of another obstetric unit, however, the total number of infants vaccinated rose from 6,541 in 1956 only to 6,694 in 1957. This was due to the temporary closure of certain obstetric units, with consequent suspension of vaccination, caused by the introduction of neo-natal infection.

X-ray Campaign: Intensive Contact Tracing. An outstanding feature of B.C.G. vaccination in 1957 was the enormous increase in the number of contacts immunised, a direct consequence of the Glasgow X-ray Campaign of 11th March to 12th April.

The task of tracing and immunising all contacts of cases detected during the Campaign was undertaken in two stages. The first group of contacts to be dealt with were those of definite cases of active disease, and this phase was completed by July. It had been decided also to deal secondarily with the contacts of cases whose disease was thought to be inactive or requiring observation only, a much greater number than the active cases, and the second phase was completed between July and early December. Thus, the contacts of all tuberculous cases detected in the campaign, whether active or doubtful, were traced, tested and vaccinated before the end of the year. Even although the number of tuberculosis health visitors was increased by 50 per cent. for the purpose, the exacting work required to achieve this result reflects great credit on the health visitors concerned, as well as on the Divisional Medical Officers who carried out the tests and vaccinations at their clinics. Due to their intensive and sustained efforts, a total of 4,081 contacts were immunised in 1957, an increase of 264 per cent. compared with the total of 1,544 contact vaccinations in 1956.

Routine Vaccination Scheme. Vaccinations were well maintained in all other groups routinely dealt with. It was thought desirable to include, somewhat experimentally, the class of nurses taking the Department's Health Visitors' Course in 1957. Two members, both in the 25-29 years age-group were found to be Mantoux-negative and both were vaccinated.

Largely due to the special attention given to contacts, the annual number of B.C.G. vaccinations in all groups in 1957 reached the unprecedented total of 20,254, compared with 17,752 in 1956, while the cumulative total since 1950 rose to 86,685. The following table shows the distribution of the annual total among all groups along with comparative totals for previous years.

B.C.G. VACCINATIONS : GLASGOW : 1950-57.

		Centre	1950-52	1953	1954	1955	1956	1957	Total	
PRIMARY GROUPS—										
Contacts	...	Moffat Street	...	289	141	148	98	92	46	814
	...	Carnbooth	...	194	71	76	57	34	56	488
	...	Millbrae	...	113	74	88	70	67	57	469
Infant Contacts	...	Millbrae	...	210	120	97	115	97	112	751
Contacts	...	H. & W. Department	...	1,567	1,243	1,260	1,456	1,510	4,002	11,038
	...	Baird Street	...	349	88	2	—	—	—	439
	...	R.H.S.C.	...	74	91	128	90	34	79	496
Nurses	...	Hospitals	...	543	174	186	213	202	193	1,511
	...	Health Visitors	...	—	—	—	—	—	2	2
	...	Trainees	...	—	—	—	19	32	36	87
Students	...	University	...	221	74	71	57	59	67	549
	...	Physiotherapy	...	—	—	18	19	7	1	45
	...	Radiography	...	—	—	—	—	—	17	17
Total (Primary Groups)			...	3,560	2,076	2,074	2,194	2,134	4,668	16,706
SECONDARY GROUPS—										
Infants	...	Maternity Hospital	...	1,497	1,898	2,038	1,968	2,291	1,781	11,473
	...	Robroyston do.	...	588	834	1,181	1,135	1,029	1,399	6,166
	...	Stobhill do.	...	—	—	—	1,154	1,856	1,673	4,683
	...	Western District do.	...	—	—	—	876	1,077	902	2,855
	...	Southern General do.	...	—	—	—	—	288	720	1,008
	...	Eastern District do.	...	—	—	—	—	—	219	219
School Children	...	Schools	...	—	6,632	9,029	8,300	8,374	7,519	39,854
Revaccinations	...	Schools	...	—	—	132	175	11	18	336
Others	...	Various	...	154	179	360	645	692	1,355	3,885
Total (Secondary Groups)			...	2,239	9,543	12,740	14,253	15,618	15,586	69,979
Total (All Groups)			...	5,799	11,619	14,814	16,447	17,752	20,254	86,685

X-RAY SECTION.

The X-ray section experienced a very disturbed year in 1957 owing to the replacement of the existing unit and the Mass X-ray Campaign. For these reasons, the total number of miniature and full-size films taken under the routine scheme was only 14,158 compared with 19,672 in 1956. If, however, over 5,000 films taken during the Campaign are added, the total work performed at the unit in 1957 is represented by almost 20,000 films. The year's activities were divided into three phases by the replacement of the unit, followed by the X-ray Campaign and the resumption of normal work.

Replacement of X-ray Unit. The first phase ended on 6th March when, as forecast in the Report for 1956, the existing 35 m.m. unit which had been in use for five years was removed, since its lease had expired and it was now needed to assist in the 2-year X-ray Campaign throughout Scotland. It had already been decided to replace it with a new apparatus purchased by the Corporation and this was installed and in working order by 8th March. The new installation, like the one removed, is a Watson Miniature Radiography Unit, but of 70 m.m. instead of 35 m.m. Owing to the proximity of the forthcoming Glasgow X-ray Campaign, in which Cochrane Street was listed as one of the centres, the routine work could not be resumed.

Glasgow X-ray Campaign. For the following 6 weeks, from 8th March till 17th April, the functions of the Section were devoted full-time to the work of the Mass X-ray Campaign, in which 20 Cochrane Street was the Recall Centre for the units operating in the Eastern and part of the South-Eastern Divisions of the city. To suit the convenience of those recalled, the centre was open virtually for 12 hours a day each week except Saturdays, when work ended about 2 p.m. until Monday morning. These hours of work required a system of shifts and for this purpose the staff was augmented by radiographers and senior radiography students, mainly from the Royal Infirmary, and also by voluntary clerical assistants. Throughout the Campaign, the pressure of work was always considerable and at times very heavy; on one occasion a daily total of 400 X-rays was reached. The all-over average, however, was about 200 persons a day, all of whom were X-rayed on full-size films. Thus, for the first six weeks after its installation, the new unit had no opportunity to function as a miniature unit.

During the Campaign, a total of some 5,000 films was taken, but these have been excluded from the statistics given below since they form part of the returns for the whole X-ray Campaign.

Resumption of Normal Routine. From Tuesday, 23rd April, after the Easter holiday which followed the X-ray Campaign, the normal time-table was resumed, with the new plant operating for the first time in its intended role of a miniature unit. While the results in general have proved satisfactory, it was to be expected that some early difficulties might occur. One was the intermittent failure of the roller mechanism on the camera, resulting in a number of films being superimposed and the consequent recall of all patients involved. This defect was later rectified by the makers. A satisfactory method of reading

70 m.m. films in series also proved difficult to find but pending further enquiries, reading by means of a desk-viewer was adopted. In June, another change took place in the post of radiographer-in-charge.

Despite these changes and adjustments in routine, the results have been advantageous. The 70 m.m. films produced have been of consistently good quality, with clear definition of small lesions even in some detail, and from the experience gained, they are considered superior to the 35 m.m. films formerly used. It is thought that further experience of their use will result in a diminished number of recalls for full-size films.

Routine X-ray Scheme. The groups dealt with were the same as in former years. The numbers X-rayed in each group, however, show a marked decline from 1956, largely owing to the X-ray Campaign, during which arrangements to X-ray them elsewhere were in operation.

The 14,518 films taken in 1957 comprised 12,877 miniature and 1,281 full-size films of which 833 were recalls. The recall rates are as shown below.

	Male	Female	Total
Miniatures	5,318	7,559	12,877
Recalls	391	442	833
Recall rate	7.3%	5.8%	6.4%

The recall rate of 6.4 per cent. is higher than the rates of 5.2 per cent. in 1956 and 5.8 per cent. in 1955, but the increase is mostly due to recalls resulting from the technical difficulty described above in the early use of the new apparatus.

The distribution of the 12,877 miniature films among the groups X-rayed is shown in the table below.

MINIATURE RADIOGRAMS, 1957.

Groups	Male	Female	Total
1. Contacts, new	1,522	1,564	3,086
2. Contacts, return	191	308	499
3. Superannuation	790	558	1,348
4. Sick Pay	141	797	938
5. School Children	66	93	159
6. Special Surveys	67	165	232
7. Nationalised Services	36	4	40
8. Industrial	3	6	9
9. Other Local Authorities	39	1	40
10. Miscellaneous	609	973	1,582
11. School Teachers	1,854	3,090	4,944
	<u>5,318</u>	<u>7,559</u>	<u>12,877</u>

The following tables give, for each sex under the same groups, an analysis of the conditions diagnosed from the 1,281 full-size films, of which 833 were recalls and 448 primary full-size films.

FULL-SIZE FILMS, 1957.

E— Groups	Phthisis		Pleur- isy	Root Lesions	Neo- plasms	Non- Pulm. Lesions	N.A.D.	Total
	Active	In- active						
Contacts, new ...	37	47	4	26	—	4	102	220
Contacts, return ...	1	6	—	1	—	—	9	17
Superannuation ...	64	61	6	1	—	4	58	194
Sick Pay	10	6	4	—	—	5	7	32
School Children ...	—	—	—	—	—	—	—	—
Special Surveys ...	1	—	1	—	—	—	1	3
Nationalised Services	1	—	—	—	—	—	—	1
Industrial	—	—	—	—	—	—	—	—
Other Local Authorities	—	—	1	—	—	—	2	3
Miscellaneous ...	9	21	5	2	—	1	74	112
School Teachers ...	10	33	8	—	—	1	46	98
	133	174	29	30	—	15	299	680
MALE—								
Contacts, new ...	35	46	5	6	2	6	92	192
Contacts, return ...	2	1	—	—	—	—	11	14
Superannuation ...	7	20	4	—	2	3	22	58
Sick Pay	9	26	4	1	1	2	50	93
School Children ...	1	—	—	—	—	1	—	2
Special Surveys ...	1	5	—	1	—	—	13	20
Nationalised Services	1	—	—	—	—	—	—	1
Industrial	—	—	—	—	—	—	1	1
Other Local Authorities	—	—	—	—	—	—	—	—
Miscellaneous ...	7	30	4	2	—	2	76	121
School Teachers ...	6	24	8	—	—	2	59	99
	69	152	25	10	5	16	324	601
Both Sexes ...	202	326	54	40	5	31	623	1,281

The 31 non-pulmonary lesions detected were bony aberrations, cardiac lesions and foreign bodies in the chest wall.

GLASGOW X-RAY CAMPAIGN, 1957.

The Glasgow X-ray campaign took place during the five weeks 11th March to 12th April, 1957, when some 715,000 persons were X-rayed. The survey was carried out by 37 X-ray units, the largest number brought together in any previous campaign. Among the Glasgow residents X-rayed, 2,369 active cases of pulmonary tuberculosis were found, equal to 3·7 per 1,000.

GENERAL OUTLINE.

The original proposal to hold an X-ray campaign in Glasgow was raised by the Department of Health for Scotland in 1954. At that time the waiting list of patients for accommodation in tuberculosis hospitals and sanatoria was extensive, and there seemed little chance of more accommodation becoming available. It was therefore wisely decided that the time was not opportune. The situation, however, was changing rapidly, and with the development and perfection of newer methods of treatment the hospital waiting list was quickly diminishing until in 1956 only a few patients were awaiting admission. The whole-city campaign now became a practical proposition, although there were no doubts as to the size of such an undertaking.

The Corporation agreed to accept the over-all responsibility for the project, and the period selected was 11th March to 12th April, 1957. This time was well chosen not only from the point of view of giving sufficient opportunity for adequate preparation but it was also the most suitable for the recruitment of volunteers, coming as it did after the winter session when most organisations were in full swing.

The planning and development were distributed among the Corporation of Glasgow, the Western Regional Hospital Board, the Scottish Information Office and the Department of Health for Scotland. The Department of Health, along with the Ministry of Health, secured the services of X-ray units from Scotland, England and Northern Ireland, the Regional Hospital Board being responsible for the technical aspects of the campaign and the care of the patients found. The Board had a very onerous task, as there was need for speed of action in disposing of new cases found during the survey and dealing with the vast overload on the chest services.

All three statutory bodies had a joint duty in regard to the welfare of staff. Special arrangements were made to welcome the staff to Glasgow and provide outings to the Trossachs and down the river on each of the available Sundays.

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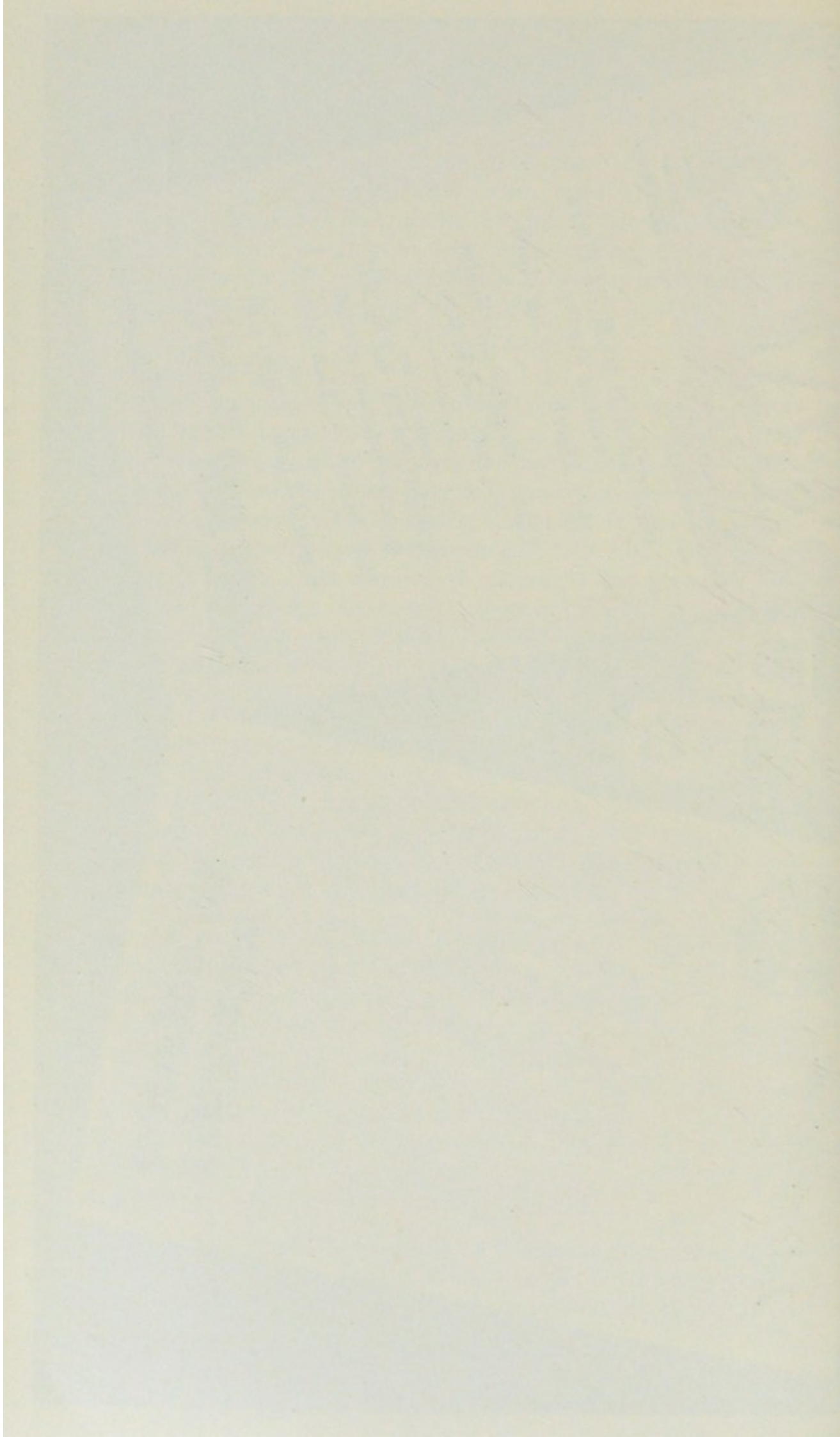
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The Board's administrative pattern was conducted on a sectoral basis with central headquarters to exercise control over the whole city. The city was divided into six areas or sectors, each having control over its own local activities. Of these, five corresponded with and were named after the five Public Health Divisions, and the sixth, the City Sector, was created to cover the central or business area, although its boundaries were intentionally left loosely defined. Except in two cases the Sector Headquarters were located in hospitals and had a dual function, (a) to control the activities of all centres in the same sector and (b) since X-ray films both miniature and full size were transported there for reading, to act as reporting centres and clearing stations for all sector films and related correspondence.

Contact on technical matters was maintained by a Technical Committee composed of representatives from the Department of Health for Scotland, the Regional Hospital Board and the Medical Officer of Health's Department. This Committee dealt with the provision of supplies, the servicing of the units, the design of X-ray cards, the printing of reply letters, and many other details of mass radiography technique. There was also a Liaison Committee representative of the three statutory bodies to whom from time to time reports were submitted on progress in the respective spheres of activity. Throughout the campaign co-operation was maintained by personal contact as well as by cross representation on the various Committees.

In view of the importance of the campaign to Glasgow, a Special Sub-committee of the Health and Welfare Committee was appointed and endowed with full powers to ensure the success of the campaign. This Committee was responsible for the approval of the various projects and the sanctioning of expenditure. The Chairman of the Special Sub-committee was the Convener of the Health and Welfare Committee, who played an outstanding part in the success of the campaign. Provision was made in the year's Estimates for the expenditure of some £20,000.

The Corporation had three principal duties (1) the development of the volume and type of publicity, i.e., the bringing of the public to the X-ray units; (2) the recruitment of voluntary workers and ensuring their efficiency and enthusiasm; and (3) the siting of the units in the most effective places.

(1) *Development of Volume and Type of Publicity.*—As the main duty of the local authority was to secure the presence of the public at the X-ray units it was inevitable that publicity should be of supreme

importance. The general plan of publicity was mainly the work of the Scottish Information Office whose chief officer frequently visited the City and was a member of the Publicity Committee. One of his Information Officers was attached to the Department as a press officer for six weeks before and for the whole five weeks of the campaign. During much of this time he actually lived in a room in the Department in order to be able to supply the press at any time of the day or night with the latest information and with previously agreed features. This assistance was invaluable.

It was early recognised that publicity was all important not only in regard to extent but also to content. The Lord Provost, therefore, convened a meeting of the representatives of the press, the B.B.C. and the cinema industry, and at that meeting it was decided to form a Publicity Committee, to which were appointed the chief Editors of the three principal newspapers, the Controller of the B.B.C., the Chairman of the Scottish Branch of the Cinematograph Association of Great Britain, and the Director of the Scottish Information Office, the Chairman being the Convener of the Health and Welfare Committee. The experienced support of the Scottish Information Office and the encouragement and advice of the Publicity Committee were invaluable. Ideas bubbled up all the time, and it was the province of the Publicity Committee to approve of the content of publicity and of the Corporation Special Committee and the Health and Welfare Department to carry it out.

Every possible method of bringing the campaign to the notice of the public was used—press advertising, posters of various sizes and description, special posters for the Transport Services, banners, window displays, car labels, letter stickers, post office franking, overprinting of Corporation stationery and of the accounts of the Electricity and Gas undertakings, the inclusion of publicity material in rent and rate notices, inclusion of special bookmarks in books distributed from the Public Library, pay packet leaflets provided by the National Association for the Prevention of Tuberculosis, pavement stencils, milk bottle tops, and loud speaker vans.

Certain special features were developed. The talking aeroplane was present during the third and fifth weeks of the campaign. It was a costly medium but attracted much attention. Its use, however, was dependent on weather and satisfactory atmospheric conditions.

The value of a campaign song was considered, but the only one available was an American record which would probably have been unintelligible to Glasgow audiences. Consideration was, therefore, given to the preparation of a new campaign song, and various efforts were tested by the Publicity Committee. Two were finally developed, one a parody on "A Gordon for Me," based on a theme proposed by a member of the Department. The final lyric was prepared by Mr. Jimmy Logan. Permission to use the song was obtained from Mr. Robert Wilson, the owner of the copyright, and arrangements were made with the Performing Rights Society. There were also discussions with the Musicians' Union, who willingly gave permission for their members to record the song on a volunteer basis. The song was recorded by Jimmy Logan and the Alhambra Theatre Orchestra augmented by members of the Scottish National Orchestra, under the conductorship of Mr. Owen Walters. The record was an excellent one and most successful.

The second song developed was regarded as probably more attractive to the younger members of the population, and was known as "The X-ray Rock." This was specially written by a member of the Department Staff and was recorded by Bill Lambert and his band.

Both records were played at cinemas, football grounds and dance halls, and by the loud speaker vans throughout the campaign.

Another special feature was the illuminated tramcar. Prior to 1939 the illuminated tramcar was a favourite method of advertising a local event—an exhibition or a circus. As many citizens had never had occasion to see an illuminated tramcar its value would much exceed its cost. It was an undoubted success and travelled every evening from 6.30 to 11.30 on various tramway routes and could be seen from afar, causing considerable stir and interest.

In order to assist in publicity and at the same time to differentiate the citizens who had been X-rayed from those who had not, it was agreed by the Publicity Committee that each person X-rayed should be given a badge. Much thought was given to the type of badge to be selected. After examining possible alternatives the Publicity Committee decided on a metal badge, and some quarter-of-a-million were ordered at a cost of £750. This allowed for one badge per person up to the agreed target of 250,000 a target which would, if achieved, make a world record and at the same time a reasonable programme for the X-ray units. By the end of the third day it was clear that this number of badges would be quite insufficient and an immediate order was placed

for another 100,000, the largest number that could be produced within three weeks. To make up the deficiency, letterhead stickers were sent back to the Printing Department to be pasted on to card and cut up into badges with a hole for a small gilt safety pin. As the available letterhead stickers were used up completely, new printing of card badges was undertaken until the additional metal badges arrived. The next difficulty was the exhaustion of the supply of safety pins, and an urgent message had to be sent to Birmingham for extra supplies to be placed on the first express train to Glasgow. Some 350,000 cardboard badges were made. They were not looked upon with as much favour as the metal badge which was an attractive production.

The Scottish Information Office, who had met the cost of the badges, were anxious to encourage their use, and the Publicity Committee approved of a proposal that small gifts in kind might be given to persons selected at random who were wearing the badge. The gifts, such as chocolates, chickens, cigarettes, etc., were donated by various commercial interests. These gifts were distributed by X-ray men, members of the staff of the Department who, wearing a mask, approached citizens in the street and if the badge was not in evidence asked if they had been X-rayed. The most favoured recipients were elderly women who were given chickens. Many of them regarded the present of a chicken as an occasion for a party, and very soon the whole tenement and even the whole street knew that Mrs. — had received a chicken for being X-rayed and wearing her badge.

It is likely that the distribution of these small prizes had no appreciable effect on the wearing of the badges which the public were delighted to accept as a sign of a community duty well done. In the later weeks of the campaign the absence of a badge made conspicuous those citizens who had not yet been X-rayed.

The second type of prize was a large prize distributed each week by ballot of the X-ray cards already sorted. It was stressed in publicity that the earlier citizens were X-rayed the greater was the chance of winning a prize, as all X-ray cards took part in each successive draw. The prizes were of a substantial nature—television set, refrigerator, washing machine, holiday for two, and a bedroom suite. In addition, everybody who was X-rayed during the campaign was entered in a draw for a special prize at the close of the campaign. This was an Austin A.35 car, donated by the local agents. The car itself was used for publicity, being installed, with the co-operation of the management in a window of Lewis's Polytechnic, Argyle Street, and a duplicate car taken round the city on a lorry during the last week of the campaign.

The third type of prize was that given to the 100,000th, 200,000th and 250,000th person to be X-rayed. A certain amount of money was available for prizes and in addition gifts were donated by local firms. To a large extent the selection of the person for this type of prize was a matter of chance, and a different X-ray centre was chosen each time.

There was extensive coverage in the press, B.B.C. and cinema news-reels. Of vital importance was the generous help of the press. Advance preparations were heralded by extensive press statements with prominent headlines and full accounts of each step in the build up of the campaign. As the opening date approached the tempo increased until the campaign itself was launched in a blaze of publicity. Further, the newspapers included daily not only the latest figures but also the special articles prepared by the press officer.

The publicity included display and classified advertisements inserted in the newspapers, and many advertisers made temporarily available their reserved space or added the campaign symbol or a phrase to their advertisements.

The B.B.C. Controller was a member of the Publicity Committee and was represented on most occasions by the News Editor. Fairly consistent attention was given to the campaign in the Scottish News including occasional interviews with the Convener and the Medical Officer of Health. The B.B.C. also had a television programme dealing with the campaign and featured the opening ceremony. This programme "Behind the Headlines" was televised on Tuesday, 12th March.

The cinema interests were most helpful. At a special meeting of the principal proprietors it was agreed to show in all of Glasgow's 96 cinemas three films prepared for the campaign, one a short coloured cartoon lasting 15 seconds made at the expense of the Local Authority and shown for one week before the campaign; a one-minute film, prepared at the expense of the N.A.P.T., during the first week; and a three-minute film "In the Clear," also prepared at the expense of the N.A.P.T., at various cinemas during the later weeks of the campaign. In addition, the cinemas exhibited posters, displayed slides, and in some cases permitted leaflets to be distributed. The official Film Transport Organisation voluntarily and without cost distributed the films and slides to various cinemas.

The film, "The Rain Maker," was given a Scottish premiere and, by courtesy of the Paramount Film Corporation, the whole of the proceeds were donated to the purposes of the campaign.

The X-ray campaign required a focal point, and George Square being normally rather dull and deserted in the evenings, it was decided to place a special X-ray centre there and to illuminate the Square. The General Manager of the Lighting Department therefore devised a scheme of illumination, and during the period of the X-ray campaign George Square was brilliantly lit with coloured and decorative lighting. Along with the flood-lighting of the City Chambers, the Square was transformed and became an attractive centre.

In order that the publicity should have some culminating point and that there should be a definite beginning to the campaign, it was decided to have an official opening ceremony. The X-ray units were arriving in the city from 7th March, and a feature was made of the X-ray units leaving their bases in England and arriving in Glasgow. On the evening of Saturday, 9th March, the official opening ceremony took place with pipe and military bands playing to the crowds gathered in the Square. A fanfare heralded the appearance on the balcony of the City Chambers of the Lord Provost, the Secretary of State and the Convener of the Health and Welfare Committee. The Lord Provost opened the campaign and was followed by the Secretary of State who read a message from Her Majesty wishing success to the campaign and the Convener who gave a short address to the citizens of Glasgow. Then all made their way across the Square to the doorway of the X-ray centre where the ceremony of cutting the ribbon took place. The ribbon was cut by two small children from local schools, emphasising the ultimate purpose of the campaign—to protect the children.

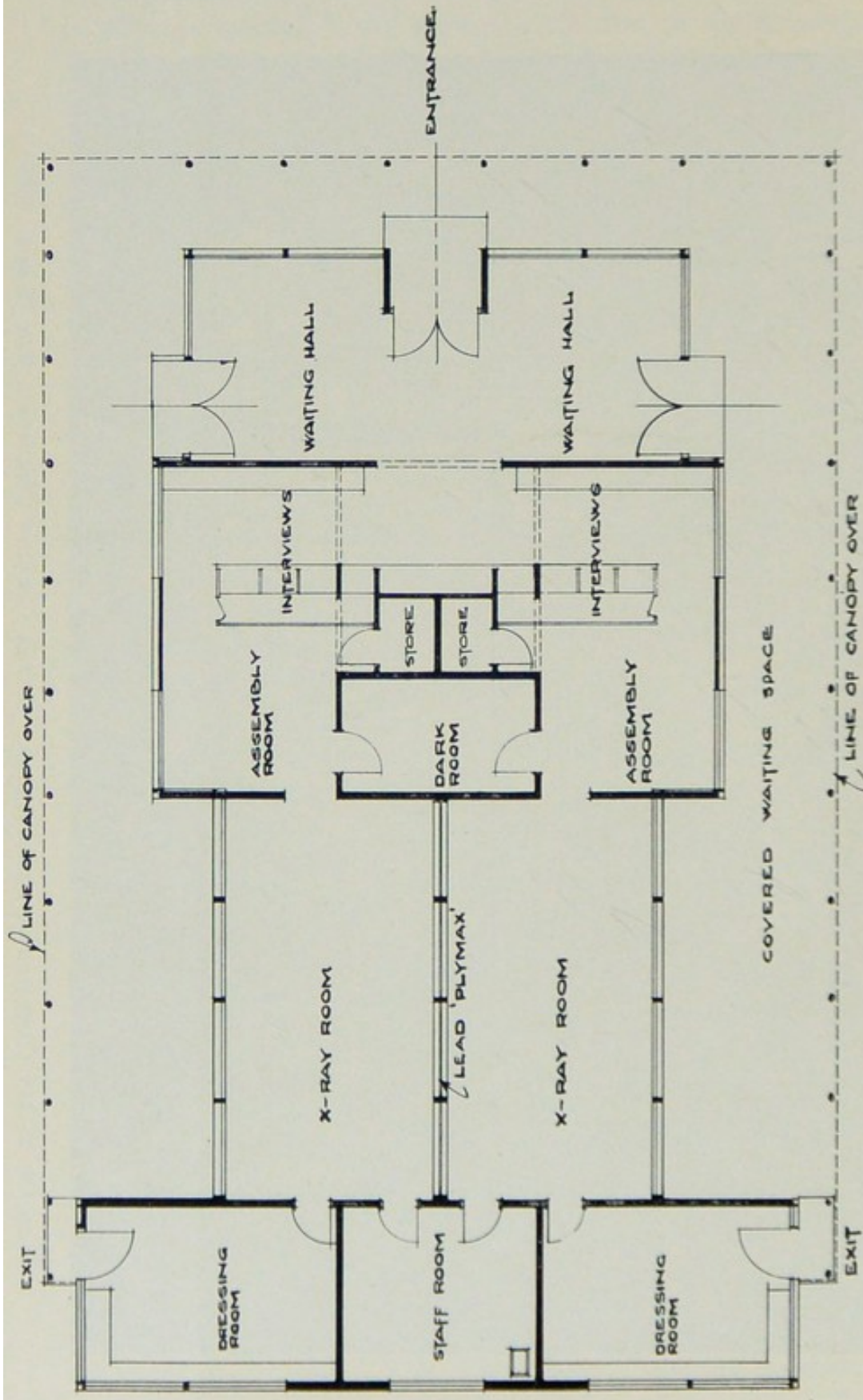
From the City Chambers then emerged a party of athletes carrying torches, and the Lord Provost charged the runners to carry the torches to the 37 wards of the City where the voluntary workers were waiting to receive them. As the runners left there appeared on the front of the balcony in fireworks "Come on Glasgow. Let's stamp out T.B."

Sunday, 10th March, was X-ray Sunday. Special services were held in Glasgow Cathedral and St. Andrew's Roman Catholic Cathedral and in other churches throughout the city to dedicate the campaign. On the previous day it was similarly recognised in the Jewish synagogues. In the afternoon there was a parade through the city of all the vehicles taking part in the campaign. In the evening there was the premiere of the film "The Rain Maker," already mentioned.

On Monday came the official opening of the units in Lewis's Polytechnic, Argyle Street, and in Muirheads, Sauchiehall Street.



GLASGOW X-RAY CAMPAIGN—GEORGE SQUARE AT THE OPENING CEREMONY, 9TH MARCH, 1957



SCALE 0 5 10 20 30 40 FEET

X-RAY CENTRE
 GEORGE SQUARE
 9TH. OCTOBER, 1956.

A. G. JURY, F.R.I.B.A., F.R.I.A.S.,
 CITY ARCHITECT & PLANNING OFFICER,
 20 TROMGATE,
 GLASGOW, C.I.

GLASGOW X-RAY CAMPAIGN—PLAN OF X-RAY CENTRE

(2) *Recruitment of Voluntary Workers.*—The second principal duty of the Local Authority was the encouragement of the voluntary effort. Certain defined tasks could be allotted to the voluntary workers, but even more important was their ability to spread knowledge and information about the campaign, the way in which it was shaping, the siting of the units, and the encouragement of the community spirit.

Clearly all organised groups would have to be brought into such a scheme. It was appreciated that the place of the churches was paramount. A series of meetings were held with various responsible groups in the city, a special invitation to participate being extended to all religious denominations. The skill, experience and devotion available in the churches was required in the campaign. The churches gave their support willingly and played a very important part in encouraging their members to volunteer and to support the campaign by going for X-ray. They were pre-eminent in the service they rendered.

Preparatory meetings were also held with representatives of voluntary organisations, commercial, industrial and business life of the community, and with representatives of the political and trade union organisations. Once initial approaches had been made a combined meeting of all members was held, and immediate support was given to the campaign. Steps were then taken to expand the recruitment by the distribution of posters to Corporation departments, to banks and insurance offices, to offices and factories, and a special recruiting centre was set up in the loggia of the City Chambers.

The 12,000 volunteers who took part were organised on a local basis on the ward system, the 37 wards being divided on account of geographical or social grouping into 49 centres and allotted to the five public health divisions of the city. Initial meetings were held in schools, church halls, public halls, etc. For the three weeks before the campaign and the five weeks of the campaign the volunteers worked from ward publicity centres hired by the Local Authority and provided with furniture, heating, telephone and stationery. The volunteers reported for duty to these centres, to which they also returned the results of canvassing and the number of persons X-rayed in their area. Each group could therefore re-assess and re-allocate their canvassing.

Each ward centre was also supplied with a detailed large scale map of the area, a copy of the index pages of the Valuation Roll giving the number of houses in individual streets and the population likely to be encountered, and a short training was given in how to divide up an area for house-to-house visitation.

One of the important items of publicity was the Citizen's Letter, a letter signed by the Medical Officer of Health and printed in type-script, which was delivered to every house in the city during the last week in February. This task was undertaken by the voluntary youth organisations, and some 8,000 of their members distributed the letters to over 300,000 houses within seven days. The letter contained a card, and the folding of the letters in such a way as to retain the card became a rather urgent matter at the beginning of February. Folding machines lent by the City Assessor were used, but it was necessary to invite volunteers to come from the ward centres to take part in inserting the card and making the fourth fold. Everyone joined in. Members of the staff took home several thousand letters and cards to fold, and the Old Folks' Homes did their share. The work was completed in good time to permit of the letters being bundled up in the numbers required for ease of transport to the various centres for distribution. In the week before the campaign the voluntary workers called at every house and collected the cards, which the householder was invited to complete. These cards formed a record of the likely success in the area and indicated where further effort might be required.

Additional duties for the volunteers were the distribution of posters to shops, offices and factories, the transport of the old people and handicapped to the X-ray centres, and the planning of the use of the loud speaker vans. While the general scheme of loud speaker vans was under central direction, provision was made for the ward publicity groups using them whenever required. For example, when numbers X-rayed coming from an area were beginning to fall or where the X-ray unit was entering an area for the first time, instructions were given as to the most effective use of loud speaker vans, and the need for the message to be concise, clear, and given only when the van was stopped or crawling.

No less important was the duty of the Corporation and its various committees and departments to support the campaign by publicity, the recruitment of voluntary staff, and the special assistance which individual departments could give—the Libraries distributing posters and book-marks, the Education Department distributing pamphlets to parents, the Transport Department displaying posters on vehicles, and the Museums and Art Galleries by not only displaying the posters but also holding an X-ray exhibition immediately before the opening of the campaign. All these offers were adopted and developed in the course of the advance preparation.

(3) *Siting of the Units in the most Effective Places.*—Possible unit sites and premises were selected by the Health and Welfare Department, approved by the Special Corporation Sub-committee, and then referred to the Technical Committee for inspection. The search for sites began about a year before the campaign commenced, this early start being made necessary by the knowledge that accommodation of the type required was in great demand by various organisations and that booking took place some nine to twelve months before the date of the function. The number of sites required was, of course dependent on the number of units available, but at a later stage in planning it was recognised that the number of units available would not permit of complete coverage unless some of the units were transferred from one site to another in the course of the campaign. Previous experience had also emphasised the need for sites to be, wherever possible, on the main routes where they would be readily recognisable by the public. An option was taken on Local Authority public halls, but wherever the public halls were unsatisfactory a search was made for alternative sites in church halls, in clinics, public libraries and in voluntary organisation premises. In one instance an unoccupied primary school was used, and in two instances industrial premises.

Special consideration was given to the placing of X-ray units in the central part of the city. To form a focal point to the campaign a temporary building was specially designed for a site in George Square. In the design were incorporated the ideal arrangements for a mass X-ray centre where the maximum number of the public could pass through with the least effort and also with provision for shelter from inclement weather and adequate dressing accommodation. The design, prepared by the City Architect, was most attractive and the building was constructed by the Housing and Works Department of the Corporation and planned to take two X-ray units. The George Square centre was open from 10 a.m. until 9 p.m. on five days a week and from 10 a.m. to 5 p.m. on Saturdays.

It had been found from experience elsewhere that units in large department stores consistently X-rayed more people and threw up a higher incidence of tuberculosis than units in any other type of site. The city department stores most likely to meet requirements for a centre were Lewis's Polytechnic, Argyle Street, and the House of Fraser's Muirheads, Sauchiehall Street. The management of both stores welcomed the opportunity to assist, and two units were placed in Lewis's and one in Muirheads. These units operated during the time the department stores were open, and there was always a queue of shoppers waiting to be X-rayed at both sites.

Apart from the five central units 13 X-ray units were in static or permanent sites, that is to say, sites where the X-ray units remained throughout the five weeks. In order to cover the city more adequately, seven other units were moved to new sites after one, two, three or four weeks depending on the population over fourteen years of age in the area. One of the obvious difficulties where a unit was transferred from one site to another was to ensure that the public knew the location and timing of the unit, and the voluntary workers gave special attention to this requirement.

The third group of sites for the five mobile X-ray units were selected in collaboration with the ward publicity committees. The majority of the sites were in the newer housing schemes where permanent hall accommodation was not available. The sites selected were usually near well known places like a school, shopping area or a clinic, which would be recognised by the public. In addition to the selection of these sites, the ward groups made rest accommodation available for the unit staff. At every site there was a house available where the staff could retire, and in fact in most cases meals were provided by the ward groups.

As it happened, there was little difficulty in the local community being aware of the location and timing of the mobile units. Posters were displayed in the local shops and in the houses, and loud speaker vans reminded the community of the time and place of the unit and the number of days it was likely to be at that site.

LIST OF SITES.

Building or Site.	Site.	Number of Sites	
		Semi-Static	Temporary
Public Hall	9	5	—
Clinic	2	1	—
School	—	1	—
Other Local Authority Building ...	1	2	2
Church Hall or Premises	—	3	—
Department Store	2	—	—
Industrial Building	1	1	—
Voluntary Association Premises ...	—	2	—
New Building	1	—	—
Courtyard, Open Ground or Roadside	—	—	35
	<u>16</u>	<u>15</u>	<u>37</u>
Number of Units	18	7	5
Number of Recall Units (Large Films)	7	—	—

Few of the static or semi-static sites could be used without some adaptation—the provision of special electrical and water points, partitioning, telephones, etc. In the majority of instances special electrical cables had to be provided from the main fuses to the site of the unit with the necessary switchgear.

LOCATION OF X-RAY UNITS.

<i>Static Site.</i>	<i>Semi-Static Site.</i>	<i>Temporary Site.</i>
CENTRAL DIVISION— George Square.	Hillhead Burgh Hall, 348 Byres Road.	Knightswood— Community Centre.
Lewis's Polytechnic, 65-117 Argyle Street.	Knightswood Depot, 1858 Gt. Western Road.	Drumchapel— Glenkirk Drive. Achamore Road/Kinfauns Drive. Linkwood Drive Kilcloy Avenue/Peel Glen Road.
Muirheads, 200 Sauchiehall Street.	Stobcross House, 185 Stobcross Street.	Blairdardie— Moraine Drive/Moraine Avenue.
Sandy Road Clinic, 551 Dumbarton Road.	Whiteinch Burgh Hall, Inchlee Street.	Old Drumchapel— Kaystone Road/Balvie Avenue.
NORTHERN DIVISION— Maryhill Public Hall, Gairbraid Avenue. Woodside Public Hall, Clarendon Street. N.B. Loco Works Hall, 97 Adamswell Street.	Barony Youth Centre, 225 Parliamentary Road. Possilpark Tramway Depot, 240 Hawthorn Street.	Robroyston— Geddes Road/Northgate Road. North Balornock— Front of R.C. Church, Lamont Rd. Barmulloch— 8 Quarrywood Avenue. Milton— Skerryay Street. Liddesdale Square. Hillend— 63 Hillend Road. Cadder— Skirsa Street/Vaila Street.
EASTERN DIVISION— Bridgeton Hall, 685 London Road. Parkhead Public Hall, 1286 Duke Street.	Miners' Welfare Centre, 1210 Royston Road. Wardlaw Church Hall, 39 Meadowpark Street. Wellshot Clinic, 150 Wellshot Road. High Carntyne Church, 356 Carntynehall Road.	Greenfields— 46 Inveresk Street. Barlarnark— Calvay Road and Blyth Road. Burnmouth Road at Sandaig Rd. Cranhill— Skerryvore Road. Ruchazie Place/Bellrock Street. Ruchazie— 433 Gartloch Road. Garthamlock— Barholm Square. Riddrie— Dinart Street—Cumbernauld Rd.
SOUTH-EASTERN DIVISION— Gorbals Library, 100 Norfolk Street. Moffat Street Clinic, 339 Moffat Street. Dixon Hall, 650 Cathcart Road. Langside Public Hall, 5 Langside Avenue.	Couper Institute, 84 Clarkston Road. Pollokshaws Burgh Hall, 2025 Pollokshaws Road.	King's Park— Hall—Courtyard. Toryglen— Glenmore Avenue/Edinbeg Street. Househillwood— Community Centre, Brockburn Road, Roundabout. Priesthill— Priesthill Avenue. Househillwood Road at Glentyan Drive. Arden— 43 Kyleakin Road. Carnwadric— Roukenburn Street/Capelrig Street Eastwood— Banchory—Garvock Drive. Mansewood— Brownhill Road/88 Parkneuk Rd. Castlemilk— Glenacre Terrace at Glenacre Dr. St. Bartholomew's School.
SOUTH-WESTERN DIVISION— Kingston Hall, 300 Paisley Road. Govan Town Hall, 401 Govan Road. South Govan Hall, 287 Langlands Road.	Pollokshields Burgh Hall, Maxwell Park. Mosspark— 555 Mosspark Boulevard. Kempsthorn Primary School, Kempsthorn Road.	Pollok— Vacent ground at rear of Com- munity Centre, Brockburn Road Roundabout. North Pollok— 24 Braidcraft Terrace. 153 Corkerhill Place. Penilee— Craigmuir Road.

With the exception of the Units in George Square, Lewis's and Muirheads, the centres were open from 2 to 4 p.m. and 6 to 8.30 p.m. each weekday except Saturday.

One of the important considerations about the location of the units was that the public should know where they were and how to reach them. In signposting the Automobile Association gave invaluable help by erecting direction signs on the main roads and a few of the subsidiary roads. At some sites direction arrows were stencilled on the pavement, while there was a vast distribution of posters giving the times and places of the static, semi-static and temporary units. The volunteers also did excellent work in keeping the public informed not only as to the progress of the campaign but the placing of the units and the times when they were open.

Public Response.—At 9 o'clock on the morning of Monday, 11th March, there was a queue forming at the units at George Square. By opening time, 10 a.m., the queue was hundreds strong, and the same seemed true of the units in the two stores, Lewis's and Muirheads. In the afternoon the remaining units were open throughout the city, and the picture was everywhere the same. By night some 27,000 persons had been X-rayed, and it was obvious that the campaign was off to an excellent start. By the end of the first week 146,317 persons had been X-rayed. On Thursday, 21st March, the campaign target of a quarter-of-a-million was exceeded, and at the end of the second week the total number of persons X-rayed stood at 297,527. And so it continued, with a slight sag in the third and fourth weeks but rising to a peak in the last week when 160,024 were X-rayed, and a record total of 46,142 for the last day, Friday, 12th April.

The draws for the prizes were carried out on the Monday of the succeeding week, the first being a washing machine on 18th March, a holiday for two in the Highlands on 25th March, and so on. The presentation of each prize was made by someone in the public eye with accompanying publicity. The final prize, the motor car, was won by a 56-year-old woman who was herself a T.B. patient, and the selection was made on television.

The demand on the units had been exceptionally high. With the continued success there was no respite for the members of the unit staff, and the first weekend was a vitally necessary break for the staff. Improvement in rapid repair of technical faults reduced the time which a unit might be out of action, but the continuous pressure on the X-ray units meant at times that a halt was necessary either to put cold wet cloths on the tubes or to leave them to cool down. In some cases fans

were added to assist in the cooling. The X-ray units stood up remarkably well to a pressure hitherto thought unbelievable.

The recall units had been in use since 14th March, and the number of films reaching the operation headquarters steadily increased. Patients were given chest clinic appointments direct and the general practitioners notified. The chest physicians at the clinics commented on the goodwill of the patients, their sense of responsibility, their eager acceptance of medical treatment not only at home but also in hospitals both in Glasgow and outlying areas. The spirit of the crusade had extended to those whose films were normal and also to those who were found to require treatment. There was a sustained load on operation headquarters and sector headquarters and on the medical directors interpreting the miniature films. Later the load fell on the chest clinics, and it was necessary to make appointments for Saturdays and Sundays in addition to the increased number of sessions during the week. The work of the chest clinics and of the contact tracing was just getting into its stride.

At 12.25 a.m. on the morning of Saturday, 13th April, at the Bridgeton Public Hall a police constable brought the day's total to 46,142 and the final total to 714,915. Such was the spirit of the unit staffs at this time that this last X-ray was taken by a radiographer from another unit who, after a full day's work, had arrived to help the last unit operating.

Results.—The outstanding achievement in the campaign was the very high public response compared with previous surveys. Of the 714,915 persons X-rayed, 622,349 were Glasgow residents over 14 years of age, equal to 76 per cent. of the adult population. The figure for women was 78 per cent. and for men 74 per cent. The highest response in both sexes was in the age group 45-59 years followed by those aged 15-24 years. The lowest response was among people over 64 years of age, but even here the figure was much higher than that which had been previously achieved. The following table shows the weekly attendances of adult Glasgow residents :—

WEEKLY ATTENDANCES—ADULT GLASGOW RESIDENTS.

	Week of Campaign.					Campaign
	1	2	3	4	5	
<i>Male—(Adult population 381,713)—</i>						
Number examined ...	58,306	56,238	55,454	46,622	65,255	281,875
Per cent. of male resident population ...	15	15	15	12	17	74
<i>Female (Adult population 437,588)—</i>						
Number Examined ...	77,845	77,870	58,419	55,772	70,568	340,474
Per cent. of female resident population ...	18	18	13	13	16	78

The average daily attendance at the 30 miniature units was 914, and at the five units in the city centre 1,396. The five mobile units had an average daily unit attendance of 628, substantially higher than was expected.

During the five weeks of the campaign, 30,506 persons were recalled for further examination on large films, a recall rate of 4.3 per 1,000, substantially lower than had been expected. Of the 30,506 persons both resident and non-resident recalled, some 17,800 or 58 per cent. presented evidence of significant radiological abnormality requiring further investigation or supervision by the family doctor or the chest physician. Of this latter number, some 3,400 were referred to their family doctors, 13,900 to attend their local chest clinic, and the remainder, 655, defaulted.

Rather fewer than 13,000 residents attended the five Glasgow chest clinics, an average rate of 500 per week, which created a vast overload on the chest service.

Tuberculosis.—Of the 13,900 persons, residents and non-residents, who attended the chest clinics, 11,575 presented some evidence of tuberculosis. The assessment and disposal of these cases is indicated in the following table :—

ASSESSMENT AND DISPOSAL OF TUBERCULOSIS PATIENTS WHO
ATTENDED THEIR LOCAL CHEST CLINICS INCLUDING
NON-RESIDENTS AND CASES ALREADY KNOWN.

Final Assessment after Three Months.	No Action necessary	Observ- ation.	Disposal.		Total.
			Out- Patient Treatment	Hospital Investigation or Treatment	
Active	—	—	1,798	966	2,764
Requiring Observation	—	4,509	698	8	5,215
Inactive	3,596	—	—	—	3,596
Total	3,596	4,509	2,496	974	11,575

Active pulmonary tuberculosis was found in 2,565 cases, equivalent to a rate of 3.6 per 1,000 of the total population examined. Glasgow cases numbered 2,369 or 3.7 per 1,000 Glasgow residents over 14 years

of age X-rayed. Some 4,500 cases were considered to require observation, 4,142 being Glasgow residents, equal to a rate of 6.4 per 1,000. The details are shown in the following table :—

INCIDENCE OF TUBERCULOSIS.

	Population Examined.				Significant Pulmonary Tuberculosis discovered (New Cases only).					
	Adults.	Per-centage.	—15 yrs.	Total.	Active		Observation		Total.	
					No.	Rate per 1,000	No.	Rate per 1,000	No.	Rate per 1,000
Glasgow ...	622,349	75.9	19,466	641,815	2,369	3.7	4,142	6.4	6,511	10.1
Non-Resident ...	73,100	—	—	73,100	196	2.7	346	4.7	542	7.4
Total ...				714,915					7,053	9.9

The age and sex incidence of the Glasgow patients are shown in the following table :—

GLASGOW RESIDENTS—PULMONARY TUBERCULOSIS DISCOVERED BY AGE AND SEX.

Disease Classification.	N.S.	0-14	15-24	25-34	35-44	45-59	60+	Total
Active Pulmonary Tuberculosis—								
Male ...	—	22	201	208	218	478	260	1,387
Female ...	1	10	285	242	215	162	67	982
Pulmonary Tuberculosis of doubtful activity but requiring observation—								
Male ...	—	10	161	334	413	910	530	2,358
Female ...	1	12	234	446	447	459	185	1,784

The early nature of the disease detected is illustrated by the fact that in two out of five patients evidence of disease was confined to one lung and only one in eight new cases presented evidence of extensive bilateral disease. Tubercle bacilli were isolated in only one out of five cases, and only one out of every three cases required admission to hospital.

Other Abnormalities.—Of the other abnormalities detected, a total of 347 persons were found to be suffering from lung cancer. Of these, 327, or 0.51 per 1,000 examined, were among Glasgow residents, the rate for men being four times the rate for women. The highest incidence, as would be expected, occurred among men of 60 years and over.

Other chest abnormalities detected included pulmonary fibrosis, bronchiectasis, bacterial and virus infections and pleural thickening and calcification. There were also found some 1,000 cases of acquired cardiac abnormalities.

The above statistical tables were obtained from the Official Report of the Campaign.

Contacts.—Discussion had taken place regarding the actual scope of contact tracing that might be possible after the campaign. While

it was agreed that the contacts of notified cases should receive immediate attention, it was thought possible to include thereafter the contacts of all patients kept under observation at the chest clinics. It was also agreed to follow up not only the family contacts but the relatives and friends of the patient and also the neighbours and others. This work was made possible only by increasing the number of health visitors by 50 per cent. The following table shows the number of contacts visited :—

FOLLOW UP BASED ON CAMPAIGN CASES.

	CONTACTS			Contacts X-rayed		
	Age of Contacts +15 years	—15 years	Total	During Cam- paign.	After Cam- paign.	Not X-rayed
<i>Family, Relatives and Friends of—</i>						
(a) Patients having positive sputum ...	1,370	507	1,877	1,246	211	420
(b) Patients having negative/nil sputum ...	7,388	2,886	10,274	6,112	859	3,303
(c) Patients for observation (non-notified)	11,842	4,988	16,830	9,865	1,262	5,703
<i>Neighbours and Others of—</i>						
(a) Patients having positive sputum ...	4,826	1,055	5,881	4,032	399	1,450
(b) Patients having negative/nil sputum ...	23,303	5,247	28,550	17,552	2,604	8,394
(c) Patients for observation (non-notified)	13,089	3,743	16,832	10,321	1,241	5,270
	<u>61,818</u>	<u>18,426</u>	<u>80,244</u>	<u>49,128</u>	<u>6,576</u>	<u>24,540</u>

Some 30 per cent. of the contacts were not X-rayed either during the campaign or afterwards in spite of intensive visitation in their own homes or the special facilities made available, such as an evening X-ray session every week. Additional attention has been given to the contacts of notified cases with positive sputum, and some reduction in the number of defaulters has been achieved. Out of the 6,576 cases X-rayed after the campaign only 17 new cases were found, 12 of them in association with notified patients and 5 with observation cases.

The following number of contacts received B.C.G. vaccination :—

Contacts of patients having positive sputum ...	457
Contacts of patients having negative or nil sputum ...	1,733
Contacts of patients under observation ...	1,484

Conclusion.—Undoubtedly the campaign was highly successful. The number of persons X-rayed was a world record for a five-week campaign, but the percentage of Glasgow residents over 14 years of

age X-rayed, 76 per cent., was lower than was indicated by the social survey conducted in the first week which found that 88 per cent. of the persons questioned were prepared to go for X-ray. On the other hand, some 2,500 cases of active tuberculosis were found, the preponderance of the cases being in the older age groups, where infection was believed to exist.

The response of the public indicated fairly conclusively that the number of units were insufficient for a city the size of Glasgow and that more, perhaps many more, would have come forward if a larger number of X-ray units could have been made available.

A principal factor in the success of the campaign was the atmosphere in the city and the attitude of its citizens to tuberculosis. Publicity was important. It made the public aware of the imminence of the campaign, its purpose and its value to the city. Undoubtedly, the vast support given by the newspapers, the B.B.C. and the cinema industry was crucial. Many other pieces of publicity not only added to the total value but emphasised to the public the efforts that were being made on their behalf. Certainly, the publicity used was effective in bringing the public to the X-ray units and maintaining their interest throughout the five weeks.

The volunteers performed an excellent job of spreading information as to the campaign, its purpose, the sites of the nearest units and the periods when the units would be open. The majority of the ward groups followed up doubtful households with enthusiasm recommending changes in the visiting staff in order to secure acceptance. In a few areas, however, the volunteer work was less efficiently carried out. As already mentioned, the support of church members was an important factor in the success of the volunteer effort.

In practice it was found that the number of volunteers willing to do clerical work was unnecessarily high. The reports by all the ward groups indicated that if all the volunteers had come forward for house-to-house visitation and such other duties as might be required of them there would have been a certain variety in the work available for the volunteers.

It was also recognised that delay in a unit reaching an area rather took the edge off the enthusiasm of the ward group and the response for that area was likely to be less than if the unit had arrived at the beginning or near the beginning of the campaign period. There was also difficulty in maintaining enthusiasm during the preliminary settling down period when there was little active work for the voluntary worker.

One section of the plan that failed was the arrangements for pre-formed groups. While five mobile units devoted the whole of the third week to industrial surveys the arrangements for the X-ray of older school children and old people and of commercial and industrial groups too small to be served by a mobile unit fell through owing to the extreme pressure on the static and semi-static units. It was thought that perhaps half-an-hour or three-quarters-of-an-hour before the usual afternoon period could be devoted to dealing with pre-formed groups, but the long queues which gathered for the beginning of the afternoon session made the introduction of pre-formed groups unacceptable to the queue. This was probably the most serious failure, undoubtedly due to the overwhelming success of the campaign, which made the number of units originally allocated quite inadequate to cope with the demand.

The weather was an important factor in the success of the campaign. March of 1957 was the third mildest March in the past hundred years. The weather opened with warm sunny days, and it was not until the third week that the weather broke.

The siting of the units was in the main satisfactory. The use of department stores in the centre of the city was well justified by the figures recorded there. The George Square unit fulfilled all expectations, and except for one day, the Friday of the third week, was always attended by queues. It was in fact the barometer of the campaign.

The decision of the Department of Health for Scotland and the Western Regional Hospital Board to provide an all-clear letter was an important factor in the support given by the public. Every all-clear letter received re-emphasised the fact already made known in publicity that the vast majority of persons coming for X-ray would be completely clear of the disease. The provision for each person to write his or her name and address on the printed all-clear letter certainly simplified clerical work at the units, as did also the use of a much modified X-ray card.

The staff of the X-ray units were heavily pressed, particularly during the first week but their morale was maintained throughout the five weeks.

The campaign was an example of careful and detailed planning, and the results were a credit to the good humour and good sense of the citizens of Glasgow who took full opportunity of what the Lord Provost had called "this great social experiment."

VENEREAL DISEASES.

There was an increase in the total number of cases of acute syphilis in 1957, 22 compared with 17 in 1956. This increase occurred only in the males, the females numbering one less. The incidence of gonorrhoea was also higher in both males and females.

The total number of new cases of venereal disease increased from 1379 in 1956 to 1424 in 1957.

The comparative figures for the incidence of acute venereal disease during the pre-war, war and post-war periods are shown in the following table :—

NEW CASES OF VENEREAL DISEASE.

Year	Acute Syphilis		Acute Gonorrhoea	
	Males	Females	Males	Females
1938	250	124	1,426	157
1939	293	118	1,358	143
1942	778	395	1,536	308
1943	671	368	1,323	407
1946	687	356	2,463	449
1947	597	247	2,164	305
1951	105	32	1,280	169
1952	61	21	1,352	164
1956	14	3	1,231	131
1957	20	2	1,258	144

The incidence of acute syphilis in males is now 92.0 per cent. below the 1938 incidence. In the case of females, the figure for 1957 is 98.4 per cent. below that ruling in 1938.

Both the total number of new and transferred-in cases attending the centres for the first time has increased during the year.

NEW AND TRANSFERRED-IN CASES OF VENEREAL DISEASE ATTENDING THE CENTRES FOR THE FIRST TIME.

Year	Total	
	New Cases	Transferred-in
1938	5,189	245
1939	4,724	189
1942	6,344	642
1943	7,740	853
1946	9,937	1,495
1947	8,181	570
1951	4,947	445
1952	5,301	450
1956	4,187	204
1957	4,208	275

The attendance of patients suffering from non-venereal conditions remains high although there has been a slight decrease during the year as compared with previous years.

PATIENTS SUFFERING FROM NON-VENEREAL CONDITIONS.

Year.	Males.	Females.	Total.
1938	824	153	977
1939	747	142	889
1942	1,058	398	1,456
1943	2,002	708	2,710
1946	3,027	650	3,677
1947	2,458	547	3,005
1951	1,707	360	2,067
1952	1,924	391	2,315
1956	1,437	308	1,745
1957	1,453	281	1,734

Syphilis.—The number of male patients suffering from acute syphilis coming to the clinics for the first time in 1957 was 20, which compares with 14 in 1956, 31 in 1955 and 18 in 1954. Acute syphilis in females fell from 3 to 2.

The number of patients suffering from late syphilis was 65, which compares with 87 in 1956. This figure for 1957 is a 86·1 per cent. reduction on that ruling in 1938. The following table shows the changes in incidence that have occurred since 1938 :—

LATE SYPHILIS.

Year.	Males.	Females.	Total.
1938	217	250	467
1939	174	191	365
1942	145	157	302
1943	206	191	397
1946	154	161	315
1947	155	167	322
1951	114	98	212
1952	127	85	212
1956	56	31	87
1957	43	22	65

There were no cases of congenital syphilis under one year and 10 cases at all ages.

CONGENITAL SYPHILIS.

Year.	All Cases.	Cases — 1 year	Rate per 1,000 Live Births.
1932	240	72	3·2
1937	177	36	1·6
1942	71	27	1·3
1943	97	32	1·4
1946	72	27	1·1
1947	80	25	0·97
1951	24	5	0·25
1952	33	5	0·25
1956	16	—	—
1957	10	—	—

During the year 8,358 ante-natal blood tests were carried out and 0.14 per cent. were found positive. The number of blood tests still represents less than half the total births in the city and a special effort has been made to persuade practitioners to adopt the practice of ante-natal blood tests for the Rhesus Factor and the Kahn and Wassermann Tests.

ANTE-NATAL BLOOD TESTS.

Year.	Number.	Percentage Positive.
1930	1,749	2.8
1935	3,334	1.8
1940	8,714	1.3
1942	10,265	1.18
1943	11,067	1.7
1946	13,946	1.23
1947	13,250	1.46
1951	9,796	0.65
1952	8,661	0.87
1953	8,457	0.35
1956	7,875	0.15
1957	8,358	0.14

Gonorrhoea.—The incidence in acute gonorrhoea in males has increased from 1,231 in 1956 to 1,258 in 1957. There has also been an increase in the number of female patients from 131 to 144.

Chronic gonorrhoea in both males and females has shown a slight increase.

CHRONIC GONORRHOEA.

Year.	Males.	Females.	Total.
1938	101	312	413
1939	53	266	319
1942	67	88	155
1943	73	93	166
1946	35	48	83
1947	32	38	70
1951	11	10	21
1952	9	6	15
1956	14	13	27
1957	20	14	34

Venereal Diseases in Seamen.—The *ad hoc* clinics continue to serve seamen coming to the port. The actual numbers suffering from acute syphilis have decreased slightly, while the numbers suffering from acute gonorrhoea have risen.

PROPORTION OF SEAMEN TO TOTAL CASES—BLACK STREET
AND BROOMIELAW CLINICS.

Year.	Early Syphilis.			Acute Gonorrhoea.		
	All.	Seamen.	Per-centage.	All.	Seamen.	Per-centage.
1940 ...	403	133	33·0	1,210	224	18·5
1941 ...	793	434	54·7	1,671	539	32·3
1942 ...	1,082	589	54·4	1,543	532	34·5
1943 ...	1,149	577	50·2	1,393	436	31·3
1946 ...	1,264	164	13·0	3,070	435	14·2
1947 ...	872	166	19·0	2,340	330	14·1
1951 ...	162	40	24·7	1,347	204	15·1
1952 ...	94	34	36·2	1,417	198	14·0
1956 ...	14	12	85·7	1,231	168	13·6
1957 ...	20	9	45·0	1,245	127	10·2

Attendance of Patients.—Patients attending for the first time at the various centres numbered 4,208 an increase from the figure of 4,187 in 1956. There were 24,926 attendances of new and old patients and 156 patients were admitted for in-patient treatment, 49 being admitted direct without previous attendance at a clinic. The *ad hoc* clinics dealt with 99 per cent. of all acute venereal disease coming to the diagnostic and treatment centres.

	<i>Ad hoc</i> Treatment Centres		Glasgow All Centres
	Males	Females	
Acute Syphilis (includes Primary, Secondary and Latent in the First Year of Infection) ...	20	1	22
Acute Gonorrhoea ...	1,245	140	1,402
Total Acute Venereal Disease ...	1,265	141	1,424
Late and Congenital Syphilis ...	17	16	75
Chronic Gonorrhoea ...	17	13	34
Total Chronic Venereal Disease ...	34	29	109
Other Diseases, including Soft Sore, Septic Balanitis, etc. ...	803	52	941
Non-Venereal ...	1,429	254	1,734

Incidence of Jaundice.—During the year, out of 21 cases of early syphilis attending the *ad hoc* centres, none developed jaundice. With the reduced use of arsenic and improved technique, jaundice no longer appears as an important complication of the treatment of syphilis.

Follow-up of Defaulters.—With the rapid treatment of both acute syphilis and acute gonorrhoea, a fairly high proportion of the patients default before completing treatment. Efforts have been made to obtain the attendance of defaulters by follow-up letters and by personal visits of the health visitors in the cases of females and the senior attendants in the case of males. During the year the health visitors attended 571 female patients on 711 occasions and persuaded 69·7 per cent. of the patients to resume treatment. The wrong name and address had been given by 64 patients. In the follow-up of male patients 1,131 follow-up letters were sent to 765 patients who defaulted during treatment but only 30·5 per cent. resumed treatment. On 236 occasions the wrong name and address was given. The low percentage of males resuming treatment is unsatisfactory but it is probable that most patients have received sufficient treatment to reduce the danger of spread of infection.

Contact Tracing.—The contact tracing, as well as defaulter follow-up work, is carried out by the staff of the male *ad hoc* centres in respect of males and by the health visitors attached to the female centres in the case of females. The following table shows the follow-up by the male and female clinics :—

CONTACT TRACING AND FOLLOW-UP OF SOURCES OF INFECTION.

Referred by Male Clinics.

	Wives		Consorts	
	Number	Percentage	Number	Percentage
Attended ...	67	9·05	8	47·1
Did not attend	7	9·5	9	52·9
	<hr/> 74		<hr/> 17	

Total referred—91 ; Total attended—75 = 82·4 per cent.

Referred by Female Clinics.

	Husbands		Consorts	
	Number	Percentage	Number	Percentage
Attended ...	3	30	1	16·6
Did not attend	7	70	5	83·4
	<hr/> 10		<hr/> 6	
Total Referred ...	...	...	16	
Total Attended ...	...	...	4	
Percentage ...	...	...	25%	

SECTION VII.

MENTAL SERVICES.

The work of this section has been carried out on the same lines as in previous years and details are given below.

MENTAL DEFECTIVES BOARDED-OUT.

The total number of mental defectives on the roll at 31st December, 1957, was 1,334, as compared with 1,359 the previous year, a decrease of 25. The number of defectives resident within the City was 1,061, as compared with 1,096 in 1956. The following are the statistics in respect of these cases :—

	City	Country	Total
On Roll at 31st December, 1956 ...	1,096	263	1,359
Enrolled and transferred during year ...	60	22	82
Taken off roll by death, recovery or transfer	95	12	107
Remaining on Roll at 31st December, 1957	1,061	273	1,334

The allowances paid in respect of these patients amount to £1,800 per week.

During the year 17 patients were transferred from homes in Glasgow to homes outwith the City, while five returned from the country to relatives in Glasgow. Of the 1,334 patients on the Roll at the end of the year, 273 were boarded-out outwith the City. Changes in guardianship numbered 138, mostly owing to the death of former guardians.

The problem of the waiting list for institutional accommodation remains unchanged. During the year 86 patients were admitted to institutions, this figure including continuation cases.

The Annual Report of the General Board of Control for Scotland for the year ending 31st December, 1956, gave the number of certified mental defectives in Scotland as 8,135. Of these, 5,554 were in mental deficiency institutions and 2,581 were under guardianship. The number of patients boarded-out by this Authority at the same date was 1,359, i.e., 52·7 per cent. of the total for Scotland.

The number of cases discharged from the Roll during the year was 107 :—

By removal to certified institutions	26
By order of the General Board of Control	42
By death	24
By removal to mental hospitals	15
Total	107

At the request of the General Board of Control, Special Reports were made on the suitability for continued guardianship, removal to an institution or discharge in respect of 430 patients in Glasgow, a decrease of 68 from the previous year, and 682 Home Reports were prepared in respect of patients in institutions or under unrelated guardianship.

Under Section 24 of the Criminal Justice (Scotland) Act, 1949, 20 convicted persons were certified mentally defective and by order of the Court placed under guardianship in private homes, following arrangements made by this Department.

Fourteen patients were ordered to be detained in certified institutions under the control of the Regional Hospital Boards.

Petitions for Judicial Orders for the placing of 15 defectives were presented to the Sheriff and all were granted.

Three patients gave birth to illegitimate children during the year. Two of these were under the guardianship of their parents, and one was under the care of an unrelated guardian. Two of these children died and the surviving one is being cared for by the maternal grandmother.

Three male patients and one female patient were married during the year and one of the couples has already separated, the wife being the non-certified party, and a warrant has been granted for her arrest for abandoning her child.

At the end of the year 55 mental defectives were residing in Forest-hall awaiting accommodation in certified institutions.

MENTAL PATIENTS BOARDED-OUT.

These are certified patients who have been resident in mental hospitals and, having made a partial recovery, are considered by the Medical Superintendent to be suitable for boarding-out under the care

of a guardian, either related or unrelated ; or destitute patients suffering from mental illness which does not require treatment in a mental hospital but who have been certified and placed under guardianship. They are visited quarterly by a medical officer, as are mental defectives. Within the City these visits are carried out by the Department's own staff. Outwith the City, medical practitioners appointed by the Department perform these duties.

Boarded-out mental patients on the roll at 31st December, 1957, numbered 88, a decrease of 5 from the previous year. Of these, 56 are resident outwith the city boundary.

In addition to the cases on the roll patients on probation from mental hospitals, who are without means, are granted an allowance which is recovered from the Regional Hospital Board in whose area the mental hospital from which they were liberated is situated.

EXAMINATION OF MENTAL PATIENTS FOR CERTIFICATION, ETC.

The full-time medical staff of the Mental Services Section of the Department is available within the City area on a 24-hour basis for the examination and, where necessary, the certification of patients referred by general practitioners as being persons of unsound mind. Arrangements for the admission and removal of patients are dealt with by officers of the Regional Hospital Board.

The number of cases seen during the year, classified according to the final decision made, is shown in the table below :—

	Prison		City		Total		Both Sexes
	M.	F.	M.	F.	M.	F.	
Fully Certified	37	15	242	331	279	346	625
Not Certified	3	3	99	103	102	106	208
For Mental Observation ...	—	3	14	15	14	18	32
Withdrawn or Cancelled	—	—	5	8	5	8	13
	<u>40</u>	<u>21</u>	<u>360</u>	<u>457</u>	<u>400</u>	<u>478</u>	<u>878*</u>

* Not included in this figure are 37 cases seen by the medical staff and certified for admission to a Mental Defective Institution.

Of the 878 cases, excluding the 37 cases certified for mental defective institution, 71·2 per cent. required full certification while 3·6 per cent. were found suitable for mental observation wards.

Cases certified in Prison were 8.3 per cent. of the total certified, the figure for 1956 being 12.9 per cent., and for 1955, 12 per cent.

Seventy patients were examined in City hospitals, of whom 53 were certified. Seven were not certifiable. Of the remaining ten, six were admitted for mental observation and one was admitted as a voluntary patient. In three cases no action was taken, for example, where relatives feel able to undertake the care of the patient.

During 1957, of those examined by the medical staff, 48 patients were recommended to mental hospitals as voluntary patients. The corresponding figures for 1955 and 1956 were 24 and 54 respectively.

Of the four medical officers of the Mental Services, two are on a 24-hour duty on alternate weeks. During the year the doctors interviewed at the Department many persons with regard to various matters arising from the certification or otherwise of their relatives and friends. In the course of the year they made 6,488 visits.

SUMMARY OF VISITS MADE BY MEDICAL OFFICERS.

Statutory Visits	3,580
Statutory Revisits	737
Completion of Second Certificates and New Enrolments	111
Certification for Mental Defective Institutions	65
Board of Control—Special Reports	430
Certification of Mental Patients	1,565
	<u>6,488</u>

RESULTS OF MENTAL EXAMINATION OF OLD PERSONS AGED 65 YEARS AND UPWARDS.

	1957	1956	1955	1954
1. All Mental Cases (excluding Prison Cases, 61, and cancelled, 13) ...	804	709	689	669
2. All cases 65 years and over	354	318	330	295
3. Cases 65 years and over Certified ...	259	218	243	205
4. Cases 65 years and over Not Certified	95	100	87	90

The number of persons 65 years and over examined in 1957 and the number certified show a slight increase over the 1956 figures.

The percentage of cases 65 years and over of the total cases and the percentage of cases 65 years and over certified from 1950 to 1957 are shown in the following table :—

				Percentage of Cases 65 years and over of the Total	Percentage of Cases 65 years and over Certified
1950	...	...	...	29.3	56.3
1951	...	...	...	41.3	56.8
1952	...	...	...	44.4	60.8
1953	...	...	...	46.3	63.7
1954	...	...	...	44.0	69.5
1955	...	...	...	48.0	73.6
1956	...	...	...	44.9	68.6
1957				44.0	73.2

AGE GROUPING OF PATIENTS IN THE OLDER AGE GROUPS.

Age Group	Certified		Not Certified		Total Cases Both Sexes
	Male	Female	Male	Female	
65-74 years ...	45	63	21	28	157
75-84 years ...	53	75	19	19	165
85 years and over ...	6	18	2	6	32
	<u>103</u>	<u>156</u>	<u>42</u>	<u>53</u>	<u>354</u>

Seven females, six of whom were certified and one male, certified, were over 90 years of age.

SECTION VIII.

BLIND PERSONS.

During 1957, 734 persons were examined for the first time at the Regional Clinic and 274 were re-examined. Of those examined for the first time 328 (44.7 per cent.) were examined at home.

Of persons examined for the first time 424 or 57.8 per cent. were certified blind and 215 or 29.3 per cent. partially-sighted and of those re-examined 128 or 46.7 per cent. were certified blind and 118 or 43.1 per cent. partially-sighted.

Table A1 gives the age and sex distribution of the 734 persons examined for the first time and A2 of the 274 persons re-examined. The majority are in the later years of life and females considerably outnumber males in both the blind and partially-sighted groups.

TABLE A1.

*Initial Examinations, 1957.**Age and Sex Distribution.*

Age	Certified Blind			Certified Partially Sighted			Not Certified		
	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes
-1	—	—	—	—	—	—	—	—	—
1-4	4	5	9	—	—	—	—	—	—
5-15	6	3	9	2	5	7	2	—	2
16-29	8	6	14	3	2	5	2	1	3
30-39	2	5	7	2	3	5	2	2	4
40-49	13	6	19	4	7	11	2	3	5
50-59	14	25	39	3	15	18	5	5	10
60-69	27	45	72	21	35	56	5	13	18
70+	105	150	255	35	78	113	29	24	53
Totals	179	245	424	70	145	215	47	48	95

TABLE A2.

*Re-examinations, 1957.**Age and Sex Distribution.*

Age	Certified Blind			Certified Partially Sighted			Not Certified		
	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes
-1	—	—	—	—	—	—	—	—	—
1-4	1	3	4	—	—	—	—	—	—
5-15	1	—	1	2	1	3	1	—	1
16-29	7	1	8	1	2	3	1	—	1
30-39	2	1	3	1	2	3	2	—	2
40-49	1	—	1	1	4	5	1	—	1
50-59	6	4	10	5	3	8	2	4	6
60-69	11	20	31	9	20	29	2	5	7
70+	22	48	70	22	45	67	3	7	10
Totals	51	77	128	41	77	118	12	16	28

Of the 734 new cases examined, 281 (38.3 per cent.) resided in Glasgow and 166 (22.6 per cent.) in Lanarkshire. Of the 274 re-examinations 123 (44.9 per cent.) resided in Glasgow and 65 (23.7 per cent.) in Lanarkshire. The allocation among the local authorities of the area of the Joint Committee of applicants examined for the first time in 1957 is shown in Table B.

TABLE B.

*Initial Examinations, 1957.**Local Authority Distribution.*

	Certified Blind			Certified Partially Sighted			Not Certified		
	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes
Glasgow	74	82	156	30	58	88	20	17	37
Airdrie	1	2	3	1	1	2	—	—	—
Coatbridge	4	4	8	1	4	5	2	—	2
Hamilton	4	3	7	1	4	5	1	2	3
Motherwell	6	11	17	—	5	5	—	1	1
Rutherglen	1	1	2	2	3	5	—	1	1
Other Lanarkshire ...	16	42	58	8	22	30	5	7	12
Greenock	2	9	11	—	5	5	1	2	3
Paisley	6	9	15	3	—	3	2	2	4
Port Glasgow	—	2	2	—	1	1	1	1	2
Other Renfrewshire ...	8	14	22	1	4	5	2	3	5
Dumbarton	3	3	6	1	1	2	1	—	1
Clydebank	2	4	6	—	5	5	1	1	2
Other Dunbartonshire ...	9	6	15	5	5	10	—	—	—
Falkirk	2	2	4	3	2	5	1	—	1
Stirling	4	5	9	—	3	3	—	2	2
Other Stirlingshire ...	10	13	23	6	8	14	4	2	6
Ayr	2	2	4	2	3	5	—	3	3
Kilmarnock	3	5	8	1	2	3	—	—	—
Other Ayrshire	14	13	27	3	5	8	4	4	8
Argyll County	6	9	15	1	3	4	2	—	2
Bute County	—	4	4	—	—	—	—	—	—
Dumfries Burgh	2	—	2	1	1	2	—	—	—
Totals	<u>179</u>	<u>245</u>	<u>424</u>	<u>70</u>	<u>145</u>	<u>215</u>	<u>47</u>	<u>48</u>	<u>95</u>

Of persons examined for the first time during the year, more than one half of those certified blind (54.2 per cent.) were examined at home and of those certified partially-sighted about one third (32.1 per cent.).

TABLE C1.

Initial Examinations, 1957.

	At Clinic	At Home	All Cases	Per cent. At Home
Certified Blind	194	230	424	54.2
Certified Partially-Sighted	146	69	215	32.1
Not Certified	66	29	95	30.5
Totals	<u>406</u>	<u>328</u>	<u>734</u>	<u>44.7</u>

Of the 274 persons re-examined during the year, either at their own request or following altered circumstances, there was no change in the classification in 161 (58.8 per cent.) of whom 28 were blind, Table C2. Of the remainder, 15 were found to be no longer blind and 98 who were previously not blind were now found to be blind. Of those found blind 46.0 per cent. were visited at home, and of the others re-examined 35.8 per cent.

TABLE C2.

Re-examinations, 1957.

	At Clinic	At Home	All Cases	Per cent. At Home
1. Blind persons previously certified as blind	17	11	28	39.3
2. Persons previously certified as blind but not now blind	11	4	15	26.7
3. Persons found not blind at the present examination and at the previous examination	84	49	133	36.8
4. Persons now certified as blind who were not blind at the previous examination	51	47	98	48.0
Totals	<u>163</u>	<u>111</u>	<u>274</u>	<u>40.5</u>

The causes of blindness in the 424 examined for the first time in 1957 and found to be blind are given in Table D. Cataract, the most important single cause of blindness, was responsible for 125 cases (29.5 per cent.), and myopia 46, glaucoma 52, arterio-sclerosis 72, diabetes 30, and chronic septicaemia 19 cases; other important causes were responsible for a further 51.7 per cent.

TABLE D.

*Initial Examinations, 1957.**Causes of Blindness.*

<i>Congenital and Undetermined—</i>							
Congenital Anomalies	...	...	...	...	...	...	9
Abiotrophies, etc.	...	...	...	...	...	...	8
Tumour of Globe or Orbit	...	...	...	...	...	...	3
Myopia	...	...	...	...	...	...	46
Other Errors of Refraction	...	...	...	...	...	...	—
Glaucoma, Primary	...	...	...	...	...	...	52
Cataract, Primary	...	...	...	...	...	...	125
Others	...	...	...	...	...	...	1
<i>Infectious and Toxic—</i>							
(a) Exogenous :							
Ophthalmia Neonatorum	...	...	...	...	...	...	1
Infections of Outer Coats of Eye	...	...	...	...	...	...	2
(b) Endogenous :							
Gonorrhoea	...	...	...	...	...	...	—
Syphilis, Congenital	...	...	...	...	...	...	3
Syphilis, Acquired	...	...	...	...	...	...	1
Measles	...	...	...	...	...	...	2
Smallpox	...	...	...	...	...	...	—
Virus Meningitis	...	...	...	...	...	...	—
Herpes Ophthalmicus	...	...	...	...	...	...	1
Bacterial Infections	...	...	...	...	...	...	2
Scarlet Fever	...	...	...	...	...	...	1
Phlyctenular, Strumous, etc.	...	...	...	...	...	...	4
Chronic Septicaemia, etc.	...	...	...	...	...	...	19
Others	...	...	...	...	...	...	1
<i>Traumatic and Chemical—</i>							
Birth Injury	...	...	...	...	...	...	5
Non-industrial Trauma	...	...	...	...	...	...	1
Industrial Trauma—Chemical	...	...	...	...	...	...	1
Metal	...	...	...	...	...	...	1
Sympathetic Ophthalmia	...	...	...	...	...	...	2
Chemico-Toxic	...	...	...	...	...	...	1
<i>Systemic Diseases—</i>							
Pernicious Anaemia	...	...	...	...	...	...	2
Diabetes	...	...	...	...	...	...	30
Essential Hypertension	...	...	...	...	...	...	1
Arterio-Sclerosis	...	...	...	...	...	...	72
Cerebral Arterio-Sclerosis	...	...	...	...	...	...	1
Perivasculitis Retinae	...	...	...	...	...	...	1
Other Vascular Diseases	...	...	...	...	...	...	8
Intracranial Neoplasm	...	...	...	...	...	...	7
Tabes	...	...	...	...	...	...	1
Brain Abscess	...	...	...	...	...	...	1
Other Diseases of Central Nervous System	...	...	...	...	...	...	5
<i>Not classified owing to lack of data</i>	...	...	...	...	...	...	1
<i>Not otherwise classified—</i>							
Retinitis Pigmentosa	...	...	...	...	...	...	2
Total							424

Follow-up Scheme.—This scheme deals with those patients examined by the Regional Clinic and considered by the examining surgeons as likely to benefit from further treatment. With the co-operation of the Mission to the Outdoor Blind, home teachers enquire and report twice yearly as to the treatment and progress of these patients. When operative or other treatment has been completed, the patient is re-examined and any improvement noted. The results of investigation in 1957 by the teachers of 108 cases certified blind are given in Table E.

TABLE E.

Follow-up Scheme of Blind Persons Considered Likely to Benefit from Further Treatment.

1957.

Treatment Recommended	No. of Cases	Treatment Carried Out			Treatment Not Carried Out			
		Still Blind	Now Partially Sighted	Now Sighted	Died	Unwilling	Unfit	Others
Surgical	96	2	7	5	14	25	18	25
Medical	12	8	—	—	1	—	2	1
	—	—	—	—	—	—	—	—
	108	10	7	5	15	25	20	26
	—	—	—	—	—	—	—	—

The group "unwilling" is composed mainly of elderly people who, owing to their advanced age, do not feel inclined to undergo an operation. In the group "others" are included patients who, for medical reasons, are not yet ready for operative procedures.

Early Ascertainment of Defects of Vision.—Testing of the vision of seven-year-olds by means of the Snellen test card has been in operation since February, 1948. D.H.S. Circular No. 43/1957, 12th June, 1957, recognised the difficulty of ascertaining eye defects in young children but as some serious defects are found on examination of seven-year-old children which could have been found and remedied earlier with benefit to a small number, suggested screening tests for children aged 5 or 5+.

Following receipt of this circular a pilot experiment was begun in a number of schools for the testing of vision of five-year-old children (by means of the "E" test). The results of this experiment are not yet available but will be included in the Annual Report of the School Health Service for the year ending 31st July, 1958.

Children with physical defects attending nursery and infant schools are referred to the School Medical Officers who arrange for the examination and appropriate treatment of such children.

Routinely Health Visitors enquire as to and take notice of physical defects and in the case of eye defects as of others refer the child to the family doctor or where attending a child welfare clinic to the Medical Officer of the clinic who refers the child to the family doctor for guidance and the obtaining of expert examination. Children with defects in day nurseries are referred by the matron to the visiting Medical Officer who in turn refers the child to the family doctor.

SECTION IX.

PORT HEALTH AUTHORITY.

The total number of foreign-going and coastwise vessels entering the port during the year amounted to an aggregate of 8,289,386 tons, which shows an increase of 425,962 tons over last year's figures.

This includes the 1,598 vessels of 4,706,952 tons which arrived from foreign ports and the 5,334 vessels of 3,582,434 tons which were operating in the coastal trade, and Irish Free State ports.

The number of overseas vessels arriving direct from infected ports totalled 234, and those arriving in the area via coastwise ports amounted to 560 vessels. A total of 304 foreign-going vessels arrived from non-infected areas.

The provisions of the Public Health (Ships) (Scotland) Regulations, 1952-54, are applied to all vessels arriving within the jurisdiction of this Authority. The initial control is applied by the Port inspectors operating from the Boarding Station at Greenock in conjunction with the Customs and Excise officers, and every effort is made to avoid the unnecessary delay in the normal movement of shipping.

During adverse weather conditions at the anchorage vessels may be granted a "modified pratique" which permits their passage up the river, where they are dealt with by the Port Inspector on duty and the Customs and Excise officials in that area.

TONNAGE OF VESSELS ARRIVING FROM OVERSEAS.

	No. of Ships	Crews	Net Reg. Tonnage
January	119	4,896	374,912
February	127	5,423	350,384
March	142	5,604	287,538
April	125	5,464	387,941
May	137	5,616	361,858
June	129	5,887	427,914
July	120	5,620	418,042
August	135	5,025	376,670
September	140	6,369	454,399
October	145	6,395	461,245
November	142	5,452	416,275
December	137	5,318	389,774
	<u>1,598</u>	<u>67,069</u>	<u>4,706,952</u>

Particulars of arrivals are given in the following table :—

NATIONALITY OF VESSELS ARRIVING DURING 1957.

Nationality	Ships	Crews	Passengers
Argentinian	1	36	—
British	1,018	50,685	899
Brazilian	1	49	—
Belgian	10	171	—
Bulgarian	1	39	—
Costa Rican	7	228	—
Danish	18	371	1
Dutch	145	2,108	8
Finnish	7	186	5
French	2	82	—
German	52	1,136	43
Greek	10	640	—
Honduran	2	—	—
Israeli	1	34	—
Italian	6	202	—
Liberian	33	1,028	—
Norwegian	127	4,169	8
Panamanian	22	687	—
Puerto Rican	1	43	—
Russian	22	880	—
South African	1	—	—
Spanish	11	332	—
Swedish	47	1,573	6
Swiss	3	115	—
United States of America	50	2,275	8
	<u>1,598</u>	<u>67,069</u>	<u>978</u>

NATIONALITY OF SHIPS' CREWS ARRIVING DURING 1957 .

	British	Indian	Chinese	Other Nationalities on British Ships	Total Crews on British Ships	Crews on Other Ships	Overall Total Crews	Passengers on British Ships	Passengers on Other Ships	Total Passengers
January ...	2,537	838	187	46	3,608	1,288	4,896	8	3	11
February ...	3,122	677	116	350	4,265	1,158	5,423	46	1	47
March ...	2,612	704	179	645	4,140	1,464	5,604	17	4	21
April ...	3,250	805	59	371	4,485	979	5,464	39	7	46
May ...	2,897	931	135	243	4,206	1,410	5,616	104	6	110
June ...	3,004	776	248	325	4,353	1,534	5,887	309	3	312
July ...	2,848	—	375	838	4,061	1,559	5,620	63	12	75
August ...	2,749	153	26	770	3,698	1,327	5,025	106	26	132
September ...	3,679	853	281	105	4,918	1,451	6,369	54	14	68
October ...	3,130	927	754	80	4,891	1,504	6,395	89	1	90
November ...	2,841	615	484	124	4,064	1,388	5,452	51	—	51
December ...	2,718	1,005	292	137	4,152	1,166	5,318	13	2	15
TOTAL ...	<u>35,387</u>	<u>8,284</u>	<u>3,136</u>	<u>4,036</u>	<u>50,841</u>	<u>16,228</u>	<u>67,069</u>	<u>899</u>	<u>79</u>	<u>978</u>

NUMBER OF VESSELS FROM FOREIGN PORTS AND IRISH FREE STATE DURING 1957.

Month.	FROM INFECTED PORTS.						FROM NON-INFECTED PORTS. Direct and Coastwise.						FROM FOREIGN PORTS.			From Irish Free State
	Class "A"—Direct.			Class "B"—Coastwise.			Total "A" and "B."			TOTAL.			Ships	Crews	Passengers	
	Ships	Crews	Passengers	Ships	Crews	Passengers	Ships	Crews	Passengers	Ships	Crews	Passengers				
January	12	448	—	47	2,790	—	59	3,238	—	60	1,658	11	119	4,896	11	31
February	21	796	45	43	2,840	1	64	3,636	46	63	1,787	1	127	5,423	47	28
March ...	17	638	4	45	2,885	—	62	3,523	4	80	2,081	17	142	5,604	21	33
April	16	619	7	52	3,205	3	68	3,824	10	57	1,640	36	125	5,464	46	28
May ...	21	790	—	46	2,662	4	67	3,452	4	70	2,164	106	137	5,616	110	25
June ...	20	1,030	12	44	2,796	183	64	3,826	195	65	2,061	117	129	5,887	312	26
July ...	24	1,026	—	39	2,788	—	63	3,814	—	57	1,806	75	120	5,620	75	31
August	22	865	2	39	2,137	—	61	3,002	2	74	2,023	130	135	5,025	132	29
Sept. ...	20	770	5	43	3,193	2	63	3,963	7	77	2,406	61	140	6,369	68	26
October	15	769	4	61	3,500	1	76	4,269	5	69	2,126	85	145	6,395	90	31
Nov. ...	21	788	—	49	2,642	—	70	3,430	—	72	2,022	51	142	5,452	51	30
Dec. ...	25	747	2	52	2,991	—	77	3,738	2	60	1,580	13	137	5,318	15	25
TOTALS	234	9,286	81	560	34,429	194	794	43,715	275	804	23,354	703	1,598	67,069	978	343

PUBLIC HEALTH (SHIPS) (SCOTLAND) REGULATIONS, 1952-1954.
INFECTIOUS DISEASE.

During the year no quarantinable diseases were found on vessels arriving within the jurisdiction of the port of Glasgow. The crews of all vessels arriving from infected areas or ports were kept under surveillance until the incubation periods had expired.

All Asiatic crews, arriving in this country by air from India and other infected areas, within a period of forty-eight hours, are treated in a similar manner, and kept under surveillance during the period of incubation.

Contact with these crews is continued, whether they reside in the Seamen's Boarding House or on board vessels within the dock area until the period prescribed by the Regulations expires.

In the event of the vessels leaving this port to proceed to other areas before the period of surveillance has expired, information is immediately forwarded to the Medical Officer of Health of the area to which the vessel is proceeding. Similar information is forwarded to this Department from other ports in the United Kingdom, if action is necessary by this Department.

In the early part of the year a case of diphtheria was removed to hospital in Glasgow, but the diagnosis was ultimately altered to one of tonsillitis.

Information was received from a West coast port that two cases of chickenpox had been landed from a vessel in their area and that the diagnosis confirmed to condition stated. The vessel arrived in Glasgow a few days later and a further case was removed to hospital by the Duty Port Medical Officer.

On the 19th of April an outbreak of food poisoning in the Indian Seamen's Boarding House at Queen's Dock, in which fifteen men were affected out of a total of eighty-eight, occurred. They suffered diarrhoea of a temporary nature. A full investigation into the conditions employed by the catering staff in the preparation of the meal and other factors relating to the water supply, utensils, crockery, etc., failed to reveal the cause of the outbreak. A medical inspection the following day confirmed that all the members who had been affected had recovered and no further cases had developed.

During the month of March an Asian member of the crew on a vessel in Govan Dry Dock was removed to Ruchill Hospital as a pyrexia of unknown origin which was later altered to one of typhoid fever. A second case removed to hospital a week later was diagnosed as an upper respiratory infection. The third case of sickness from this vessel was diagnosed as one of malaria. Specimens of faeces and urine were taken from sixteen members of the crew on this vessel and were reported as negative for *B.dysenteriae* and *Salmonella* group.

A case of leprosy which was brought to the notice of this department by the Indian Welfare Officer in Glasgow was ultimately transferred to a treatment centre in England.

On the 3rd of July the Port Health Inspectors at the Greenock Boarding Station were instructed to make specific enquiries on all vessels arriving in the area from East of Suez, including coastwise vessels, in regard to the number of cases of influenza which might have occurred during the voyage. The representatives of shipping companies having Asiatic crews on board were also advised to report immediately to the Port Health Office if they received information of influenza cases occurring on their vessels.

During the month of September the death of an Asiatic seaman occurring in the Queen's Dock Hostel was recorded. The cause of death was attributed to influenzal bronchial pneumonia. The port inspector on duty at Queen's Dock was not informed about this case during his daily visits to the Hostel.

From this time on cases of Asian influenza were being found on quite a number of vessels arriving in the port. Some of the vessels arriving reported that there had been cases of influenza on board during the voyage but the patients had recovered.

The number of cases of Asiatic influenza increased towards the end of the year and the port staff were making frequent visits arranging the disinfection of the accommodation, washing of the infected materials, etc.

Information in regard to a suspected case of typhoid on a vessel in an Irish port was forwarded to this Department stating that all possible steps were taken to deal with this case and full investigation had failed to confirm the diagnosis. Serological and blood cultures did not reveal any evidence of enteric fever. The vessel was visited on arrival at Glasgow but no further cases had been reported during the voyage.

CASES OF ILLNESS REPORTED ON VESSELS ON ARRIVAL AT GLASGOW.

Disease	Hospital	Home	Clinic	On board	Died	Total
Pneumonia	29	—	—	—	—	29
Pyrexia of Unknown Origin	2	—	—	—	—	2
Food Poisoning (including Salmonella)	11	—	—	—	—	11
T.B. Meningitis	1	—	—	—	—	1
Tuberculosis	3	—	—	—	—	3
T.B. Haemoptysis	1	—	—	—	—	1
Influenza	8	—	—	—	—	8
Chickenpox	1	1	—	—	—	2
Bronchitis	3	—	—	—	—	3
Malaria	3	—	—	—	—	3
Measles	1	—	—	1	—	2
Typhoid	1	—	—	—	—	1
Others	24	—	—	1	—	25
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	88	1	—	2	—	91
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

SAMPLES OF DRINKING WATER.

During the year it was necessary to investigate and test the drinking-water supplies on a number of vessels entering the port. In most cases this was due to complaints made by members of the crews on these vessels in regard to the taste or colour of the water.

Vessel No. 1. The results of the bacteriological examination of the samples of water from this vessel were highly satisfactory and the chemical analysis of the samples of water were declared as suitable for dietetic purposes.

Vessel No. 2. The results of the bacteriological examination of the sample of water taken from the aft peak tank were reported as satisfactory but the water taken from the pump of the aft peak tank showed bacterial counts which were rather high although typical *B.coli* and faecal streptococci were not isolated from 100 ml.

The results of the chemical analysis of the domestic water on this vessel were reported as suitable for dietetic purposes.

Vessel No. 3. The sampling of domestic water on this vessel was carried out as the result of information received from another Port Health Authority. The chemical analysis of the water supply was declared as suitable for human consumption. A second group of water samples taken from this vessel was declared suitable for dietetic purposes provided that bacteriological examination of the water was also satisfactory. The results of the bacteriological samples are recorded in the following tables.

Vessel No. 4. Complaints by members of the crew on this vessel were investigated and samples were taken for chemical and bacteriological examination. The chemical analysis report indicated that although the water was declared suitable for dietetic purposes the presence of 1.3 p.p.m. of iron was objectionable and that the water had an unsightly appearance. The composition of the water was substantially different from that of the Glasgow mains water. The results of the bacteriological examination are recorded in the tables on pages 206 and 207.

Vessel No. 5. A complaint by members of the crew on this vessel in regard to an unpleasant taste of the drinking water lead to an investigation by the Department. The analysis of the sample revealed a slight deposit of iron hydroxide and that the water had an unpleasant taste. Although the water was declared as suitable for human consumption the presence of iron hydroxide in suspension and 0.3 p.p.m. of iron in solution gave rise to an unpleasant taste which justified the complaint. Without specific information in regard to the source of this water supply it is not possible to state whether the high chloride content was normal or if there had been slight contamination with sea water.

The bacteriological examination of this water supply was satisfactory.

Vessel No. 6. Samples of water were obtained from the domestic water supply system on this vessel for chemical and bacteriological examination after the domestic tanks had been cleaned, cement-washed, flushed out and refilled.

The domestic water supply on all vessels arriving within the Port of Glasgow is a matter which is investigated.

The following tables record the results of the bacteriological and chemical examination of samples of drinking water taken from these vessels.

BACTERIOLOGICAL EXAMINATION OF SAMPLES OF DRINKING WATER.

Vessel	Source	Bacterial Count pr. ml. on Agar at		Faecal B. Coli		Faecal Strept. Absent from	Cl. welchii in 100 ml.	Remarks
		37° C.	22° C.	Absent from	Present in			
No. 1	Tap in Engineers' quarters from Starboard Tank.	2	1	100 ml.	—	100 ml.	—	Very good.
No. 2	Pump of After Peak Tank.	44	172	100 ml.	—	100 ml.	—	Satisfactory.
	Pump of After Peak Tank. (After repairs)	560	approx. 1,550	100 ml.	—	100 ml.	—	Bacterial count rather high.
No. 3	Tap at No. 6 Double Bottom Tank.	approx. 4,000	approx. 1,300	—	0	1 ml. (Present in 5 ml.)	—	Coliforms present 8 in 100 ml.
	Tap at No. 7 Double Bottom Tank.	approx. 2,600	approx. 1,700	—	0	1 ml. (Present in 5 ml.)	—	Coliforms present 5 in 100 ml.
	Pantry Tap from Forepeak Tank.	approx. 1,800	approx. 1,200	—	0	5 ml. (Present in 10 ml.)	—	Coliforms present 17 in 100 ml.
	Crew's Messroom from Fore- peak Tank.	approx. 1,700	approx. 1,000	—	0	1 ml. (Present in 5 ml.)	—	Coliforms present 14 in 100 ml.
	Galley Tap...	approx. 1,800	approx. 1,200	—	0	0.5 ml. (Present in 1 ml.)	—	Coliforms present 3 in 100 ml.
	Pantry Tap	approx. 1,060	approx. 1,210	—	0	1 ml. (Present in 5 ml.)	—	Coliforms present 4 in 100 ml.
	Tap in Crew's Messroom.	approx. 950	approx. 1,070	—	0	50 ml. (Present in 100 ml.)	—	Coliforms present 4 in 100 ml.

BACTERIOLOGICAL EXAMINATION OF SAMPLES OF DRINKING WATER—Continued.

Vessel	Source	Bacterial Count per ml. on Agar at		Faecal B. Coli		Faecal Strept. Absent from	Cl. welchii in 100 ml.	Remarks
		37° C.	22° C.	Absent from	Present in			
No. 4	Galley Tap...	approx. 1,060	approx. 1,190	—	2 ml.	10 ml. (Present in 50 ml.)	—	Coliforms present 6 in 100 ml.
	Pantry Tap No. 7 Tank ...	approx. 7,600	approx. 970	—	0	1 ml. (Present in 5 ml.)	—	Coliforms present 1 in 100 ml.
	Crew's Messroom No. 7 Tank.	approx. 3,800	approx. 1,550	—	0	5 ml. (Present in 10 ml.)	—	Coliforms present 1 in 100 ml.
	Galley Tap No. 7 Tank ...	approx. 3,400	approx. 2,560	—	0	5 ml. (Present in 10 ml.)	—	Coliforms present 1 in 100 ml.
No. 5	Refrigerator Tap ...	1,060	2,379	100 ml.	—	100 ml.	Absent	No pathogens isolated.
	Tap in Galley Midships ...	1,045	1,708	100 ml.	—	100 ml.	Absent	No pathogens isolated.
	Tap in Greasers' Bathroom.	1,088	1,555	100 ml.	—	100 ml.	Absent	No pathogens isolated.
	Pump at No. 2 Starboard Tank.	352	154	100 ml.	—	100 ml.	—	
No. 6	Tap in Hospital—No. 2 Starboard Tank.	200	142	100 ml.	—	100 ml.	—	
	Tap in Crew's Washroom Aft.	578	2,379	100 ml.	—	100 ml.	Absent	No pathogens isolated.
No. 6	Sounding pipe—Port Tank.	2	2	100 ml.	—	100 ml.	—	Satisfactory.
	Sounding pipe—Starboard Tank.	approx. 50,000	approx. 1,770	100 ml.	—	100 ml.	—	High bacterial count.

CHEMICAL EXAMINATION OF SAMPLES OF DRINKING WATER.

VESSEL	SOURCE	Free and Saline Nitrogen.	Albuminoid Nitrogen.	Oxygen absorbed from permanganate in 15 mins. at 27°C.	Oxygen absorbed in 4 hours at 27°C. from permanganate	Chlorides (as Chlorine).	Nitrates (as Nitrogen)	Nitrites (as Nitrogen).	Solids.			Hardness.		pH Value.	Colour (Hazen Units).	Free Chlorine.	Chloramines.	Iron (in solution).	REMARKS
									Mineral Solids.	Organic Solids.	Calcium	Magnesium							
No. 1	Tap in Engineers' quarters Starboard Tank ..	0.054	0.049	0.23	0.49	25	0.11	0.08	170	100	195	5	9.8	5	NII	NII	NII	NII	Suitable for dietetic purposes.
No. 2	Pump of Aft. Peak Tank	0.010	0.009	0.28	0.46	15	0.2	NII	42	27	30	9	9.6	13	NII	NII	NII	NII	Suitable for dietetic purposes.
	Pump of Aft. Peak Tank (after repairs) ..	0.024	0.118	0.68	0.90	11	0.15	0.004	40	26	27	9	10.4	15	NII	NII	NII	NII	Suitable for dietetic purposes.
No. 3	No. 6 Double Bottom Tank	0.015	0.025	0.76	1.40	11	0.06	NII	48	22	23	6	7.3	18	—	—	—	—	Suitable for dietetic purposes.
	No. 7 Double Bottom Tank	0.015	0.035	0.72	1.26	12	0.10	NII	77	13	35	8	7.3	14	—	—	—	—	Suitable for dietetic purposes.
No. 4	Fridge Tap (40 gallon storage tank No. 2 Port)	0.003	0.048	0.38	0.70	28	0.75	NII	159	23	96	17	8.7	8	—	—	—	—	Suitable for dietetic purposes.
	Tap in hospital No. 2 Starboard Tank ..	0.002	0.074	5.76	6.40	14	0.12	NII	79	29	42	23	7.8	13	NII	NII	1.3	1.3	Suitable for dietetic purposes. Iron may be objectionable.
No. 5	Tap in Crew's washroom Aft.	0.010	0.074	0.57	1.30	200	2.50	0.003	—	—	—	—	8.3	—	NII	NII	0.3	0.3	Iron hydroxide present.
No. 6	Galley Tap	0.010	0.065	0.73	1.22	8	0.22	NII	34	18	20	4	6.3	15	—	—	—	—	Satisfactory.

IMMUNISATION AGAINST YELLOW FEVER.

During the year the Port Medical staff provided 1,890 seamen with immunisation against Yellow Fever. These men were members of the crews on vessels which were calling at ports within the Yellow Fever Zones.

DANGEROUS DRUGS REGULATIONS, 1953.

During the year twelve certificates were issued under the above Regulations to the masters of foreign vessels in the port to enable them to complete the necessary medical supplies on their vessels. These certificates are retained by the supplier for record purposes.

ALIENS ACT, 1953.

There was an increase in the number of vessels carrying alien passengers and also in the number of aliens landed at the port in 1957, 53 vessels with 153 passengers as against 51 vessels with 134 passengers in 1956.

The following table shows the number and nationality of aliens arriving at the Port :—

Danish	4
Dutch	16
Finnish	1
German	11
Israeli	4
Italian	2
Norwegian	14
U.S.A.	101

Close co-operation was maintained with H.M. Immigration Officers in the examination of these persons and there were no rejections on medical grounds.

COMMON LODGING HOUSES.

The Seamen's Hostel in Queen's Dock which is reserved for the use of Indian and Pakistani seamen is kept under observation by the Inspector in that area. The men concerned are members of the crews from a number of different shipping companies and often include a number of seamen who have newly arrived by air from India. Others may be awaiting repatriation to India or Pakistan.

HYGIENE IN CREW ACCOMMODATION, ETC.

The routine inspection and re-inspection of all vessels arriving within the area is carried out by the inspectors in their respective districts. The main purpose is to see that the conditions on board the vessels are satisfactory and that the health and welfare of the members of the crew is in no way impaired by lack of hygienic conditions.

Where defects or disrepair, or other factors which may affect the health of the members of the crew are discovered, the matter is drawn to the attention of the Master or other responsible person on board by means of an intimation issued in terms of Section 19 of the Public Health (Scotland) Act, 1897. When the defects cannot be remedied at this port, because the time factor does not permit it, information is sent to the next port of call in the United Kingdom, so that the repairs may be completed at that port under the supervision of the Port Health Authorities concerned.

During the year a total of nine intimations was issued under the Public Health (Scotland) Act, 1897, to masters of vessels within the dock area, and 247 verbal warnings were given to the ships' officers in respect of defects and nuisances which were discovered during the inspection. Seventy-eight verbal warnings were given in regard to the fouling of the quayside by discharges from the ships.

A total of 1,802 initial visits and 486 revisits were made by the inspectors during the year. Four intimations in terms of Section 19 of the Public Health (Scotland) Act, 1897, were sent to the Clyde Navigation Trustees and one verbal intimation was issued in respect of nuisances arising within their area. Inspection of the various premises within the dock area included 66 revisits under the Factories Act, 37 in respect of Clyde Navigation Trustees premises, 68 in regard to canteens within the dock area, 164 in regard to sanitary conveniences, and 21 in the supervision of new or alteration of drainage work within the dock area.

The replacement of the older type of vessel by the more up-to-date type has led to a great advance and improvement in living conditions on board, and in most cases the nuisances which are reported are confined to the older types of vessels.

The following tables indicate the type of defect reported on vessels and the number and nationality of the vessels on which they were located.

	Coasters	Foreign Arrivals	Total
<i>Functional Neglect—Accommodation—</i>			
Paintwork dirty	—	—	—
Floors and Woodwork dirty	—	8	8
Tables and Benches dirty	—	9	9
Alleyways dirty	—	1	1
Food Lockers dirty	3	25	28
Verminous condition	3	62	65
Galleys dirty	1	3	4
Scuppers choked	4	32	36
Accumulation of rubbish	4	23	27
Beds and Bedding dirty	1	7	8
	16	170	186
<i>Wash Places and Water Closet Compartments—</i>			
Troughs of W.C. Basins foul or choked ...	4	11	15
Floors or Woodwork dirty	—	2	2
Paintwork dirty	—	—	—
Scuppers choked	1	22	23
Flushing apparatus defective	—	6	6
Wash Basins dirty or choked	1	14	15
	6	55	61
<i>General Neglect—</i>			
Drinking Water Tanks	—	3	3
Accumulation of Garbage	—	26	26
Bilges to Cleanse	—	—	—
Gear in Sleeping Compartments	—	—	—
	—	29	29
<i>Structural Defects—</i>			
Storm Damage	—	1	1
Port or Deadlights leaking	—	9	9
Deckheads leaking	—	—	—
Heating apparatus defective	—	6	6
Hawse pipes leaking	—	—	—
Floors broken	—	1	1
Condensation	—	—	—
Lighting defective	—	—	—
Ventilation defective	—	—	—
Food Locker Doors broken	—	12	12
Bulkheads defective	—	—	—
Steampipes leaking	—	1	1
	—	30	30
<i>Wash Places and Water Closet Compartments—</i>			
Seats broken or missing	—	11	11
Doors broken or defective	—	4	4
W.C. Basins broken	—	—	—
Lighting defective	—	—	—
Ventilation defective	—	—	—
Wash Basins broken	—	—	—
Soil pipes and Storm Valves defective ...	—	2	2
Floors broken	—	—	—
	—	17	17

NUMBER AND NATIONALITY OF VESSELS ON WHICH
DEFECTS WERE DISCOVERED.

	Defective
British	201
Argentinian	1
Norwegian	5
Liberian	10
Panamanian	1
Spanish	2
German	3
Costa Rican	3
Swedish	3
Danish	3
Dutch	2
German	3
Total	237
Coasters—British	23
Totals	260

RAT DESTRUCTION.

The total number of rats destroyed during the year was 430. Out of this total 205 rats were destroyed on foreign-going vessels as the result of fumigation in which HCN gas was employed and 87 as the result of trapping operations carried out by the searchers. There were 712 mice recovered from vessels which had been fumigated by HCN gas.

One hundred and thirty-eight rats were trapped by the searchers in cargo sheds and other premises within the dock area.

In both fields, on vessels and on shore premises, there has been a marked reduction in the numbers of rats destroyed during the year. The contrast can be seen in the following figures—in 1953 1,795 rats were destroyed, in 1956 the figure had dropped to 737 compared with the present number of 430 rats.

The rat searchers made 1,834 visits to vessels within the port area and the outlying districts in the Clyde area during the year, and 2,800 visits to premises within the dock area. Evidence was recorded on 230 occasions and 138 rats were recovered during the operations.

One hundred and seven specimens of rats were submitted to the City Bacteriologist for examination of bacillus pestis. Forty-seven of the rats were from ships and sixty from shore premises. Negative results were reported in each case.

The following tables show details of the number of rats destroyed on board vessels, and also in the quayside sheds and other premises within the dock area.

PARTICULARS OF THE RATS DESTROYED DURING THE YEAR
ARE GIVEN IN THE FOLLOWING TABLES.

ON BOARD FOREIGN-GOING VESSELS.

Method of Destruction	Infected Ports				Non-Infected Ports				Total
	R. Rattus		R. Norvegicus		R. Rattus		R. Norvegicus		
	M.	F.	M.	F.	M.	F.	M.	F.	
HCN. ...	133	67	—	—	3	2	—	—	205
SO ₂ ...	—	—	—	—	—	—	—	—	—
Trapping ...	36	38	—	1	5	7	—	—	87
	169	105	—	1	8	9	—	—	292

In addition, 712 mice were recovered from vessels which were fumigated.

CARGO SHEDS AND OTHER PREMISES.

R. Rattus		R. Norvegicus		Total
M.	F.	M.	F.	
40	41	28	29	138

INTERNATIONAL DERATTING AND DERATTING EXEMPTION CERTIFICATES.

The total number of certificates issued during the year was 474 which is in excess of last year's figure of 465 certificates. This total includes the fumigation of 23 vessels which had been subjected to Hydrogen Cyanide gas at the rate of 2 ounces per thousand cubic feet and one in which the vessel was subjected to trapping operations by the port searchers. The remaining 448 Exemption Certificates were issued to vessels which had been searched and reported as clear of rodent infestation.

Vessels arriving at the ship-breaker's yard were searched on arrival but deratting operations were not necessary as no evidence of rodent infestation was found.

PREVENTION OF DAMAGE BY PESTS ACT AND APPLICATION TO SHIPPING
ORDER.

Rodent control certificates were issued to 78 vessels during the year. In this field there has been a marked absence of rodent infestation on coastal vessels, owing to the routine methods employed in laying poison baits whenever necessary.

There is one aspect in the control of rodent infestation on vessels which I feel should receive some consideration. This is the difficulty which arises in the examination of vessels coming coastwise from other ports, where poison baits have been used while the vessel was in that port. No information is forwarded in regard to the number of rodents recovered, and quite often the time schedule for the vessel while it is in this port is so short that it is difficult to estimate the real facts in regard to the degree of rodent infestation on the vessel before a Certificate can be issued.

I feel that the only satisfactory solution to this problem is that advanced information should be sent to the final port of call where instructions could be issued to the Shipping Company concerned, to the effect that fumigation of the vessel was necessary to obtain a certificate. This would enable action to take place at an early date and shipping companies to make arrangements in advance.

RAGS, HAIR, HIDES AND BONES.

The following table shows the amount of imported rags, hair, hides and bones and the country of origin :—

Country of Origin	Rags		Hair (Various)		Hides (Various)		Bones	
	No. of Ships	No. of Bundles	No. of Ships	No. of Bundles	No. of Ships	No. of Bundles	No. of Ships	No. of Bundles
Africa...	—	—	2	28	16	651	9	6,227
Australia ...	1	21	1	29	27	5,725	—	—
Belgium ...	1	26	—	—	—	—	1	44
Canada ...	—	—	2	606	—	—	—	—
Europe ...	22	2,419	11	108	16	1,930	1	110
France ...	—	—	—	—	2	810	—	—
India ...	—	—	—	—	12	2,232	32	29,686
Israel ...	—	—	—	—	—	—	1	594
Italy ...	—	—	—	—	2	253	—	—
Japan ...	1	4	—	—	8	6,129	—	—
New Zealand...	—	—	—	—	6	678	—	—
Portugal ...	—	—	—	—	—	—	1	500
Sweden ...	8	982	—	—	—	—	—	—
South America	—	—	3	117	1	34	7	73,335
U.S.A. ...	—	—	—	—	5	2,861	1	1,019

ANTHRAX.

Three specimens of goatskins from thirteen African consignments were submitted to the City Bacteriologist and reported negative for B.anthraxis. Six specimens of pigskins from eight Japanese consignments were submitted to the City Bacteriologist and reported negative for B.anthraxis. One specimen of hog hair from two South American consignments was submitted to the City Bacteriologist and reported negative for B.anthraxis.

PUBLIC HEALTH (IMPORTED FOOD) REGULATIONS (SCOTLAND) 1937-48.

During the year a total of 631,491 tons of foodstuffs was landed at the port, 593,753 tons from vessels arriving from overseas ports and 37,738 tons from vessels operating on the coastwise services. Compared with the corresponding figures for last year the total amount of food products imported shows a decrease to the extent of 20,483 tons, including the excess amount of cargo carried by the coastal vessels which amounted to 4,149 tons.

Some of the factors causing the variation in the importation of food products may be attributed to seasonal factors, especially in regard to grain cargoes which show a fall in the tonnage of maize, flour, and wheat to the extent of 64,000 tons. On the other hand there has been a marked increase in the importation of barley and corn to the extent of 63,000 tons.

All food products landed within the jurisdiction of this authority are dealt with under the above regulations and bacteriological or analytical samples are submitted for examination should the condition of the product require investigation.

Food products which have been examined and declared unfit for human consumption are disposed of under the supervision of the port inspectors. These products, in many instances, are removed to the Cleansing Department incinerators.

In other instances the condemned food products may be released for use as animal feeding stuffs, or for technical purposes only. In these cases the condemned products are not released until a written undertaking has been received from the purchaser to that effect. Where the purchaser resides outwith the city boundary information is forwarded to the responsible officer in that area for his consideration and acceptance or rejection of the product involved.

In general, fruit and vegetable cargoes form a major part of the quantity of foodstuffs condemned during the year.

Consignments of apples, etc., transported under refrigerated conditions, are usually found satisfactory on arrival at this port, but a thorough examination is necessary to see that no breakdown has occurred in the refrigerator machinery during the voyage. If this occurs

for an indefinite period the outward appearance of the fruit could appear normal but an incision of the fruit, vertically or horizontally, would reveal its real condition.

The canned goods imported during the year have been reported in general as satisfactory, although a fair amount of damage was found in consignments of canned soups, tomato juice and paste, canned fruits, and casks of ginger, etc.

A part consignment of lard weighing over four tons which had been damaged during transit was released for use in technical purposes only, and a part shipment of damaged canned fruits weighing two tons was removed to the Cleansing Department's destructor.

The other problems dealt with during the year included the reconditioning of damaged butter, cheese, dried fruit, tea, desiccated coconut, lard, wet ginger, etc.

It is not always possible to complete the examination of consignments of imported foodstuffs in any one year, and invariably it is necessary to carry it over into the following year's report. In this particular instance consignments of pepper which had been landed from two vessels last year are being dealt with in this year's report. All the bags of pepper which were sound were released for normal distribution, but those bags of pepper which had suffered damage by water were detained for examination.

A meeting was held with the principal importers and various methods of treatment were considered in regard to the reconditioning of the pepper. Tests were carried out by subjecting the damaged bags to a concentration of ethylene oxide for a period of four days. The bacteriological reports on the examination of initial samples taken from three wet damaged bags revealed average bacterial counts at 37° C. ranging from 26,000 to 28,800 and Faecal B.Coli was present.

The samples taken from four bags of pepper, after the four day treatment with ethylene oxide, showed an average bacterial count of 1,000,000 at 37° C. ; coliforms were present in a range from 1/1,000 gram to 1/10 of a gram at 37° C. and absent in 1/1,000 to 1/100 gram. Typical B.Coli was not found and no pathogens were isolated in any of the samples.

Further examination of new importations of undamaged pepper were examined to obtain a general background of this product. In the first of these consignments the average bacterial count at 37° C. was 28,000 per gram with coliforms present in 1/100 gram. Typical B.Coli was not found. In the second consignment the average bacterial count in samples taken from undamaged and unground pepper revealed the average bacterial count at 37° C. as ranging from 42,000 to 33,000,000 per gram.

The highest average bacterial count at 37° C. in the wet damaged bags of pepper was over 200 million; Faecal B. Col. was present in 1/10,000 gram but Typical B.Coli was not found. Moulds were grown from all samples, both wet damaged and dry damaged bags.

The importers were informed that the reconditioning of this product was their responsibility and that it would not be released for distribution until it had been rendered fit for human consumption. They were further advised, that, in their own interest they should contact representatives at the source of production and ascertain the methods employed in the plucking, drying, and bagging of this commodity.

The mixing of one bag of wet pepper with five bags of dry pepper by one of the importers did not help matters, but further investigation in this field is being continued.

A sample of pepper purchased in Glasgow was submitted for bacteriological examination. The average bacterial count per gram at 37° C. was 1,000,000. Faecal B.Coli was present in 1/1,000 gram and absent from 1/10,000 gram. Cl. welchii was present and moulds were grown.

The analytical report on samples of pepper taken from these damaged bags records that microscopical examination revealed no evidence of the presence of moulds, mould spores or other extraneous matter.

The labelling of canned foods, imported from overseas areas, was again taken up with importers, and their attention was drawn to a contravention of the Labelling of Food Order (Circular MF/3/54) in connection with a consignment of canned soup. The contents of the tins were satisfactory but the description on the label was considered misleading to the purchaser. The question of relabelling was discussed with the importers, who stated that this would be a costly business.

They stated that this identical product was being landed in large quantities at other ports in Great Britain without any restriction being imposed.

This consignment was released from the dock area for detention in a store in the City, where it was ultimately placed under the supervision of the Food and Drugs section of the Department for further investigation.

Particular attention is being given to importations of canned goods coming in from Northern Ireland, where consignments are being labelled in a manner which leads to a presumption that the article was manufactured in Scotland. Further investigations are being continued in regard to shipments of canned salmon from the same area in which this product is presumably being prepared and packed. There is no statement on the label to indicate that the product is an imported article.

Importation of canned goods which are unlabelled on arrival are detained for investigation and only released when the evidence produced justifies that action.

THE PUBLIC HEALTH (PRESERVATIVES, ETC., IN FOOD) REGULATIONS (SCOTLAND), 1925-53.

Importations of fruit juice and fruit pulp were subjected to examination at the time of importation to ascertain the amount of preservative present in the product. The result of the examination of nine consignments revealed the presence of sulphite preservative in five instances ranging from 156 parts per million to 1920 parts per million in excess of the standard laid down by the regulations. Each importer was informed in accordance with the regulations and written undertakings were received declaring that the sulphite preservative would be reduced during processing to conform to the standard laid down by the regulations for the final products.

In addition to this, four samples of mixed peel from one consignment revealed an excess of preservative ranging from 79 parts per million to 112 parts per million in excess of the 100 p.p.m. permitted by the above regulations. This matter was brought to the attention of the importer and arrangements were made to release the consignment for use in a specified cake bakery, where the heat process would be sufficient to dispose of the excess preservative. An undertaking by the baking firm concerned was obtained, and inspections were made to see that this action was being carried out.

" OFFICIAL CERTIFICATES "

During the year a number of consignments of meat products were landed in the area, which included thirty-one samples of lard from the U.S.A., Canada, South America and France.

A consignment of lard from South America was detained at the quayside due to the absence of the " official certificate ". Further investigation revealed the presence of the certificates inside the drums of lard. The consignment was released for normal distribution and the importers were advised to contact their representative overseas to notify the firms concerned that the " official certificates " must be affixed to the outside of the container if detention of future consignments is to be avoided.

The consignment of meat products and lard from the U.S.A. and Canada were accompanied by the " official certificate " and were released following an examination of the product.

Consignments of lard arriving from France have, however, again been detained by reason of the absence of the " official certificates ". This information was immediately placed before the local representative who notified his head office in London.

In the course of the examination of this consignment, exception was taken in regard to the unsatisfactory condition of the containers, which had been despatched by the local firm in Scotland. One of the samples of lard submitted for bacteriological examination revealed a bacterial count, at 37° C., as 1,032,000, with Typical B.Coli present in 1/1,000 gram. The counts in two other samples at 37° C. were 200 and 750 and no coliforms were isolated.

Samples of lard were also submitted for analytical examination which revealed that two samples which were semi-liquid and yellow in colour contained suspended matter. The analysis also shows that the lard contained starchy matter and a high proportion of iron and was therefore unsuitable for sale.

Direct contact with the principal importers in London failed to produce a satisfactory solution to this problem. They reiterated their statement in regard to the product coming from one " station " in France, but ultimately agreed that it had been dispatched from three different stations.

The firm in London was informed of the conditions laid down by the regulations and advised to notify their representative in France with a view to preventing a delay in the examination of future consignments of lard.

The full consignment was ultimately released from the dock area for delivery to a firm in Paisley with the consent of a representative of the Public Health Department in that area for the purpose of having the whole consignment refined.

Samples taken by the Public Health Authority concerned, after the consignment had been treated, were reported as satisfactory.

The three bacteriological specimens submitted for examination after the treatment had been carried out were reported as sterile and the percentage of free fatty acids in the three samples submitted for analytical examination were reported as 0·17 per cent., 0·14 per cent., and 0·20 per cent. Starch was not found in any of these samples and iron, in parts per million, was absent.

This product was ultimately released by the Public Health Department Inspector in that area for normal distribution.

As the result of these enquiries, evidence was produced in the form of a declaration by the Veterinary Surgeon at the establishment involved, stating that the products in question had been derived from pigs which had been examined before and after slaughter and had been declared as suitable for human consumption.

The facts of this case were submitted to the Secretary of the Department of Health, Edinburgh, for discussion with the French authorities concerned.

EGG PRODUCTS.

A great deal of the inspectors' time is devoted to the examination of these products during the year and as these importations are seasonal, it is quite often necessary to carry forward a balance of a consignment from one year into the next.

As the result of the extensive investigations which have been carried out during the past few years, and the experience so gained, it has been possible to modify the restrictions which were originally imposed.

Every effort has been made to speed up the release of consignments by adopting new methods, where possible, but difficulties do arise in regard to the actual number of tins in the individual batches, the number of tins involved, and other factors outwith our control. These are matters which are receiving attention.

The total amount of frozen whole egg products, imported from Australia, dealt with during the year amounted to 669 tons, from eight separate importations, which consisted of 49,409 tins in total.

The balance carried over from the previous years included two tins of frozen whole egg which contained *Salmonella* organisms. The contents of these tins were destroyed at the request of the importers and the Detention Certificates withdrawn. A further group of 144 tins was detained owing to the presence of *Salmonella* organisms, but the balance of 4,856 tins, in which the batches had been tested and reported negative for *Salmonella* organisms, was released for normal distribution.

The packing stations from which samples containing *Salmonellae* organisms have been isolated during the year were Nos. 500, 900, 248 and 476. Samples obtained from batches of frozen whole egg have, so far, continued to be satisfactory and the products are released for normal distribution.

A total of 52 samples was found to contain *Salmonella* organisms out of the total of 2,389 specimens submitted for bacteriological examination during the year.

With a view to speeding up the release of these products a meeting with the importers' representatives was arranged, and the methods of sampling were discussed and the whole field of operations and problems involved were reviewed.

One main difficulty at this period was the need for the limitation in the numbers of samples for bacteriological examination, as the Bacteriological Laboratory was then heavily engaged in dealing with outbreaks of food poisoning.

It was finally agreed to reduce the degree of sampling from 5 per cent. to 3 per cent. in regard to new shipments, except in batches from stations which were previously recorded as infected.

Numerous enquiries were made regarding the best type of apparatus to use to speed up the sampling methods. It was finally decided that the tins of frozen egg should be left outside the cold chambers overnight to enable the inspectors to obtain samples without the use of the brace and sterile bit which had been employed in the earlier stages of sampling.

A further improvement was the introduction of the method of bulk testing. Each sample was placed in an individual jar, which was labelled with the name of the vessel and batch number. The bulking of these samples was carried out in the laboratory.

The rate of sampling was increased to 75 samples per week for egg from previously infected stations and one hundred and eighty samples from non-infected stations. The result of this alteration in the method of sampling provided an opening for an immediate release of a considerable number of tins, followed by a regular weekly release of frozen whole egg products for normal distribution to the trade.

In the earlier stages of the examination of these products in previous years the tins were released for pasteurisation and high temperatures baking purposes only, but as a result of these changes adequate samples from all batches have been examined and reported as satisfactory and consignments are now released for normal distribution.

Consignments containing positive tins are being released for high temperature baking and pasteurisation in areas south of the border when the Medical Officer of Health for the area has agreed to that arrangement.

In dealing with importations of hen egg albumen crystals from China, the problem has been simplified to a considerable extent by the experience obtained during the extensive investigations and experiments carried out on the initial importations.

All importations of hen egg albumen crystals are subjected to heat-treatment, particular attention being given to the sampling of the first two batches submitted for heat-treatment. The percentage of samples taken ranged from 25 per cent. pre-treatment to 100 per cent. post heat-treatment, but this was reduced at a later stage to 25 per cent. post heat-treatment in view of the efficiency of the process.

During one period of heat-treatment, the ink recording unit failed to function properly and the recording indicator itself was still showing a reading of 128° F. Samples taken from this batch after heat-treatment had been carried out were reported as satisfactory.

The omission on the part of the operator of the heat-treatment chamber to turn on the heat in the chamber after he had made a check on the number marks and the position of the tins in the chamber caused a time lag of twenty-eight hours in the normal period of heat-treatment. The temperature recordings in the centre of the tins, when the chamber was re-entered on the Monday, varied from 112° F. to 124° F., and the temperature in the chamber itself was recording at 112° F. To counteract this the tins were kept in the chamber for a further two days and the rate of sampling was increased to 75 per cent. The bacteriological report indicated that all the samples submitted for examination were negative for Salmonellae organisms. In view of this report the rate of sampling was again reduced to twenty-five per cent.

A drop in the demand for this product during the year led to an easing of the situation, while similar products were being brought into the city for treatment from other areas in the country. As the result of these measures some of the consignments landed at the port will have to be carried over into the coming year. Four-hundred and ninety-two tins have been dealt with during the year which leaves a balance of three hundred and fifteen tins still to be subjected to heat-treatment.

The other egg products imported during the year consisted of two consignments of glycerinated hen egg yolk from China. Samples taken from both these consignments submitted for bacteriological examination were negative for Salmonellae organisms and were released for distribution.

The following extracts give a brief outline of the consignments and egg products dealt with by the inspectors during the year. The examination of consignments of imported food is an important part of the inspectors' duties and a considerable amount of time is devoted to this particular aspect of the work.

Co-operation and understanding with the importers, surveyors, stevedores and other people concerned is essential to the interests of all parties.

AUSTRALIAN FROZEN WHOLE EGG DEALT WITH DURING 1957.

Date of Importation	Vessel	Consign-ment		Bact. Samples		Released for Normal Distribution		Total Tins	Detained INFECTED BATCHES		Tins Remaining in Inf. Batches and Released Cond.
		Pos.	6,053	1	306	307	6,023		30	Tins in which S/ella Organisms were Isolated	
1957	2/1 S.S. "Clan MacDougall"	6,053	1	306	307	6,023	30	1 Past. and High temp. baking	29	Past. and High temp. baking	601
	18/1 S.S. "Jason"	5,234	15	247	262	4,618	616	15 Do.	601	Do.	Do.
	18/2 S.S. "Clan MacDonald"	5,000	5	221	226	4,700	300	5 Do.	295	Do.	Do.
	18/2 S.S. "Helenus"	6,528	11	354	365	5,979	549	11 Do.	538	Do.	Do.
	19/3 S.S. "Hector"	9,330	17	411	428	7,116	2,214	17 Do.	2,197	Do.	Do.
	10/4 S.S. "Ixion"	8,200	3	378	381	7,914	286	3 Do.	283	Do.	Do.
	8/6 S.S. "Northumberland"	4,064	—	204	204	4,064	—	—	—	—	—
	1/8 S.S. "Hector"	5,000	—	216	216	5,000	—	—	—	—	—
		<u>49,409</u>	<u>52</u>	<u>2,337</u>	<u>2,389</u>	<u>45,414</u>	<u>3,995</u>	<u>52</u>	<u>3,943</u>		

BALANCE CARRIED FORWARD FROM PREVIOUS CONSIGNMENTS.

1955	2/5 S.S. "Hector"	—	—	—	—	—	1	1 Destroyed	13.6.57
1956	27/1 S.S. "Nestor"	—	—	—	—	—	1	1 Destroyed	24.6.57
	1/12 S.S. "Ixion"	5,000	—	2	2	4,856	144	5 Past. and High temp. baking	139 Past. and High temp. baking

NOTE.—Total of 56 samples taken in 1956 (53 negative and 5 positive).

CHINESE HEN EGG ALBUMEN CRYSTAL DEALT WITH DURING 1957.

CASES RELEASED

Date of Importation	Vessel	Con. sign-ment	No. of cases released in 1956	Bacteriological Samples				After Heat Treatment	Pos. Neg.	Under Para 1/2	Under Para 2/3	After De-canting	To Area Outside Glasgow for Treatment	After Heat-Treatment	Cases Re-Exp.	No. of Cases Still to be Dealt With
				Untreated Crystal	Tot. Pos.	Neg.	Tot.										Pos.	Neg.
4.9.56	S.S. "Clytoneus"	112	—	—	—	45	—	45	—	—	—	—	112	—	—	
16.9.56	S.S. "Patroclus"	168	98	—	—	35	—	35	—	—	—	—	70	—	—	
3.11.56	S.S. "Calchas"	269	42	4	—	86	—	86	—	—	—	56	171	—	—	
11.12.56	S.S. "Bellerophon"	112	—	4	—	70	—	70	—	—	—	—	112	—	—	
20.8.57	S.S. "Peleus"	269	—	26	—	152	—	152	—	—	—	—	269	—	—	
3.9.57	S.S. "Adrastus"	338	—	6	—	59	—	59	—	—	—	—	123	—	215	
17.9.57	S.S. "Patroclus"	100	—	—	—	—	—	—	—	—	—	—	—	—	100	
24.9.57	S.S. "Alcinous"	100	—	2	—	45	—	45	—	—	—	—	100	—	—	
		1,468	140	42	—	492	—	492	—	—	—	56	957	—	315	

GLYCERINATED HEN EGG YOLK DEALT WITH DURING 1957.

Date of Importation	Vessel	Con- signment.	Bact. Samples Tot. Pos. Neg.	Release for Normal Distribution.
20.8.57	S.S. "Peleus"	192 casks	3 — 3	192 casks
3.9.57	S.S. "Adrastus"	200 casks	3 — 3	200 casks

The following tables show the amount of foodstuffs imported during the year :—

FOREIGN IMPORTS, 1957.

TABLE "A"

Article	Weight Tons Cwt.	Article	Weight Tons Cwt.
Acids	34 11	Jams and Jellies ...	404 15
Apples	10,103 —	Lard	1,461 10
Bakers' Sundries ...	7 17	Lemons	3,023 2
Barley	50,811 12	Lentils	4,875 —
Beans	5,897 11	Liquorice	1 15
Biscuits	13 11	Macaroni... ..	144 2
Butter	11,843 11	Maize	100,034 4
Casein	— 17	Margarine	4 5
Cheese	5,772 7	Meal	488 —
Chicken (Canned) ...	1 5	Meats (Canned)... ..	8,281 13
Cocoa	3 —	Melons	1,085 8
Coconut (desiccated) ...	2,703 17	Milk Powder	3,123 13
Coffee	117 16	Molasses	7 —
Confectionery	41 18	Nuts (Various)	2,792 14
Condiments	91 16	Oats	371 —
Corn	58,617 —	Oils	486 —
Cream of Tartar ...	8 1	Onions	2,172 13
Egg (Albumen)	59 6	Oranges	17,524 16
Egg (Frozen Whole) ...	669 —	Pears	871 10
Egg (Yolk)	71 —	Peas	2,048 12
Farinaceous Foods ...	438 4	Peel	80 9
Fats	625 7	Pomegranates	458 13
Fish (Canned)	1,508 13	Potatoes	9,785 15
Flour	49,507 5	Puddings	25 —
Fruit (Canned)	19,010 14	Rice	4,866 —
Fruit (Dried)	9,205 12	Sago	482 11
Fruit (Juice)	2,706 14	Sauces	4 14
Fruit (Pulp)	1,340 19	Soups	3,110 5
Fruit (Cake)	39 7	Sugar	9,822 10
Fruit (Skins)	14 18	Tea	901 13
Gammon	13 18	Tomatoes (Fresh) ...	49 14
Ginger (Preserved) ...	916 —	Tomatoes (Canned) ...	1,529 16
Glucose	544 14	Tomatoes (Juice) ...	412 12
Grapes	904 16	Tomatoes (Puree and	
Grapefruit	1,934 2	Paste)	1,335 10
Ham (Canned)	33 12	Vegetables (Fresh) ...	215 6
Honey	9 5	Vegetables (Canned) ...	706 6
		Wheat	175,142 —

Total Weight=593,753 tons, 2 cwts.

COASTWISE IMPORTS, 1957.

TABLE " B "

Article	Weight Tons Cwt.	Article	Weight Tons Cwt.
Aerated Waters ...	261 3	Ham and Chicken (Canned)	23 —
Apples	1,512 11	Ice-Cream	5 19
Bakers' Sundries ...	59 10	Jams and Jellies ...	52 13
Barley	1,373 10	Lentils	18 7
Beans	134 16	Macaroni... ..	1 18
Biscuits	77 6	Maize	640 —
Butter	147 12	Meat (Canned) ...	1,547 18
Cheese	578 8	Meat (Cooked) ...	201 5
Chocolate Coverture ...	502 19	Meals	35 —
Coconut (Desiccated) ...	35 18	Milk (Canned)	87 9
Coffee	29 5	Milk (Powder)	1,227 11
Condiments	2 11	Nuts (Various)	48 16
Confectionery	105 5	Oats	3 17
Corn	737 —	Oils	2 18
Egg (Shell)	1,673 5	Onions	24 15
Egg (Frozen Whole) ...	1 —	Oranges	2,961 5
Fats	269 8	Pears (Fresh)	540 15
Fish (Canned)	107 13	Peas	548 —
Fish (Fresh)	6 2	Potatoes	529 18
Flour	2,711 —	Potato Powder	100 11
Fruit (Juice)	769 7	Rice	195 1
Fruit (Canned)	1,603 7	Soups	708 2
Fruit (Dried)	32 7	Sugar	2,621 5
Fruit (Pulp)	86 17	Tea	161 14
Fruit (Cake)	9 17	Tomato (Juice)	8 5
Fruit (Fresh)	153 4	Tomato (Natural) ...	21 12
Gammon	618 12	Tomato (Canned) ...	59 —
Glucose	26 1	Tomato (Paste and Puree)	8 —
Grapefruit	229 —	Vegetables (Fresh) ...	367 18
Haggis	3 4	Vegetables (Canned) ...	172 5
Ham and Bacon	5,555 3	Wheat	5,400 —

Total Weight=37,737 tons, 18 cwt.

The following foodstuffs were found unfit for human consumption and disposed of to the satisfaction of the Port Medical Officer.

Article	Weight Cwts. Qr.	Article	Weight Cwt. Qr.
Apples	— 2	Grapes	— 2
Barley	— 1	Jams and Jellies ...	10 3
Butter	1 3	Meats (Canned)... ..	33 3
Cheese	— 3	Onions	8 2
Coconut (Desiccated) ...	14 —	Oranges	3 1
Condiments	— 2	Potatoes	243 —
Egg (Frozen Whole) ...	— 2	Rice	17 2
Fats	88 —	Sago	2 1
Fish (Canned)	1 —	Soups (Canned)... ..	107 —
Flour	503 3	Tea	9 3
Fruit (Canned)	433 1	Tomato (Canned) ...	9 1
Fruit (Dried)	14 1	Tomato (Juice)	13 1
Fruit (Pulp)	47 2	Tomato (Puree and Paste)	10 1
Fruit (Juice)	43 1	Vegetables (Canned) ...	2 2
Gammon (Canned)	— 1	Wheat	189 1
Ginger (Pres.)	7 3		

Total Weight=2,045 cwts., 2 quarters.

(Includes 277 cwts., 2 quarters, ships' stores).

FOODSTUFFS EXAMINED BY CITY ANALYST.

Article	Fit for Human Consumption	Unfit for Human Consumption or not Conforming to Regulations	Remarks
Apples	4	—	
Beans	1	—	
Butter	5	5	Extraneous matter, rancid.
Chicken (Canned)	1	—	
Condiments	1	1	Damp and mouldy.
Confectionery	1	—	
Cocoa	1	—	
Fats and Oils	9	4	Taint, high proportion of iron.
Fish (Canned)	23	1	Fermentation.
Fish (Salt)	1	—	
Fruits (Fresh)	1	—	
Fruits (Canned)	44	2	Fermentation.
Fruits (Dried)	22	4	Mould, contamination, resin and furfural.
Fruit (Juices)	1	5	Excessive preservative.
Fruit (Pulp)	3	—	
Flour	5	1	Lead contamination.
Ginger	—	1	Extraneous matter.
Haggis	1	—	
Lactose Albumen Compound... ..	1	—	
Lemons	1	—	
Macaroni	1	—	
Margarine	1	—	
Meats (Canned)	16	—	
Melons	1	—	
Milk (Canned)	3	—	
Milk (Powder)	2	—	
Nuts	4	—	
Onions	2	—	
Oranges	15	—	
Peel	—	4	Excess preservative.
Pomegranates	1	—	
Rice	2	4	Contamination, seawater and extraneous matter, mould.
Sago	2	—	
Soups	2	—	
Tea	4	6	Mould.
Vegetables (Canned)	4	—	

SAMPLES SUBMITTED TO CITY BACTERIOLOGIST.

Articles.	Sound	Unfit	Remarks
Butter	4	1	Bacterial contamination.
Confectionery	1	—	
Condiments	13	—	
Chicken (Canned)	1	—	
Egg (Albumen)	534	—	
Egg (Frozen Whole)	2,336	52	Bacterial contamination.
Egg (Yolk)	6	—	
Fats	7	—	
Fish (Canned)	12	—	
Fruits (Canned)	4	—	
Fruit (Dried)	1	—	
Haggis	1	—	
Lactose Albumen Compound	1	—	
Macaroni	1	—	
Meat (Canned)	7	—	
Milk Powder... ..	2	—	
Nuts	3	—	
Tea	3	3	Bacterial contamination.

WILLIAM J. SMITH
Senior Port Inspector

PUBLIC HEALTH (IMPORTED FOOD) REGULATIONS (SCOTLAND) 1932.

The following statement submitted by the Corporation Veterinary Surgeon indicates the work done under the Foreign Meat Regulations during 1957 :—

EXAMINED

Beef—				Offal—cont.—			
Quarters ... ..	...	...	33,405	Ox Hearts, Boxes ... ..	...	...	25
Cuts ... ..	...	...	283	Ox Livers, Bags ... ..	...	...	1,672
Boxes ... ..	...	...	33,835	Ox Livers, Boxes ... ..	...	...	1,222
Bags ... ..	...	...	46,776	Ox Kidneys, Cartons ... ..	...	...	431
Crops ... ..	...	...	63,687	Ox Tails, Bags ... ..	...	...	2
Butts. ... ..	...	...	28,581	Ox Tails, Boxes ... ..	...	...	72
Barrels ... ..	...	...	5	Ox Skirts, Packages ... ..	...	...	146
<i>Veal—</i>				Ox Sweetbreads, bags ... ..	...	...	3
Sides ... ..	...	...	616	Ox Casings, Tierces ... ..	...	...	37
Boxes ... ..	...	...	160	Ox Mixed Offal, packages ... ..	...	...	4,420
<i>Mutton—</i>				Ox Fat, packages... ..	...	...	237
Carcases ... ..	...	...	29,970	Ox Suet, cartons ... ..	...	...	630
Boxes ... ..	...	...	300	Calf Tongues, bags ... ..	...	...	19
Bags ... ..	...	...	41	Calf Hearts, bags ... ..	...	...	11
<i>Lamb—</i>				Calf Livers, boxes ... ..	...	...	70
Carcases ... ..	...	...	36,937	Calf Casings, tierces ... ..	...	...	18
<i>Pork—</i>				Sheep Hearts, bags ... ..	...	...	20
Carcases ... ..	...	...	2,105	Sheep Livers, boxes ... ..	...	...	253
Sides ... ..	...	...	24,274	Sheep Stomachs, boxes ... ..	...	...	38
Bags ... ..	...	...	3,318	Sheep Kidneys, boxes ... ..	...	...	50
<i>Offal, etc.—</i>				Sheep Casings, tierces ... ..	...	...	209
Ox Tongues, packages ... ..	...	...	106	Lamb Hearts, bags ... ..	...	...	20
Ox Cheeks, packages ... ..	...	...	99	Lamb Livers, boxes ... ..	...	...	1,484
Ox Hearts, bags ... ..	...	...	50				

Beef—

CONDEMNED.

Quarters ... ..	...	...	5	Bags ... ..	...	...	2
Cuts ... ..	...	...	7	Lbs. ... ..	...	...	84

HOUSING (REPAIRS AND RENTS) (SCOTLAND) ACT, 1954.

Return of Certificates issued by the Local Authority under Part II of the above Act during 1957 to 5th July.

I. Certificates of Disrepair issued under Section 18(1) of the 1954 Act.

	Houses subject to Notice of Repairs Increase	Houses not so subject but subject to Section 2(1)(c) and (d) of Increase of Rent and Mortgage Interest (Restrictions) Act, 1920	Total
Applications for Certificates ...	38	331	369
Of which—			
Granted ...	11	192	203
Refused ...	21	75	96
Cancelled ...	1	11	12
Outstanding ...	5	53	58
Applications for Revocation of Certificates* ...	11	50	61
Of which—			
Granted ...	10	45	55
Refused ...	—	1	1
Cancelled ...	—	—	—
Outstanding ...	1	4	5

* Including applications for revocation of sanitary certificates issued under the pre-1954 Act procedure but still in force at 30.8.54.

II. Certificates as to Service of Notice under Section 7 of the Housing (Scotland) Act 1950, issued under Section 18(2) of the 1954 Act.

	Houses subject to Notice of Repairs Increase	Houses which have not been subject to Notice of Repairs Increase but where Permitted Increases of Rents are recoverable under 1920 Act
Certificates Issued	Nil	Nil
Applications for Revocation of Certificates	Nil	Nil
Granted	Nil	Nil
Refused	Nil	Nil

III. Certificates of (i) Repair and (ii) Refusal to Grant Repair Certificates issued under Section 20 and the second Schedule of the 1954 Act.

Applications for Certificates of Repair	Granted	Certificates of Refusal to Grant Repair Certificate Issued	Cancelled	Outstanding	Applications for Revocation of Certificate of Refusal
Nil	Nil	Nil	Nil	Nil	Nil

RENT ACT, 1957.

Return of Certificates issued by the Local Authority from 6th July, 1957.

I. Certificates of Disrepair issued under Section 8(1) of the 1957 Act.

Applications for Certificates	...	...	...	1,302
Of which—				
Granted	...	...	...	784
Refused	...	...	...	397
Cancelled	...	...	...	34
Outstanding	...	...	...	87
Applications for Revocation of Certificates	...			154
Of which—				
Granted	...	...	...	123
Refused	...	...	...	14
Cancelled	...	...	...	2
Outstanding	...	...	...	15

II. Certificates as to Service of Notice under Section 7 of the Housing (Scotland) Act, 1950, issued under Section 8(1) of the 1957 Act.

Certificates Issued	...	...	...	...	Nil
Applications for Revocation of Certificates	...	...	...	...	Nil
Granted	...	...	...	...	Nil
Refused	...	...	...	...	Nil

III. Certificates of (i) Repair and (ii) Refusal to Grant Repair Certificates issued under Section 8(1) of, and third Schedule to, the 1957 Act.

Applications for Certificates of Repair	Certificates of Refusal to Grant Repair Certificate				Applications for Revocation of Certificate of Refusal
	Granted	Issued	Cancelled	Outstanding	
Nil	Nil	Nil	Nil	Nil	Nil

REHOUSING OF TUBERCULOUS FAMILIES.

During 1957, 571 recommendations were made under the scheme for the rehousing of tuberculous families and 495 families were rehoused during the year, 297 being families recommended during 1957 and the others in previous years. The following table shows the number of families rehoused since 1934 :—

Year	Number of Families	
	Recommended	Rehoused
1934-1944	3,327	1,360
1945-1949	2,661	1,702
1950-1954	2,806	2,308
1955	429	486
1956	497	544
1957	571	495
	<u>10,291</u>	<u>6,895</u>

The conditions experienced in the provision of suitable accommodation are shown in the following table:—

Recommendations, 1934 to 31st December, 1957	...	...	...	...	...	...	10,291
Number of Families Rehoused—							
Rehousing	...	...	...	...	...	...	2,099
Intermediate	}	...	...	...	...	...	1,695
Ordinary		...	...	...	...	...
Super-ordinary	...	...	...	...	...	...	2,633
City Factor's Houses and others	...	...	...	...	...	...	169
Temporary Houses	...	...	...	...	...	...	299
Recommendations remaining but not yet rehoused—							
Refused Offers	...	...	...	...	...	...	165
Did not reply	...	...	...	...	...	...	182
Gone away—new address not given	...	...	...	...	...	...	450
Cancelled	...	...	...	...	...	...	720
Returned to M.O.H. for revision	...	...	...	...	...	...	—
Patient Deceased	...	...	...	...	...	...	1,519
							9,931
Still to be dealt with	...	...	...	...	...	...	360

SUMMARY OF TUBERCULOUS FAMILIES REHOUSED SINCE 1934.

	1934-	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	Total
1934-1946	1,877	150	184	40	27	13	4	4	—	—	—	—	2,299
1947	...	72	90	120	24	16	6	3	6	2	2	—	341
1948	...		86	240	44	25	9	4	3	2	1	—	414
1949	...			243	136	49	18	10	4	4	2	—	466
1950	...				236	190	51	34	10	9	4	1	535
1951	...					163	183	69	22	12	6	1	456
1952	...						96	250	71	26	18	6	467
1953	...							153	175	51	17	8	404
1954	...								160	212	63	8	443
1955	...									168	171	15	354
1956	...										260	159	419
1957	...											297	297
		1,949	326	787	480	470	376	527	455	486	544	495	6,895

SECONDARY PRIORITY SCHEME.

During 1957, 469 recommendations were made under the scheme classified as follows:—

Category M.2	...	85
Category M.3	...	384

A further 618 applications were considered but were not passed.

DETERIORATION OF PROPERTY.

During the year 1,716 dwellings were represented to the Housing Committee as uninhabitable. In addition 328 were condemned by the Master of Works as dangerous and a clearance area was promoted in Royston Road, details of which are shown in the table below. The wastage of houses over the last thirteen years is shown in the following table :—

Year	Medical Officer of Health			Total	Master of Works	
	Closing Order	Demolition Order	Slum Clearance		Dangerous	Grand Total
1945-49 ...	192	271	—	463	1,791	2,254
1950-54 ...	591	709	164	1,464	1,967	3,431
1955 ...	494	583	—	1,077	341	1,418
1956 ...	621	1,119	—	1,740	218	1,958
1957 ...	690	974	*295	1,716	328	2,044
	<u>2,588</u>	<u>3,656</u>	<u>*459</u>	<u>6,460</u>	<u>4,645</u>	<u>11,105</u>

*Includes 243 houses previously dealt with by Closing and Demolition Orders.

ROYSTON ROAD CLEARANCE AREAS.

Area No.	Fit Houses	Unfit Houses	Total
Area No. 1 ...	23	204	227
Area No. 2 ...	—	26	26
Area No. 3 ...	—	42	42
Total ...	<u>23</u>	<u>*272</u>	<u>295</u>

* Includes 243 houses previously dealt with by Closing and Demolition Orders.

The position at 31st December, 1957, was that the Corporation had passed a resolution declaring the areas to be clearance areas and had decided to make and submit to the Department of Health for Scotland for confirmation compulsory purchase orders under Part III of the Housing (Scotland) Act, 1950.

No action had been taken with regard to the rehousing of the tenants.

HOUSING (SCOTLAND) ACT, 1950.

During the year 1956 there was submitted to the Committee a Representation under Section 7 of the above Act.

The position at 31st December, 1956, was that the tenant had been temporarily rehoused whilst the repairs were being carried out and by March, 1957, the house had been rendered fit and occupied.

The total number of houses represented during the past thirteen years and action taken is illustrated in the next table :—

Year	Houses Represented			Houses Actually Closed in Each Year		
	Under Slum Clearance Schemes	Under Closing or Demolition Orders	Together	Under Slum Clearance Schemes	Under Closing or Demolition Orders	Together
1945-49	—	463	463	—	456	456
1950-54	164	1,300	1,464	64	1,106	1,170
1955	—	1,077	1,077	100	745	845
1956	—	1,740	1,740	—	1,503	1,503
1957	*295	1,664	1,716	—	1,606	1,606

* Includes 243 houses previously dealt with by Closing and Demolition Orders.

Supervision of Tenants in Housing Schemes.

The first post war slum clearance scheme in Glasgow was opened at Hamiltonhill in 1923 with the transfer of 107 families from Cowcaddens. In order to ascertain what response would be made by the tenants to the improved housing conditions regular inspection of the houses was made by a lady inspector.

In 1926, following a report by the Divisional Sanitary Inspectors to the Sub-Committee on Insanitary Areas, the latter recommended the appointment, as a charge against the Housing Department, of a special officer attached to the Health Department to assist in the routine inspection of rehousing schemes. A special nurse inspector "to exercise intimate supervisory duties over the less satisfactory tenants" was appointed in August, 1927 (Nurse C. Matheson) and her first report appeared in the Annual Report of the Medical Officer of Health for 1927. A meeting of the Committee in October expressed its satisfaction with the results obtained by this special officer and recommended that a second special female officer be appointed to assist in the work of routine inspection.

This second Housing Nurse, Miss Eliz. Walker, retired in 1952 after twenty-five years work in the Housing Schemes and opportunity was then taken to review the changes which had taken place during this period. Commenting on this in the 1952 Report the Medical Officer of Health pointed out that Miss Walker's work had been mainly in the rehousing schemes but that the pre-war arrangement of rehousing, intermediate and ordinary schemes was tending to become blurred. "Already it is apparent that the ability to pay an ordinary rent does not necessarily imply that the family is suitable for such a type of scheme and the necessity for the expansion of the work of the Housing

Nurse is becoming evident. The present housing financial burdens make it difficult to find a solution which will allow for an adequate rent with supervision."

In 1953 families began to move in to the Drumchapel and Blairdardie Schemes and in his Annual Report for that year the Divisional Sanitary Inspector commented "The nurse inspectresses are of the opinion that a number of the tenants now being rehoused in 'ordinary schemes' are of a type that will require considerable supervision." In 1954 he reported that a survey of the first 500 houses to be occupied in Drumchapel (an ordinary scheme) revealed 19 per cent. of tenants as requiring some measure of supervision although some allowance had to be made for the "Settling in" period.

The Property and Management Committee which was considering the rehousing of families from dangerous and condemned buildings agreed in January, 1955, that the Medical Officer of Health be asked to second a health visitor for an experimental period of six months to assist in connection with the rehousing of such families. Sister E. Taylor was therefore seconded and her report of 8.11.55 was as follows :—

DRUMCHAPEL AND CASTLEMILK SCHEMES.

Report by Sister E. Taylor on

Special Visitation of Tenants rehoused from Slum Properties.

"As from the beginning of June, 1955, I was seconded to the City Factor's Department for a period of six months in order to supervise and report on those tenants who were rehoused in the above schemes from slum properties.

To date the number of tenants who came under my supervision totalled 291, of whom 132 were rehoused in Drumchapel and 159 in Castlemilk. As the tenants were rehoused the names were given me by the City Factor and an endeavour was made to visit each one during the first week of their tenancy. This first visit is of special importance as at this stage advice on good housekeeping and the proper use of fittings can be given before the settling-in period is completed. At this stage it was obvious that many tenants were ignorant of the proper use of fittings and that their standards of cleanliness, especially with regard to kitchenettes and bathrooms, were rather low. On later visitation, however, the standard was found to have risen and it was noticeable that many tenants had enclosed their baths and had carried

out improvements to kitchenettes. On the whole it was found that close, constant supervision had a markedly good effect in raising the general standard of cleanliness and housekeeping. It was found that a great deal of time was lost by mothers having to take children to the school buses. Inadequate shopping facilities also meant a great loss of time being spent in shopping which might otherwise have been devoted to the house.

External conditions such as closes and stairs, gardens and washing greens, require some comment. At first the regular cleansing of closes and stairs tended to be neglected but constant visitation and exhortation made for improvement in this respect. Some attempt was generally made to cultivate gardens where these were provided but lack of protection by railings from dogs, cats and children proved very frustrating. It was also noted that the absence of court boundary railings led to certain closes being used as thoroughfares.

The period of supervision has been too short to permit of firm and final opinions being formed but it is evident that supervision of many tenants will require to be carried on for a considerable time.

As a result of my experience in these areas I would suggest that the following points should be given consideration :—

1. These houses should be treated as are those in rehousing schemes, i.e., placed under the supervision of the divisional sanitary inspectors through their housing sisters.
2. The best results are obtained by intensive visitation during the first six months—weekly during the first month and tapering off at the discretion of the housing sister.
3. The allocation of houses to each housing sister should be such as to permit of more time being devoted to dealing with difficult cases by way of advice and instruction. This might involve restricting the number of houses to be supervised by each housing sister.
4. Footpaths in front of houses should be tar-macadamised before occupation as ash paths lead to damaging of floor coverings.
5. Court boundary railings should be *in situ* before occupancy of houses.
6. The dado of closes and staircases should be painted in a darker shade than at present.

DROMCHAPEL AREA.

Address	No. of Houses	Average No. of Visits	Time under Supervision	Conditions found	Remarks
11/15 Airgold Drive ...	12	6	5 months	Good tenants. Houses and fittings well kept.	Supervision here could be relaxed. Suggest one visit in 3 months.
19/21 Drumore Road ...	12	7	5 months	Good with three exceptions—required 18, 13 and 11 visits.	Now improving but still require close supervision. Once per month at least, other houses 3-monthly.
62/64 Summerhill Road ...	12	5	3-4 months	Well-kept with two exceptions	Supervision could be relaxed with exception of 2 houses which will require monthly visitation.
12/15 Rayne Place ...	12	3	1 month	Houses and fittings clean ...	Not long enough under supervision to form accurate assessment. Will require further supervision.
155/157/159/161/163 Ladyloan Avenue.	36	3	1 month	Many poorly furnished houses. Tenants not making best of houses. Standard of cleanliness fairly good.	These tenants will require supervision and encouragement for some time yet.
41/43/45/47/49/51/53 Peel Glen Road.	48	2-3	1 month	Very mixed tenants. Many houses untidy and fittings unclean.	Will require close supervision for long time yet.
	132				
CASTLEMILK AREA.					
50/52/54 Dougrie Drive ...	15	6	5 months	Mostly good tenants with good standard of cleanliness. Two exceptions required 11 and 10 visits.	Supervision could be relaxed to 3-monthly visitation with two exceptions.
47/49/51/53 Machrie Drive ...	32	7	5 months	Very good tenants. Keeping up good standard.	Tenants would like regular visitation, but could be reduced to minimum.
49/51/53 Machrie Road ...	24	6	4 months	Mixed lot. Some very good, others required many visits. Trouble is untidiness rather than dirt.	Will require fairly close supervision for some time yet; 3-monthly.
50/52/54/56 Machrie Road ...	28	4	2 months	Generally clean and well kept ...	Period of supervision too short to form final opinion. Further regular supervision required.
58/60/62/64 Glenacre Drive ...	28	2	1 month	Fairly good tenants ...	Houses not all occupied. Will require supervision for some time yet.
115/117/119/121 Barlia Drive	32	1	2 weeks	Houses clean ...	Period of supervision too short to form final opinion. Some vandalism evident. Will need close supervision.
	159				

7. More frequent collection of refuse and sweeping of courts seems to be required.
8. The lack of shops might be overcome to some extent by conversion of some selected corner houses to shop premises.
9. Provision for taking teenagers off the streets is urgently required. There are at present no such means of entertainment as existed in their old districts. Such as cinemas, cafes, etc.
10. All new tenants coming to these areas should be visited at least once irrespective of their previous residence. Experience has proved that some tenants not coming under the Slum Clearance Category require supervision and guidance."

As a result of this report the Property Management Committee (on 22.11.55) agreed to ask the Medical Officer of Health to arrange for the continued supervision of new houses allocated to families from dangerous and condemned properties in the same way as the Rehousing Scheme houses, i.e., under the supervision of the divisional sanitary inspectors through the housing nurses.

In the Annual Report for 1955 the Divisional Inspector made the following comment. "In addition as opportunity occurred the visitation of new tenants in the Drumchapel area was continued and last year's finding, that a number will require some degree of supervision, confirmed. The housing nurses state that in certain areas a fairly serious degree of vandalism is already evident."

At a meeting of the Property and Management Committee of 13.2.56 the report of the special Sub-Committee on the Condition of Housing Schemes was approved and it was agreed that the Health Committee be asked to expand their existing supervisory service on housing schemes. In a letter to the Town Clerk (of 17.8.56) the Medical Officer outlined what this proposal would involve :—

1. The visitation of new schemes as they are occupied, starting with Drumchapel, Castlemilk and Arden and continuing into Easterhouse.
2. Visits to new houses where the tenants are in residence and having difficulty.
3. The visitation of backward or difficult families about to be rehoused, including families who are overcrowded and have long standing applications.

4. Gradual extension of the service in the newer housing to the post war schemes. "A limited amount of this work has already been carried out but to increase the service to the extent envisaged by the Property Management Committee would require an appreciable recruitment of staff. As a first instalment it would require the recruitment of six housing nurses and the cost of the scheme would be borne by the Property Management Committee."

The recruitment of six housing nurses or health visitors was approved by the Sub-Committee on Clinical Services on 23.3.56 and the six nurses appointed on 1st June, 1956.

The usual procedure adopted in the supervision of tenants moving into the new schemes is as follows. Every new tenant arriving in the area is visited at least once soon after occupancy when the tenant has had time to settle in. Those who, in the opinion of the housing nurse, might require a degree of supervision are noted for further visitation. As might be expected, these visits have on occasion aroused some antagonism but this is invariably allayed when the purpose of the visit is explained.

By the end of 1956 the visitation of the Drumchapel and Castlemilk areas was well advanced and towards the end of the year a beginning was made at Easterhouse. The first result of the visitation of the Castlemilk Scheme was given in detail in the South-Eastern Divisional Inspector's report for that year. In connection with the Drumchapel Scheme, the Divisional Inspector for the Central Division had this pertinent comment to make, "While housing in Drumchapel is practically completed, the provision of such amenities as schools, shops, community centres, churches and so on lags far behind. Until such are provided a real community spirit and pride of locality will be difficult to engender."

The following is a report on the work of the housing nurses for the first nine months (30th September, 1956, to 31st May, 1957).

	No. Visits
Long Standing Applications on the City Factor's List ...	144
Households in New Schemes	16,761

The following table shows the improved record in the cleanliness of households over the year from December, 1955, to December, 1956.

	December, 1955	December, 1956
Clean	67.8%	68.6%
Fair	31.0%	30.7%
Dirty	1.2%	0.7%
Total households under supervision	14,390	14,355

Intermediate Schemes.—In a report on “The Intermediate House” which appeared in the Annual Report for 1928 this type of house was defined as follows. “This type of house has been designated ‘Intermediate’ because it represents a recent effort to provide houses, chiefly of 3-apartments, with bathroom, scullery, etc., at a rental more within the competence of the working classes than the great majority of those hitherto erected under the subsidy scheme.”

It has hitherto been the policy of the Corporation to transfer as many of the tenants originally rehoused in the special schemes to houses in Ordinary or Intermediate type of schemes (where no supervision is exercised) and to make available the vacated houses for other families who require the supervision of the Housing Nurse.

Intermediate Houses are not normally under direct supervision but in 1954 visitation of such schemes in the Central Division revealed the necessity for such a policy and regular supervision of the Intermediate Schemes in this Division has been carried out since. It was then pointed out that since the war there has not been so sharp a distinction between these two classes of tenant (i.e., Rehousing and Intermediate). The number of visits paid to Intermediate Schemes in each Division, with an analysis of the conditions found, is recorded each year in Appendix Table XVI, General Sanitary Operations, Section 30. The number of visits paid in 1957, 11,260 in all, shows a sharp increase over the 1956 total of 3,312, itself an almost threefold increase from 1955. Most of the increase was in the Eastern Division (5,731 visits as against 140 in 1956) and the North (3,213 compared with 1,028).

Rehousing Schemes.—Details of the number of visits paid in each Division of the City and the conditions found are shown in Appendix Table XVI, page 406.

The figures are analysed in more detail as follows :—

(a) *Condition as to Cleanliness.*

During 1957 the nurse-inspectresses made 89,611 visits, the condition of the houses being recorded at the time of the visits as "Clean" 52,781, "Fair" 35,760, and "Dirty" 1,070. Further visits numbering 6,991, were made to the less satisfactory tenants.

The number of houses in the various rehousing schemes reported on is 14,925.

No. of tenants under supervision at 1st January, 1957		14,908	
Of which evicted or left owing rent during 1957	46		
Of which left voluntarily during 1957	583		
		<u>629</u>	
Of which remaining as at 31st December, 1957 ...			14,279
No. of tenants obtaining entry during 1957 ...		635	
Of which evicted or left owing rent during 1957	2		
Of which left voluntarily during 1957	2		
		<u>4</u>	
			<u>631</u>
Total number of tenants remaining as at 31st December, 1957			<u>14,910</u>

At the beginning of the year 14,908 households were under supervision, and at the end of the year 14,910. The number of new tenants was 631. There were 629 removals or 4·2 per cent. of the total occupancies.

The changes in the condition of the 14,279 households under supervision throughout the whole year were as follows :—

Condition at beginning of year—	Conditions at end of Year				Group Percentages
	Clean	Fair	Dirty	Totals	
Clean	9,370	264	2	9,636	67·5
Fair	515	4,005	24	4,544	31·8
Dirty	1	36	62	99	0·7
Total	<u>9,886</u>	<u>4,305</u>	<u>88</u>	<u>14,279</u>	<u>100·0</u>
Group Percentages ...	69·2	30·2	0·6	100·0	

A similar table is given for the 631 tenants who obtained entry during the year and were still resident in the schemes at the close :—

Condition at date of entry—	Condition at end of Year				Group Percentages
	Clean	Fair	Dirty	Totals	
Clean	205	89	1	295	46.8
Fair	14	319	1	334	52.9
Dirty	1	—	1	2	0.3
Total	<u>220</u>	<u>408</u>	<u>3</u>	<u>631</u>	<u>100.0</u>
Group Percentages ...	34.9	64.6	0.5	100.0	

The condition, prior to removal, of the houses occupied by families who were evicted or left owing rent and by tenants removing voluntarily during the year is compared in the following table :—

Condition at date of removal—	Tenants Evicted during 1957		Tenants Removing voluntarily during 1957	
	Number	Group Percentages	Number	Group Percentages
Clean	13	27.1	437	74.7
Fair	32	66.7	148	25.3
Dirty	3	6.2	—	—
Total	<u>48</u>	<u>100.0</u>	<u>585</u>	<u>100.0</u>

(b) *Bug Infestation.*

The total number of houses in which evidence of bed bugs was found was 27 or 0.18 per cent. From the table following it will be seen that there has been an increase in the degree of "serious" infestation from 0.08 per cent. in 1956 to 0.14 per cent. this year, while the degree of "mild" infestation has fallen from 0.2 per cent. to 0.03 per cent. Of the houses inspected 0.01 per cent. showed only a "trace" of infestation as against 0.03 per cent. last year.

The use by the Disinfestation Unit of D.D.T. and Gammexane ("B.H.C.") continues to give every satisfaction in the eradication of this pest. This method of treatment has now been in use for eight years and coupled with the work of the nurse-inspectresses in the early detection of infestation has proved efficient and speedy and causes the minimum upset in the house.

The following table shows how the incidence of "serious" infestations has fallen since 1934, the first year for which records are available. In that year the percentages were "trace" 1·2, "medium" 2·4, "serious" 7·1 and total 10·7. The total number of houses involved was 8,670.

PROGRESS OF BUG INFESTATION PREVENTION IN REHOUSING SCHEMES.

Year	Number of Houses Inspected	Number of Houses in which Bed Bugs were Found				Percentage of Total Number of Houses			
		Trace	M.I.	S.I.	Total	Trace	M.I.	S.I.	Total
1934-38 ...	60,141	933	1,108	1,829	3,870	1·55	1·84	3·04	6·43
1939-43 ...	73,529	244	314	688	1,246	0·33	0·43	0·93	1·69
1944-48 ...	73,845	150	119	537	806	0·20	0·16	0·73	1·09
1949-53 ...	74,001	68	164	335	567	0·09	0·22	0·45	0·77
1954 ...	14,925	14	28	24	66	0·09	0·19	0·16	0·44
1955 ...	14,925	12	16	38	66	0·08	0·11	0·25	0·44
1956 ...	14,925	5	30	12	47	0·03	0·20	0·08	0·31
1957 ...	14,925	2	5	20	27	0·01	0·03	0·14	0·18

Trace—Old hatched eggs or bug casts only.

Medium Infestation (M.I.)—Live bugs or eggs on furnishings only.

Serious Infestation (S.I.)—Living bugs or eggs on furnishings and in structure of buildings.

DISINFESTATION UNIT.

This has been another successful year for the Unit, the total number of apartments treated showing a considerable increase over the previous year. Once again there is a slight decrease in the number of rooms treated solely for bed bug infestation and it is hoped this is a sign that the widespread campaign against this unpleasant household pest is meeting with some measure of success.

The following table shows the work carried out in each Division :—

TABLE I.

Division	Number of Apartments Treated for				Total Apartments Treated
	Bug Infestation	Tenants being Rehoused	Cockroach Infestations	Other Insects	
Eastern ...	453	491	144	154	1,242
Northern ...	305	1,105	157	126	1,693
South-Eastern ...	131	657	101	53	942
South-Western ...	474	361	162	51	1,048
Central ...	164	595	211	113	1,083
Total ...	1,527	3,209	775	497	6,008

Rehousing.—The number of apartments requiring treatment prior to the removal of the tenants' furniture to a Corporation house again shows a considerable increase over previous years. This is a very important part of the Unit's work and plays a major role in preventing the transference of bed bugs to new housing areas. Despite all precautions infestations of bed bugs do occur from time to time in new houses and most of them can be traced to second-hand articles of furniture which are bought after the tenant has settled down in the new surroundings. The dangers of buying second-hand furniture or the exchange of furniture and bedding between neighbours cannot be stressed too strongly as this has been a considerable obstacle to the prevention of bed bug infestations in new houses. Last year a case of bug infestation in a very clean house was eventually traced to a second-hand wireless set bought a few weeks previously in one of the city markets.

Other Insects.—During the year the Unit dealt with scores of complaints of insect infestations, a large number of which were accidental invasions by outside beetles, etc. Considerable trouble was experienced in one of the new housing areas by large numbers of outside beetles gaining access to the houses. These were identified as belonging to the family Carabidae (Ground Beetles) and were dealt with by treating with D.D.T. the area between the back doors of the houses and the adjacent field.

Throughout the summer months a close watch was kept on the area where considerable trouble was experienced from mosquitoes during the previous year but no serious infestation developed and there were no complaints of people being bitten. The second species of mosquito has now been identified as *Culex pipiens*, a common British mosquito which feeds almost exclusively on birds and frogs but has been known to attack man if no other source of food is available.

The following table shows the amount of work carried out in each Division in respect of other insect infestations.

TABLE II.

Division	Number of Apartments Treated for				Total
	Verminous Bedding	Flea Infestation	Fly Infestation	Other Insects	
Eastern	76	41	14	23	154
Northern	65	41	12	8	126
South-Eastern	22	27	—	4	53
South-Western ...	24	16	9	2	51
Central	52	32	9	20	113
Total	239	157	44	57	497

Insect Identification.—The investigation and identification of different species of insects takes up a considerable amount of time. Acknowledgment is made of the co-operation and help so willingly given by the Zoology Department of Glasgow University. As usual, most of the requests came from business firms and the general public, advice being sought on 152 occasions. An unusual case was a complaint received from two warehouses of an infestation of insects in a consignment of Wellington boots just arrived from overseas. These were identified as *Tribolium confusum*, one of the common beetle pests of cereal products and from examination of the debris in the bottom of the tea chests it was evident that they had been previously used for transporting rice and other cereals. Advice was given on how to deal with this pest and no further complaints were received.

Other Premises.—Outwith the work shown in the previous table, 174 treatment of other premises (restaurants, shops, lodging houses, etc.) were carried out for numerous kinds of insect pests. In addition, two temporary operators were employed during the summer months for the control of the house fly. In this way 2,087 treatments of ashbin shelters, stables and piggeries were carried out, using either D.D.T. or Gammexane. The table below shows the number of visits made during the year for different types of infestation.

Bug Infestation and Rehousing	...	...	...	5,879
Cockroach Infestation	...	...	...	1,512
Verminous Bedding	...	...	...	162
Flea Infestation	...	...	...	106
Fly Infestation	...	...	...	70
Other Insect Infestation	...	...	...	182
Total	...	...	...	<u>7,911</u>

Insecticides.—The two main insecticides in use are D.D.T. and Gammexane, both of which are still giving excellent results. New insecticides are continually appearing on the market, two of the more recent being Parathion and Diazinon. These are of the organo-phosphorus group and are being used in America for the control of house flies in byres and dairies. The method used is to dip cotton cords, $\frac{3}{16}$ - $\frac{3}{2}$ inches in diameter, in the solution for two minutes, air dry for three weeks, and then to hang them from byre and dairy ceilings or, alternatively, to stretch the cords from wall to wall to form resting places for the flies. It is recommended to use 8-10 linear feet of cord per 100 square feet of floor area. It is claimed that the cords remain lethal to flies for 7-10 weeks. Organo-phosphorus compounds have a very high insecticidal activity but more information is required about their toxicity to man and other mammals.

SECTION XI.

BACTERIOLOGICAL LABORATORY.

Applied bacteriology, which is the main function of this laboratory, has proved one of the most successful efforts of human endeavour from the standpoint of humanity. It has not outlived its usefulness; far from it. Its practice is expanding and invading fields opened up by new discoveries which widen the range of epidemiology and preventive medicine, where the need for control is as essential as the determination of the causes and locations of epidemic disease. No longer is our aspiration limited to the cure of disease: our highest aim is to prevent it, and a laboratory is as necessary in the equipment of a public health administration as it is in a hospital. To study the phenomena of disease without laboratories is today unthinkable, for they have become an outstanding feature of modern scientific medicine: they arose from the experimental side of medicine and from the experimental spirit of medicine, which, at the present time, is stronger than ever.

The Laboratory had a full year in 1957, and the varied nature of its work in its relation to the diagnosis and treatment of disease, to prevention and control, and to public health administration is indicated by the many lines of investigation recorded in this report.

The total volume of work was quite as large as in 1956 though there was a small reduction in the total number of individual examinations, which was more than compensated for by a large increase in more complicated and time-consuming investigations such as the examination of food-stuffs. The work on foods was nearly double that done last year. The slight reduction in absolute numbers is more than accounted for by the continued recession of dysentery in the city.

The salient features of the report are these:

There was again a large decrease in the incidence of dysentery among the population, and more than 4,500 fewer specimens from patients were examined. The major numerical fall was in Sonne dysentery, but there were fewer Flexner infections also. The total number of isolations of dysentery bacilli from people was appreciably lower than last year and less than half the large number of two years ago, in 1955.

The number of samples of sputum to be examined for tubercle bacilli was smaller by about 400, despite a temporary increase in the

early part of the year due to the mass radiography campaign. The number of positive specimens fell by about 2·8 per cent. The decrease in this work is due to improvement in control arising from the intensive attack on tuberculosis, during which a larger share of bacteriological work has been undertaken in other laboratories.

The total number of tests performed to investigate Venereal Disease in Glasgow fell by about 800. For Stirlingshire more than twice as many tests were done as in 1956.

Suspected food-poisoning provided fewer specimens by about 1,500, a fall of about 30 per cent. The number of times *Salmonellae* were isolated primarily also fell by about 16 per cent., but repeat cases yielded more than last year.

There was a large increase in the work done in investigating the fitness for consumption of foods entering the Port or exposed for sale in the City (excluding milk). The increase was chiefly due to many more examinations of samples of imported dried and frozen eggs, and was in the region of 80 per cent.

Towards the end of the year, at the suggestion of the Medical Officer of Health, it was decided to examine, with bacteriological control, the hygienic condition of itinerant ice-cream vans and this work was begun late in December.

There were over 1,000 more determinations of blood groups and the Rh factor done in 1957. Also general haematological work entailed the examination of many more samples of blood than last year. This last increase is relatively great—almost six-fold—owing to the increased number of haemoglobin estimations performed on the blood of pregnant women seen at antenatal clinics.

The staining and screening of gynaecological smears (exfoliative cytology) continued, and more examinations were completed than in 1956.

Specimens from Stirlingshire for various tests rose in numbers by just over 2,000 (about 60 per cent.).

The number of examinations made in the laboratory during 1957 was 97,677, which is slightly smaller (about 3·2 per cent.) than last year's figure owing to the lower incidence of dysentery in the City. The total includes 5,464 examinations made on behalf of outside health authorities.

The tabular summary at the end of this report records the large variety of specimens examined for different purposes, with their numbers.

COMMUNICABLE DISEASES—EPIDEMIOLOGICAL INVESTIGATIONS.

Diphtheria.—The total number of swabs from noses and throats examined during the year for the presence of *C. diphtheriae* was 1,222 which is 377 less than last year. The absence of the disease in the community accounts for the diminishing number, year by year, of swabs from suspicious throats, though there are always likely to be some, for sore throats are not uncommon and diphtheria not always easy to diagnose without bacteriological examination. Even though the disease has practically disappeared following intensive and widespread immunisation, its ravages are not likely to be forgotten, and watchfulness is still justified. Freedom from infectious diseases demands constant vigilance despite prophylaxis and improved methods of cure.

The number of swabs taken from suspected throats in 1957 was 1,138 (293 fewer than last year). For control purposes 84 swabs were sent to the laboratory.

The number of positive specimens was 5 against 3 in 1956 and 15 in 1955. Typing revealed 2 of *mitis* type and 3 *atypical* (*Type VI*). The two *mitis* strains were proved by animal inoculation to be non-virulent. They were non-toxicogenic. The *Type VI* strains were non-virulent, as they always are. So that no virulent strain of *C. diphtheriae* was isolated in the laboratory in 1957. In 1956 one virulent strain was found, of *mitis* type.

The epidemic *gravis* type has now been absent for three years and the *intermedius* type for two years.

The table of types below is amended to contain this year's findings.

Year	Total No. of Strains	Gravis		Intermedius		Mitis		Atypical	
		No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
1948 ...	397	122	30.7	54	13.6	142	35.7	79	19.8
1949 ...	220	46	20.9	41	18.6	86	39.1	47	21.4
1950 ...	118	40	33.9	12	10.2	32	27.1	34	28.8
1951 ...	165	88	53.3	14	8.5	21	12.7	42	25.4
1952 ...	136	60	44.1	20	14.7	19	14.0	37	27.2
1953 ...	66	9	13.6	11	16.6	33	50.0	13	19.7
1954 ...	29	2	6.9	8	27.6	1	3.4	18	62.1
1955 ...	15	—	—	1	6.6	3	20.0	11	73.6
1956 ...	3	—	—	—	—	2	66.0	1	33.0
1957 ...	5	—	—	—	—	2	40.0	3	60.0

That no virulent strain of *C. diphtheriae* was isolated in Glasgow in 1957 (within the experience of this laboratory) is a matter for congratulation, and is no doubt largely attributable to the extensive and continuous immunisation carried out in Glasgow. Immunisation must have reduced the fully susceptible members of the community to such a low level that virulent diphtheria bacilli have difficulty in maintaining existence within the community, and a ratio between immune and susceptible members of the population must have been reached when infection tends to die out of its own accord. This quantitative ratio (in diphtheria, probably about 3 or 4 to 1) must be maintained and this can be done only by rigorously continuing prophylactic inoculation to keep the number of susceptibles in the population as low as possible. A strongly immunised community is the assurance against reappearance of diphtheria.

The table of case rates since 1943 includes the figures for 1957.

Cases of diphtheria per 100,000 of population and deaths per 1,000 cases.

			Case rate per 100,000	Case fatality rate per 1,000 cases	Number of deaths
1943	...	...	279	28	81
1944	...	...	226	26	62
1945	...	...	187	17	33
1946	...	...	135	25	37
1947	...	...	45.6	25.8	13
1948	...	...	25.8	28	8
1949	...	...	13.9	33	5
1950	...	...	7.8	—	—
1951	...	...	11.1	31	4
1952	...	...	7.3	80	7
1953	...	...	4.4	—	—
1954	...	...	0.9	100	1
1955	...	...	0.18	—	—
1956	...	...	0.092	—	—
1957	...	...	—	—	—

The natural history and epidemiology of diphtheria has been studied in the laboratory since 1932 and papers on this subject have been published by the writer. The range of predominance of types has moved from *mitis* to *intermedius* (1934-1937) and thence to *gravis*, which remained much in the ascendant from 1938 to 1947. From 1947 to 1949 the percentage of *gravis* strains diminished and *mitis* strains were temporarily predominant. Then, although the number of strains of *C. diphtheriae* isolated continued to fall the *gravis* type became predominant again in 1950-52 but began to diminish rapidly until it

disappeared at the end of 1954. The *gravis* strain has been responsible for the greatest number of deaths and was principally operative in the epidemic years 1940-41.

During this long survey of diphtheria 19,034 strains of the principal types of *C. diphtheriae* have been handled and the following table gives the average case mortalities caused by these types.

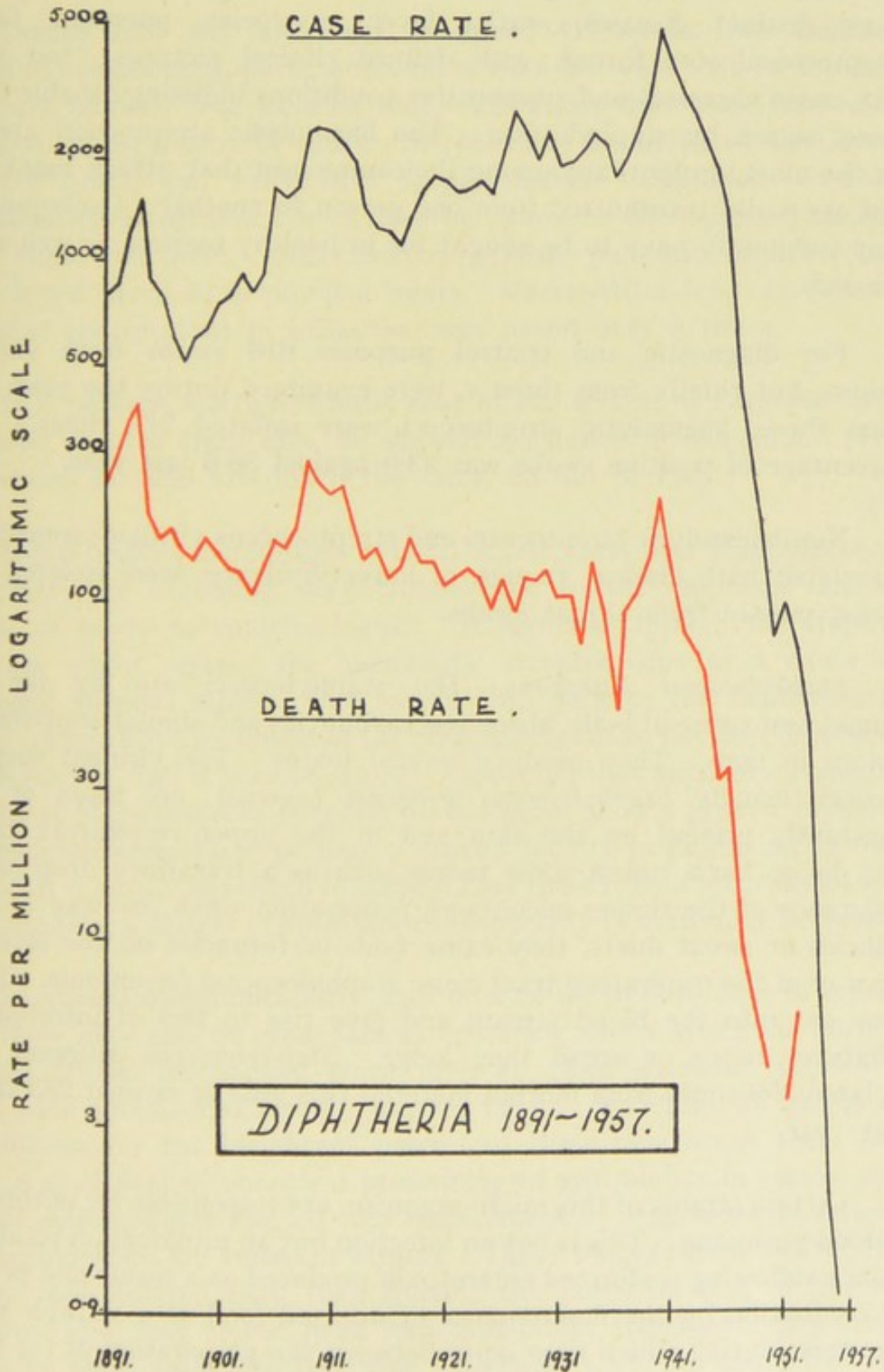
Glasgow figures	GRAVIS		INTERMEDIUS		MITIS	
	Cases	Case mortality per cent.	Cases	Case mortality per cent.	Cases	Case mortality per cent.
25 years	9,017	4.31	6,654	3.92	3,363	1.66

Much higher case fatality rates have been recorded by various authors for the *gravis* and *intermedius* strains, varying for the *gravis* type from 8 to over 13 per cent. and for the *intermedius* type from 7 to nearly 9 per cent. Fatality rates due to the *mitis* type have been constantly low (round about 2 per cent.) compared with those due to the *gravis* and *intermedius* types, but many observations have proved that on occasion the *mitis* type can cause very severe and fatal diphtheria. These comparisons show that for a quarter of a century, although diphtheria was a serious infectious disease in Glasgow causing many deaths, yet on the whole, the mortality rates were on the low side, and the case mortality in any year from all types was usually below the figure for *gravis* shown in the table. Indeed, the highest case fatality rate during the period only once exceeded 6 per cent. So on the whole, despite a high morbidity rate in some years in Glasgow, the city might have fared much worse than it has from diphtheria infections. From 1947 to 1957 during the gradual disappearance of the disease, the case mortality rates from the relatively few strains of *C. diphtheriae* isolated have been lower. From 540 *gravis* strains, 3.5 per cent.; from 232 *intermedius* strains, 1.7 per cent. and from 430 *mitis* strains, 0.93 per cent.

There is another rarer type of *C. diphtheriae* known as Type IV: a *gravis*-like type, of which only 219 strains have been isolated in the laboratory during the period under review. It has not been found since 1949. The average case mortality for this Type IV strain among the 219 persons infected with it was 6.6 per cent. Higher mortality rates have been recorded elsewhere. It has very fortunately been uncommon in Glasgow, for it is apt to be very virulent.

The graph here inserted, drawn to a logarithmic scale, shows the trends of the case rates and death rates from diphtheria in Glasgow

from 1891 to 1957, and shows well the sudden and deep falls in both incidence of and deaths from diphtheria which have taken place in recent years. There were no deaths from diphtheria in 1950, 1953 and during the last three years, 1955-1957.



Streptococcal Infections.—The streptococci cause a wide variety of diseases in man and animals. They may be the primary cause of disease, but have also a tendency to occur in mixed and secondary infections with other pathogenic bacteria. They generally cause suppurative lesions and through their toxins various complications of infection such as fever, nephritis, carditis, *et cetera*. Some streptococci cause distinct diseases, scarlet fever, erysipelas, puerperal fever, streptococcal sore throat, with defined clinical pictures: but they may cause abscesses and suppurative conditions indistinguishable from those caused by staphylococci. The haemolytic streptococci are by far the most virulent, are among the commonest that attack mankind, and are easily transmitted from one person to another. Consequently they frequently have to be sought for in healthy carriers as well as in the sick.

For diagnostic and control purposes 616 swabs from various lesions, but chiefly from throats, were examined during the year, and from these, haemolytic streptococci were isolated 217 times. The percentage of positive swabs was 33·6 against 38·6 last year.

Non-haemolytic streptococci and streptococcus viridans, sometimes associated with disease, though of lower virulence, were isolated 344 times, mostly from throat swabs.

Staphylococcal Infections.—The staphylococci are by far the commonest cause of boils, abscesses, carbuncles and similar suppurative lesions in man. They produce several toxins. The virulent staphylococci, usually *Staphylococcus pyogenes (aureus)*, are more or less constantly present on the skin and in the upper respiratory tract, but do no harm unless some factor such as a transitory drop in the resistance of the tissues encourages penetration when, by way of hair follicles or sweat ducts, they cause boils or furuncles on the skin, or by way of the respiratory tract cause staphylococcal pneumonia. They may get into the blood stream and give rise to foci of infection in whatever tissue or organ they lodge. *Staphylococcus pyogenes* was isolated 399 times from morbid material this year as against 263 times last year.

Certain strains of this micro-organism are responsible for outbreaks of food-poisoning. This is not an infection but an intoxication resulting from swallowing preformed enterotoxin produced as a result of a period of incubation by the maintenance of infected food at a suitable temperature, during which time lapse between the preparation of the food

and its consumption, the multiplying staphylococci manufacture the injurious toxin. Such attacks of food-poisoning are fairly common but the upset is fortunately usually transient. The contamination of the food may be by an infected handler or indirectly by the use of contaminated ingredients in prepared dishes (see under Food Poisoning).

During 1957 the laboratory examined 417 swabs from infected ears and neighbouring parts, a few more than last year. *Staphylococcus pyogenes* (*aureus*) was isolated alone 122 times and associated with other micro-organisms 23 times. *Streptococcus haemolyticus* was found alone 6 times, and twice with *Staph. aureus*. *Coliforms*, *Proteus*, *Pseudomonas aeruginosa*, one or the other, alone or with other organisms, were found 146 times. Other micro-organisms including diphtheroids, were found much as in previous years. *Haemophilus* (*sp.*), at times a frequent concomitant in influenza, was found only 3 times.

It is perhaps worthy of note, that of 123 strains of *Staphylococcus pyogenes* isolated from ears, 56 showed resistance to penicillin. (The proportion in 1956 was much the same, 58 out of 124).

It has become increasingly evident of late years that Staphylococcal Infections are becoming very troublesome to the clinicians and a source of worry to epidemiologists. It seems as though the staphylococcus might replace the haemolytic streptococcus as a cause of epidemic hospital sepsis. One reason, and perhaps the main reason, is the comparative readiness of the staphylococcus to develop resistance to antibiotics, and it may be strongly suspected that antibiotic resistant strains of *Staphylococcus pyogenes* on the whole show a greater capacity for epidemic spread and perhaps a greater facility in producing lesions. In fact it is hardly too much to suggest that these resistant staphylococci are becoming a danger in hospitals and especially in maternity hospitals.

Increased communicability may be a factor in outbreaks of sepsis, but there may also be other factors operating which affect the normal human defence mechanism, since, after all, *Staphylococcus pyogenes* is very wide spread and mostly does no harm. No doubt in excess of enthusiasm for the beneficent powers of these new drugs there has been a good deal of uncritical prescribing of anti-biotics in season and out of season, which has led to a replacement of drug-sensitive strains of staphylococci by resistant strains. These tougher members of the group disseminated may then inhabit the noses or skin of normal persons who may never have had anti-biotic treatment, and from them be distributed into receptive soil where they can cause trouble.

Certain combinations of antibiotics especially should be used with great caution, and all antibiotics should be used with critical discrimination.

Apropos of this new light on the evil powers of *Staphylococcus pyogenes* it may be pertinent to note that in 1956 out of 196 strains of *Staphylococcus pyogenes* (*aureus*) isolated in the laboratory from various sources, 46 per cent. showed resistance to penicillin when examined for sensitivity, and in 1957, 54.6 per cent. of 207 strains.

Vincent's Infections.—Vincent's organisms sometimes cause an ulceromembranous condition of the throat or inflammation of the mucous membranes of the mouth. The affection is fairly prevalent but usually mild, and it may escape notice. Swabs from throat or mouth to the number of 98 were examined during the year for Vincent's spirilla and fusiform bacilli; only 8 proved positive.

Sensitivity Tests.—Tests of the sensitivity of various microorganisms to several antibiotics were asked for as usual, and 1,487 tests were made.

Glandular Fever.—The Paul Bunnell test, on blood from persons suspected of suffering from Glandular Fever (Infectious mononucleosis) was carried out 49 times. Several blood films were examined for the typical abnormal mononuclear white cells found in this disease.

Enteric Fever.—There was a rise in the number of specimens from persons suspected of suffering from one of the enteric fevers, 399 against 208 in 1956. The number of repeat and contact specimens for control purposes numbered 68. Of the suspects, 13 proved positive, all for *S. paratyphi-B*, and from the controls the same organism was isolated 9 times.

S. typhi was not isolated from a new case in this laboratory during 1957, but was recovered 3 times from old cases.

As usual during the year a number of specimens of faeces, urine and blood from workmen employed around water-works were examined to exclude the possibility of contamination of the water supply, 15 in all from 5 persons. All tests proved negative for evidence of enteric infection.

The strains of *S. paratyphi-B* belonged to various bacteriophage types and were classified by the Enteric Reference Laboratory. There

were 6 of the "Dundee" type, 3 of the "Taunton" type, 1 of the "Beccles" type, two were untypeable and the remaining culture belonged to type I.

Neither *S. typhi* nor *S. paratyphi-B* was isolated from any specimen sent by outside authorities.

Dysentery.—The fall in the incidence of dysentery in the City noted in last year's report continued in 1957, according to the experience of the laboratory. There was a fall in both Sonne and Flexner dysentery. The total number of isolations of Dysentery bacilli from new cases was 2,020 against 2,697 in 1956, a fall of about 25 per cent. The figure is less than half the number isolated in 1955, which was 4,247. (The maximum number ever isolated in a year by the laboratory was 4,278 in 1954).

Of this total number 1,830 (90.6 per cent.) were *Sh. sonnei* and 190 *Sh. flexneri*. The percentage of Sonne strains in the total was slightly higher than last year, when it was 88.5 per cent. There was a numerical decrease in Sonne isolations of 558 and in Flexner isolations of 119.

The largest number of new cases occurred in the months March to June inclusive. The first half of the year yielded more than twice as many as the second half, this variation being almost entirely confined to Sonne dysentery, there being little difference in the half-yearly isolations of *Sh. flexneri*. Calculated percentages show that over the whole year Sonne dysentery decreased by 23.3 per cent. and Flexner dysentery by 38.5 per cent.

A large number of specimens were as usual examined for purposes of control. From these dysentery bacilli were isolated 1,144 times. Altogether 12,113 specimens were examined from suspected cases and 8,168 for control, making a grand total of 20,281 which is 4,564 less than last year. Dysentery bacilli were isolated in all 3,164 times against 4,198 times last year. Many specimens were submitted as a result of outbreaks of Sonne dysentery in a children's hospital and in a mental hospital. None of the rarer types of dysentery bacilli were isolated during the year.

The diminished incidence of dysentery in Glasgow showed suddenly in July by laboratory findings, only 98 isolations being made then, compared with 273 in June. The following three months yielded relatively low figures, but in November there was a sudden rise again

though not to the heights of the earlier months of the year. There is a possibility that the impact of the recent epidemic of influenza obscured dysentery to some extent, especially as the latter disease is so mild. A good deal of dysentery may have been passed by in the anxious atmosphere created by influenza.

However, there appeared to be some recession in dysentery all over Britain, but the future trend will manifest itself and reveal the true state of affairs. There are peaks in the incidence of dysentery in this island and a fall is not unexpected.

The following table has been amended to record the findings in 1957.

Year	Sonne	Flexner	Newcastle	Schmitz	Total
1946 ...	111	109	49	—	269
1947 ...	66	18	21	—	105
1948 ...	434	383	3	—	820
1949 ...	501	373	1	1	826
1950 ...	1,865	105	—	—	1,970
1951 ...	949	40	—	—	989
1952 ...	1,779	11	3	—	1,793
1953 ...	1,694	272	—	—	1,966
1954 ...	2,524	1,754	—	—	4,278
1955 ...	2,763	1,484	—	—	4,247
1956 ...	2,388	309	—	—	2,697
1957 ...	1,830	190	—	—	2,020

From Stirlingshire 342 specimens were examined for bacillary dysentery.

Dysentery (amoebic).—Forty-seven specimens of faeces were examined for *Entamoeba histolytica*, all with negative results.

From Stirlingshire, 14 specimens were examined but *E. histolytica* was never found.

Giardia dysentery.—This flagellate is thought to be sometimes associated with diarrhoea. Its presence was reported twice in Glasgow specimens and twice in Stirlingshire specimens.

Food-Poisoning and Foodstuffs.—There were 3,438 specimens of excreta examined from persons suspected of suffering from Salmonella food-poisoning, from suspected carriers, from contacts and for control purposes; 1,470 fewer than last year. From these rather more Salmonellae were isolated, 229 against 201 last year, but only 108

were from new cases, compared with 132 last year. Thus there was again a decrease in the incidence of Salmonellae infections in the City measured by laboratory records.

There were 32 samples of suspected food brought for examination. These included meat pies, spam, gammon, tongue, chicken, mutton, beef, soup, canned salmon, chicken mould, cheese, eggs and other foods, but Salmonellae were isolated from none, and no sample of contaminated food could be definitely associated with any patient from whose faeces one of the food-poisoning salmonellae was isolated. This is not unusual because of latency in development of symptoms (18-36 hours), so that by the time the incident is reported it is difficult to determine the food responsible and when there is reasonable suspicion of some article of diet, none is available for examination.

But most of these foods, with in addition dried milk, cake, ice-cream, biscuits, butter, lemonade were also examined for *Staphylococcus pyogenes*, some types of which form an enterotoxin under favourable conditions which causes transient gastrointestinal upset, and this micro-organism was isolated in large numbers from brisket, gammon, tongue, chicken, soup, canned salmon and cake, and was presumably the cause of illnesses complained of. *Staphylococcus pyogenes (aureus)* is wide spread and is common in the nose and on the skin, besides being often the cause of septic fingers, and frequent contamination of food is to be expected. Where conditions allow the organism to multiply before the food is consumed, vomiting and abdominal discomfort may well result at times, if the type of staphylococcus present is able to produce an enterotoxin. It was isolated 8 times from foods.

Clostridium welchii, some strains of which cause the symptoms of food-poisoning was also frequently sought for. It was isolated once from a sample of brisket and from the excreta of 2 patients out of 34 examined.

Of the 108 persons from whose excreta salmonellae of food-poisoning type were isolated, 92 yielded *S.typhi-murium*, the commonest cause of this sort of illness. *S.thompson*, frequently in the past found in imported egg products was again not isolated from a patient this year and *S.enteritidis* once only. *S.newport* was found in 4 people and *S.saint-paul* in five.

From Stirlingshire, 44 samples of excreta from persons taken ill whilst on an outing were received. From 32 of these *S.typhi-murium* was isolated primarily. This organism was the obvious cause of the outbreak.

The Glasgow findings for 1957 are added to the following table. *Salmonella give* has not been isolated in the laboratory before.

	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948
<i>S. typhi-murium</i> ...	92	123	122	87	209	139	97	80	73	16
<i>S. enteritidis</i> ...	1	2	10	4	13	7	53	12	—	4
<i>S. newport</i> ...	4	—	8	—	—	2	9	—	1	2
<i>S. thompson</i> ...	—	—	25	—	3	6	4	5	1	—
<i>S. potsdam</i> ...	1	—	—	—	—	—	4	—	—	—
<i>S. saint-paul</i> ...	5	—	—	—	—	—	2	—	—	—
<i>S. montevideo</i> ...	—	—	—	—	—	—	1	—	1	1
<i>S. bovis morbificans</i> ...	1	1	1	—	—	1	1	—	1	—
<i>S. georgia</i> ...	—	—	—	—	—	—	1	—	—	—
<i>S. oregon</i> ...	—	—	—	—	1	—	1	—	—	—
<i>S. minnesota</i> ...	—	—	—	—	—	1	1	—	—	—
<i>S. newington</i> ...	—	—	—	—	—	—	—	1	—	—
<i>S. san-diego</i> ...	—	1	—	—	—	—	—	1	—	—
<i>S. senftenberg</i> ...	1	—	—	—	—	—	—	1	—	—
<i>S. bredeney</i> ...	—	—	—	—	—	1	—	—	—	—
<i>S. stanleyville</i> ...	—	—	—	—	—	1	—	—	—	—
<i>S. virchow</i> ...	—	—	—	—	—	1	—	—	—	—
<i>S. anatum</i> ...	—	1	—	—	1	—	—	—	—	—
<i>S. stanley</i> ...	2	—	—	—	17	—	—	—	—	—
<i>S. waycross</i> ...	—	1	—	1	—	—	—	—	—	—
<i>S. brancaster</i> ...	—	—	—	1	—	—	—	—	—	—
<i>S. johannesburg</i> ...	—	—	—	1	—	—	—	—	—	—
<i>S. cholerae suis</i> (var <i>Kunzendorf</i>)	—	—	—	1	—	1	—	—	—	—
<i>S. derby</i> ...	—	—	1	—	—	—	—	—	—	—
<i>S. muenchen</i> ...	—	—	1	—	—	—	—	—	—	—
<i>S. heidelberg</i> ...	—	2	1	—	—	—	—	—	—	—
<i>S. oranienburg</i> ...	—	—	1	—	—	—	—	—	—	—
<i>S. litchfield</i> ...	—	1	—	—	—	—	—	—	—	—
<i>S. unidentifiable</i> ...	—	—	—	—	2	—	—	—	—	—
<i>S. (new salmonella</i> <i>unnamed)</i> ...	—	—	—	1	1	—	—	—	—	—
<i>S. give</i> ...	1	—	—	—	—	—	—	—	—	—
	108	132	170	96	247	160	174	100	77	23

Shellfish.—Sixteen samples of shellfish including 8 batches of mussels (1 cooked and 7 uncooked), 7 batches of whelks (1 cooked and 6 uncooked) and one batch of oysters were examined. Altogether 176 shellfish were examined.

By a new system of grading shellfish can be classified as follows:—

Grade I.—where the fish contain not more than 5 faecal *B.coli* per ml. of tissue.

Grade II.—6-15 per ml.

Grade III.—more than 15 per ml.

By these standards used comparatively, Grade I is as clean as raw shellfish can be expected to be. Grade II is the grade of doubtful purity and Grade III shows evidence of pollution which can often be traced to the shellfish bed.

Among all these shellfish examined, most could be classified as Grade I, but there was one batch of mussels and one batch of whelks (both uncooked) which fell into Grade II, and one batch of uncooked mussels frankly polluted and thus classified as Group III.

Venereal Diseases.—The tests commonly used for Syphilis in the laboratory are the Wassermann, Kahn and Laughlen tests. The last is a screening test used to eliminate quickly all negative samples of blood. Any specimen which when tested by the Laughlen method shows the least deviation from the normal is re-examined by the Wassermann or Kahn test or frequently by both. During the year 20,634 of these tests were performed. In addition, 2,364 tests were made to investigate gonococcal infection: 137 more than in 1956. The total of these tests for Syphilis and Gonorrhoea numbered 22,998 carried out on 20,919 specimens.

Of the 7,640 Wassermann tests, 5,957 were for diagnostic purposes, 1,581 were made to examine results of treatment of known infections and 102 to elucidate anomalous findings by the Laughlen test. To supplement the Wassermann test 1,977 specimens were also examined by Kahn's method.

The Laughlen test was used as a routine procedure to exclude the possibility of syphilitic infection in 8,358 women as an antenatal investigation, and to investigate 2,659 patients attending V.D. clinics for conditions presumed to be probably non-syphilitic.

To provide additional information in cases of suspected syphilis of the central nervous system and to examine progress under treatment, 71 samples of cerebro-spinal fluid were tested by Lange's Colloidal Gold method and in 24 of these samples the total protein content was estimated.

For an outside authority, County of Stirling, 3,370 tests were made: 1,745 Wassermann tests, 1,482 Kahn tests and 143 for gonorrhoeal infection by the complement fixation test.

Tests for infection by *N.gonorrhoeae* include microscopical examination of exudates, culture, and the complement fixation test upon the patient's blood serum.

Cultures are made from swabs bearing materials from suspected sources sent to the laboratory in the Glasgow transport medium which we supply and which ensures viability of these sensitive microorganisms for some days. Samples are sent chiefly from the city V.D. clinics for women, but some come from other sources including a few from clinics for men. The number of swabs examined by culture methods in 1957 was 1,666 from 509 persons (rather more than last year). From these the gonococcus was isolated 162 times from 102 persons.

Smears from exudates examined numbered 444 of which 43 were reported positive. In addition, the gonococcal complement fixation test was carried out on 254 samples of blood which yielded 42 positives. This test was also done on 143 samples of blood from Stirlingshire with 22 positive findings.

Trichomoniasis.—*Trichomonas vaginitis*, a recognised inflammatory condition due to infection with the flagellate (*Trichomonas vaginalis*) has received more attention of late years. The number of specimens searched for this parasite during the year was 1,801 (148 more than last year). Among these the flagellate was seen in 260 (14.4 per cent.).

It has recently been suggested that cultivation of *Trichomonas* often reveals the parasite where microscopical examination has failed because of the small number present in the specimen. Late in the year the laboratory began to use the culture method. Early results seem promising.

Ophthalmia neonatorum.—During the year 162 samples of exudates from the eyes of 66 children were examined for gonococci. Eighteen of these from 14 babies were examined by culture methods but only 3 babies proved to have gonococcal ophthalmia.

For diagnosis and clearance under treatment, 32 films and cultures were examined from these 3 children.

From the eyes of several of the other children *Staphylococcus pyogenes (aureus)* was isolated. Meningococcal infection of the eyes was not detected this year.

PUBLIC HEALTH—GENERAL CONTROL

Antenatal—Rh tests and Blood Groupings.—The number of examinations of blood for determining the Rhesus classification of pregnant women as well as their blood groups was larger than last year. There were 10,196 examinations for the Rh factor, 402 more than in 1956. Of these 1,813 were sent by 147 practitioners and the rest came mainly from the antenatal clinics, though there were a few from other sources. Out of the total 1,732 (17·2 per cent.) proved to be Rh negative (last year 17·7 per cent.).

Further investigation of these Rh negative bloods by the Blood Transfusion Service showed 76 of the women concerned to be sensitised to the Rh antigen, including 11 who were known to be sensitised in earlier pregnancies.

Blood grouping was also done on 10,196 samples of blood (as against 9,412 last year).

Tuberculosis.—The number of samples of sputum received for examination microscopically for *M. tuberculosis* was 7,911, of which 371 were positive. The positive specimens comprise 236 from new cases and 135 from old cases (according to such information as was available to the laboratory). The number of samples submitted to the laboratory was 579 less than last year, and the percentage of positive specimens smaller. After the close of the mass radiography campaign early in the year, there was a large increase (up to more than 2,000 in April and over 1,000 in May) in specimens examined, but otherwise the monthly totals have diminished. This is accounted for by the stricter control exercised as a result of the recent intensive attack on the disease, and to more sharing of bacteriological work upon it by other laboratories.

As in previous years many samples of urine, cerebro-spinal fluid, pleural exudates, pus and other morbid material were examined microscopically, biologically and by culture. Microscopic examinations numbered 61, biological examinations by animal inoculation 134, and cultural tests 96, making a total of 291 (showing a decrease of 252 from last year). The decrease may be attributed to the reasons mentioned above.

From Stirlingshire an over-all increase is to be recorded. Microscopical examinations numbered 5, biological examinations 247 and examinations by culture 920. (There were routinely more microscopical

examinations than the small number listed, because many specimens were examined by the microscope before culture or inoculation into animals). The total amounts to 1,172 against 769 last year.

As in previous years a miscellany of specimens were examined as part of the control of B.C.G. vaccination. No virulent tubercle bacilli were isolated from these specimens.

Milk Supply. Tuberculosis.—The total number of samples of milk tested biologically (i.e. by animal inoculation) for tubercle in 1957 amounted to 577 (24 more than last year). For the City of Glasgow were examined thus 140 designated milks, 144 samples of milk supplied to schools and 14 supplied to hospitals. In addition to these many were examined for outside authorities: 70 from Clydebank, 75 from Stirlingshire and 134 from Dumfries-shire, Kirkcudbrightshire and Wigtownshire.

None of the milk examined was found to be infected with *M.tuberculosis*.

Milk Supply. Bacterial Content.—Examination of the City's milk supply continued routinely, and the results this year showed some improvement even on the high standard hitherto maintained. In all 2,047 samples were sent for investigation, 2,010 to find whether they complied with the regulations governing the sale of designated milk, 14 for compliance with the standard set by the department for milk produced in the city or coming into the city for processing, and 23 miscellaneous milks for advisory purposes. Of the total 1,944 (95 per cent.) proved satisfactory, 1·6 per cent. more than last year.

The following table shows detailed results.

	Number of samples	No. complying with standards	Per cent. complying	
			in 1957	in 1956
<i>Hospital Supplies—</i>				
Raw (Certified; T.T.) ...	106	96	90·6	89·1
T.T. (Past.); Pasteurised ...	241	226	93·7	85·4
<i>Public Supplies—</i>				
Raw (Certified; T.T.) ...	391	345	88·2	90·0
T.T. (Past.); Pasteurised ...	1,011	988	97·7	97·1
<i>School Supplies—</i>				
Pasteurised	261	254	97·3	94·0
<i>Undesignated milk produced or processed in city</i>				
	14	14	100	100·0
<i>Miscellaneous</i>				
	23	21	91·3	91·6

Bottles, cans, closures.—The results of examinations of these receptacles and bottle closures were not as satisfactory as they were last year.

Of 191 washed milk bottles 162 (84·8 per cent.) conformed to the standard adopted compared with 92·7 per cent. last year. Of 74 miscellaneous bottles, used for beverages other than milk, only 57 (77·0 per cent.) proved to have been satisfactorily cleansed, compared with 81·8 per cent. in 1956.

Two samples of bottle closures were examined, one was satisfactory, but the other gave a high bacterial count.

Milk cans, hitherto tested for special purposes only, were examined from all the creameries in the city, and 54 (55·7 per cent.) of the 97 cans investigated were found to be in a satisfactory condition of bacteriological cleanliness, 14 (14·4 per cent.) were only fairly satisfactory and 29 (29·9 per cent.) were unsatisfactory.

Ice Cream.—The scope of examination of ice-cream was considerably widened during 1957 to include samples from itinerant vehicles operating on summer Sunday afternoons and, towards the end of the year, from restaurants serving ice-cream as a sweet. The samples comparable with the more limited numbers routinely taken in past years showed an improvement, and were in general of a higher standard than the other samples. This table summarises the results.

	Number of Samples	Number containing coliforms in 1/100ml.	Bacterial counts				
			0 to 30,000	30,000 to 100,000	100,000 to 200,000	200,000 to 1 million	over a million
Routine 1957 ...	120	6 (5%)	111 (92·5%)	7 (5·83%)	1 (0·83%)	1 (0·83%)	—
Routine 1956 ...	139	9 (6·5%)	117 (84·2%)	17 (12·2%)	3 (2·2%)	2 (1·4%)	—
Vehicles on Sundays 1957	69	31 (44·9%)	40 (58·0%)	9 (13·0%)	5 (7·2%)	7 (10·1%)	8 (11·6%)
Restaurants ...	30	5 (16·7%)	21 (70·0%)	3 (10·0%)	1 (3·3%)	5 (16·7%)	—

Imitation cream.—Ten samples were taken from a factory manufacturing imitation cream and all proved very satisfactory. Two products on sale at a grocer's shop were also satisfactory, but of 14 samples taken from baker's premises, only 8 conformed to the standard set by the department (that for T.T. milk: bacterial count not above 200,000 per ml. and absence of coliform from 1/100 ml.).

Swabs and rinses from equipment.—Several were again examined in the course of investigation into unsatisfactory milk samples.

Cell counts.—Cell counts were made on 32 samples of milk during the course of a special enquiry. This was relative to milk from Renfrewshire brought into Glasgow and was for comparative purposes with Renfrewshire findings.

City Water Supply.—Seven hundred and three samples of water from inlets, reservoirs, supply mains and other sources, including 22 from ships' tanks, were examined for bacterial content, especially for micro-organisms of intestinal origin which act as pointers to possible contamination with pathogens. The samples of drinking water supplied to the public continued to be satisfactory and the recognised high standard of the water supply was fully maintained.

Supply	No. of Samples	Average bacterial count per ml. at 37°C.	Average bacterial count per ml. at 22°C.	Typical <i>B. coli</i>		Faecal streptococci
				Present in 100 ml. Absent from 50 ml.	Present in 50 ml. Absent from 10 ml.	Present in 100 ml. Absent from 50 ml.
Loch Katrine	204	3	30	4	1	—
Gorbals ...	48	14	23	3	3	—

Swimming Baths.—Three hundred and thirty-eight samples of water from swimming pools were examined, 255 from public swimming pools, 61 from school ponds and 22 from private ponds. The bacterial count was less than 10 per ml. in 231 of the samples from public swimming pools, in 55 from school ponds and in all the samples from private ponds. Typical *B. coli* were found on only 3 occasions, in the public pools water. The hygienic condition of the swimming pools water was well maintained.

Foodstuffs.—There was again a large increase in 1957 in the number of samples of foods examined with regard to their fitness for distribution and consumption, due to the continuation and extension of the work on imported egg products. The total reported upon was 3,456 compared with 1,926 last year. Of this total 3,374 were egg products—dried egg albumen, frozen egg, etc.—against 1,815 last year.

The remaining 82 samples comprised canned foods of various sorts and other foods. Some were examined because of possible contamination due to water damage of ships' cargoes. Canned chicken, corned beef, luncheon meat, haggis, chicken broth, lambs' tongues, ravioli; canned salmon and tuna fish, prawns; canned grapes, peaches,

pineapple juice, pears, condensed milk, were among the tinned products, and there were also butter, lard, pepper, tea, potted meat, marshmallows, raisins, shelled walnuts and whole shell eggs. Most of the canned foods were, as usual, bacteriologically sound, with very low bacterial content. Some samples of pepper yielded high bacterial counts and contained non-faecal coliforms. A sample of tea and a sample of lard contained typical *B.coli*. A sample of butter yielded *Staphylococcus aureus*. A sample of lard had a high bacterial content. No pathogens were found in the shell eggs.

Preservation of foods in sealed containers (canning) has become a great industry, and obviously if all micro-organisms in the food are destroyed in processing and the ingress of others prevented, canned foods should keep indefinitely—as far as microbic spoilage is concerned ; though chemical changes may take place. Very high sanitary standards are reached nowadays, and on the whole, properly inspected canned foods after the elimination of damaged or blown cans, are of high quality and perfectly safe, though commercially sound canned products are not invariably sterile. “ Commercially sterile ” canned foods which have been processed under the careful storage conditions obtaining to-day, will not spoil and will not endanger the health of the consumer. Above all, the processing of the food should have been adequate for the destruction of *Clostridium botulinum* spores, and organisms of lower heat-resistance should also have been eliminated from all heat-processed products.

The bacteriological examination of consignments of egg products shipped chiefly from China and Australia which began in 1955 and was continued on an increased scale last year, reached new proportions in 1957. These eggs entering the Port as frozen whole egg or yolk or white, or dried egg albumen, are used in large quantities by wholesale and retail bakers and confectioners in making cakes, fancy pastries, buns and other similar comestibles. In the past many of these products were found to harbour micro-organisms of the Salmonella group capable of causing symptoms of food-poisoning in consumers of the manufactured foods in which they are used, if the bacteria survive the baking temperatures ; or are incorporated in unheated glazes, creams or fillings. Heat treatment of some of these products, dried egg albumen in particular (the process was described in last year's report) has practically eliminated the risk of infection, by killing any salmonellae present before the egg albumen is released for use. The method has proved very efficacious with egg albumen “ crystals ” or “ scales,” and is in continuous use.

Among 723 samples of dried egg albumen no salmonellae were isolated from 615, which had been heat-treated. From the remainder, before heat treatment, *S.potsdam* and *S.thompson* were each recovered once, which represents only about 2 per cent. infected, much less than previously, owing probably to improved methods of collecting and preliminary processing.

From 2,429 samples of frozen whole egg, which cannot be treated by the same process and whose wholesomeness depends chiefly on good hygienic production, various salmonellae were isolated, from 55 samples. *S.typhi-murium* was found 37 times, *S.cholerae suis* 11, *S.meleagridis* 5, *S.adelaide* once and *S.orion* once.

Also from this product *Staphylococcus aureus* was isolated 34 times.

From 215 samples of frozen egg whites no salmonellae were recovered, and 6 samples of glycerinated egg yolk and one of liquid whole egg also proved negative for salmonellae.

The 55 isolations from frozen whole egg represent a slightly higher percentage than last year, when however, only 375 samples were sent for examination.

The predominant salmonella found this year was *S.typhi-murium* which was also commonest in salmonella infections among the community, as it has been for some years.

The following *Salmonella* types have been isolated from egg products during the past three years. Out of 328 isolations, 203 were of *S.thompson* and 52, *S.typhi-murium*.

<i>S. thompson</i>	<i>S. cholerae suis</i> (var Kunzendorf)
<i>S. typhi-murium</i>	<i>S. bovis morbificans</i>
<i>S. newport</i>	<i>S. anatum</i>
<i>S. potsdam</i>	<i>S. sundsvall</i>
<i>S. aberdeen</i>	<i>S. adelaide</i>
<i>S. panama</i>	<i>S. orion</i>
<i>S. meleagridis</i>	

Anthrax.—Ten samples of hides and hair, 3 goatskins, 6 pigskins and one specimen of hog's hair, were examined biologically and by culture. None of these yielded *B.anthraxis*.

Plague.—Examinations were made of 108 rats collected from around the docks and harbour for evidence of infection with *B.pestis*. Results were all negative.

Yellow Fever.—The demand for yellow fever vaccine for the prophylactic vaccination of prospective travellers who might be exposed to infection was rather larger than last year and 4,420 doses were issued (4,305 in 1956). Over 1,800 of the total issued was used for the protection of ships' companies.

Insect Pests.—A few of these were brought to the laboratory for identification as in previous years. They included the familiar *Niptus hololeucus* (golden spider beetle), water beetles of the genus *Hydroporus*, some wood-boring beetles, the common silverfish, *Lepisma saccharina*, and some blue bottle larvae.

Worms.—Samples of faeces are often sent for examination for worms or their eggs. Sometimes worms or portions of worms are submitted for identification. Thirty-six specimens of excreta were received and infestation with tape-worms and threadworms confirmed in a few instances. The round worm *Ascaris* was found once.

Haematology.—Estimations of blood haemoglobin was carried out on 976 samples of blood from women attending antenatal clinics so that any anaemic state could be investigated. This service was begun in 1956 when 152 samples were examined.

In addition, full blood examinations were made on certain X-ray personnel to detect any falling off from the normal which might be due to exposure to radiation.

Some blood examinations were made for practitioners in the city. The full total of examinations was 996.

At various times a few blood films from practitioners' patients were scrutinised.

A few blood films were examined for evidence of malaria parasites, one showing benign tertian parasites.

Morbid histology.—The work under this heading referred to in last year's report, carried out in conjunction with the gynaecological department of the Western Infirmary, was continued during 1957 when a further 481 smears from gynaecological sources were differentially stained by Papanicolaou's method and scrutinised by a medical officer experienced in exfoliative cytology: the object being to search for the presence of tissue cells showing evidence of the possibility of very early malignant disease, so that treatment can be given in appropriate cases at the very earliest possible moment. The

total of smears stained and examined since the commencement of this service now amounts to 935. The work is continuing.

During 1957, positive results were obtained in 3 clinically unsuspected cases of carcinoma of the cervix; in 2 instances the histological picture indicated that malignant disease was clinically possible, and in a further 2 that it was clinically probable. Where there is doubt, the patients remain under close observation.

Bovine Brucellosis.—It was noted last year that the laboratory had agreed to help in some research conducted at the Royal (Dick) School of Veterinary Studies, University of Edinburgh, into the incidence of bovine brucellosis in Scotland by examination of milk and milk-inoculated guinea-pigs. During 1957 the laboratory transmitted 430 samples of milk and the blood and spleens of 380 guinea-pigs. This work is drawing to a close, though there are still materials from animals to be forwarded in due course. By the end of the year we had sent 457 samples of milk and 416 spleens and samples of blood from inoculated animals. The figures denoting this work do not appear in the tabular summary of work done in the laboratory.

Miscellaneous.—A good deal of work involving various examinations which may be classed under the general heading of clinical pathology, with or without accompanying bacteriology, was done as usual over the year. These include the general examinations of urine for albumen, blood, sugar, pus and other abnormal constituents. Many samples of urine were at the same time examined bacteriologically for micro-organisms other than tubercle bacilli, which might be causing trouble. Micro-organisms other than tubercle bacilli have to be sought for at times in various puncture fluids, i.e. from the chest, abdomen, joints, etc. Faeces are examined for blood and parasites: hair examined for the spores of ringworm fungi, and water sediments frequently examined microscopically. These and other supplementary tasks form part of the work of the laboratory.

HARTLEY S. CARTER,
Bacteriologist.

ORIGINAL INVESTIGATIONS.

Investigation of the hygienic condition of itinerant ice-cream vans, with bacteriological control, was started in December.

PUBLICATIONS.

William Heberden. H. S. Carter (1957) *Scottish Med. J.* 2 480.

TOTAL OF EXAMINATIONS FOR YEAR 1957.

CITY OF GLASGOW.		INFECTIOUS DISEASES.		Positive	Total
<i>Diphtheria and General Throat Infections—</i>					
Diphtheria	...	Suspects	...	4	1,138
		Control, etc.	...	5	84
		Typing	...		5
		Virulence Tests (biological)			5
		Toxigenicity Tests	...	—	5
Streptococcal Infections	...	Suspects and control	...	217	616
Vincent's Infections		Suspects	...	8	98
Staphylococcal Infections	...	...	...	—	399
<i>Gastro-intestinal Infections—</i>					
<i>Enteric Fever—</i>					
(Typhoid, ... paratyphoid)	...	Suspects	...	13	399
		Control, etc.	...	12	68
		Water Works employees		—	15
<i>Food Poisoning—</i>					
(Salmonellosis)	...	Suspects and control	...	229	3,438
		Foodstuffs	...	—	32
		Miscellaneous (mice, food container)	...	—	7
(Staphylococcal)	...	Suspects and control	...	—	5
		Foodstuffs	...	8	30
(Cl. welchii)	...	Suspects and control	...	2	34
		Foodstuffs	...	1	4
<i>Dysentery—</i>					
Bacillary	...	Suspects	...	2,020	12,113
		Control	...	1,144	8,168
Amoebic	...	...	...	—	47
Other forms—giardia, etc.	...	...	...	—	2
<i>Tuberculosis—</i>					
		Sputa	...	371	7,911
		Various specimens (micros. exams.)	...	—	61
		Various specimens (biological exams.)	...	—	134
		Various specimens (culture)	...	—	96
<i>Venereal Diseases—</i>					
Syphilis	...	Wassermann Test	...	—	7,640
		Kahn Test	...	—	1,977
		Laughlen Test	...	—	11,017
		Lange's Colloidal Gold Test	...	—	71
		Protein estimations	...	—	24
Gonorrhoea	...	Smears, cultures and complement fixation tests	...	—	2,364
		Ophthalmia neonatorum (smears and cultures)	...	12	162
		<i>Carry forward</i>	...	...	58,169

	<i>Brought forward</i>	...	...	...	58,169
OTHER EXAMINATIONS—					
Blood—Rh factor	...	...	...	...	10,196
Blood—A.B.O. grouping	...	...	...	...	10,196
Blood—haematology, cell counts, haemoglobin, etc.	...	...	...	...	996
Blood—cultures, Paul Bunnell tests, etc.	...	...	...	...	57
Body fluids (urine, etc.)	...	...	...	...	450
Exudates—various	...	...	...	...	451
Faeces for worms	...	...	...	...	36
Faeces for occult blood	...	...	...	...	27
Swabs for Trichomonas	...	...	...	...	1,801
Insects (identification)	...	...	...	...	6
Antibiotic sensitivity tests	...	...	...	...	1,487
Miscellaneous	...	...	...	...	14
Morbid Histology—gynaecological smears	...	...	...	...	481
GENERAL PUBLIC HEALTH—					
City Milk Supplies (bacterial counts)	...	...	...	...	1,700
Hospital Milk Supplies (bacterial counts)	...	...	...	...	347
Milk (biological tests)	...	...	...	...	298
Milk (cell count)	...	...	...	...	32
Swabs and rinses from apparatus	...	...	...	...	37
Swabs from milk cans	...	...	...	...	97
Bottle closures	...	...	...	...	2
Ice Cream	...	...	...	...	218
Foodstuffs—fitness for consumption :—					
Imitation cream, etc.	...	...	...	...	26
Miscellaneous foods—dried egg, etc.	...	...	...	...	470
Shellfish—mussels, whelks, oysters	...	...	...	...	176
Beer and mineral water bottles	...	...	...	...	74
Water supplies—routine	...	...	...	...	681
Water from swimming ponds	...	...	...	...	338
Food utensils—ice cream vans	...	...	...	...	10
Milk bottles (bacterial counts)	...	...	...	...	191
PORT HEALTH AUTHORITY—					
Anthrax (hides, skins, hair, etc.)	...	...	...	...	10
Plague (examination of rats)	...	...	...	...	107
Foodstuffs—fitness for consumption	...	...	...	...	3,010
Water—from ships and docks	...	...	...	...	22
OUTSIDE AUTHORITIES—					
<i>Stirlingshire—</i>					
Tuberculosis (sputum, etc.—micros.)	...	...	...	...	5
Tuberculosis (various specimens—biological)	...	...	...	...	247
Tuberculosis (various specimens—culture)	...	...	...	...	920
Tuberculosis (milk—biological examinations)	...	...	...	...	75
Gastro-intestinal infections	...	...	...	...	590
Throat infections	...	...	...	...	5
Venereal Diseases	...	...	...	...	3,370
Foodstuffs—fitness for consumption	...	...	...	...	1
Ice Cream	...	...	...	...	1
Other infections	...	...	...	...	38
Sensitivity Tests	...	...	...	...	8
					5,260
<i>Clydebank—</i>					
Milk (biological test for tuberculosis)	...	...	...	...	70
SOUTHERN TOWNS AND COUNTIES—					
<i>Dumfries, Wigtown and Kirkcudbright</i>					
Milk (biological test for tuberculosis)	...	...	...	...	134
					<u>97,677</u>

SECTION XII.

FOOD.

SUMMARY OF OPERATIONS UNDER THE FOOD AND DRUGS (SCOTLAND) ACT, 1956 ; THE MILK AND DAIRIES ACTS AND ALLIED ACTS, ORDERS AND REGULATIONS FOR THE YEAR ENDING 31ST DECEMBER, 1957.

The Food and Drugs (Scotland) Act, 1956.—Seventeen months have passed since this Act became operative in August, 1956. It will be remembered that the Act consolidates some former Acts, amends others and introduces some new measures.

Comment may be passed for the present on only three changes which have been made and which may be described as (1) an advantage ; (2) a doubtful improvement ; (3) a disadvantage.

- (1) The Advantage—With regard to formal sampling, in the former Act of 1928 legal proceedings could not be instituted after the expiration of twenty-eight days from the time of the purchase. Under the new Act, Section 41 (2), however, the period has been extended to two months and may, if the Court is satisfied it is impracticable to take proceedings at an earlier date, be extended for a longer period. This is a distinct advantage—it allows more time to the analyst to make his analysis and to make his report, more time to the official to prepare the case for court, and more time to the prosecutor to carry out his duties.
- (2) The Doubtful Improvement has been introduced in Section 45. Briefly, where a person charged with a contravention of this Act or of any regulation or order made thereunder proves to the satisfaction of the Court that he has used all due diligence to secure that the provision was complied with and that the contravention was due to the act or default of some other person, the first-mentioned person shall be acquitted of the contravention and the other person may be charged and convicted.
- (3) The Disadvantage is contained in Section 30 (4). Briefly this section states that where a sample of a prepacked food, drug or substance procured for analysis bears the name and address of the manufacturer or the packer (not being a person to whom one part of the sample is required to be

given under this section) on the wrapper or container and is within the United Kingdom, then the officer *shall* within three days of procuring the sample send that person a notice informing him that a sample has been procured and from whom and where the sample was taken.

During the year well over 1,000 such notices have been sent by this Section and as far as can be ascertained to no apparent advantage to anyone. As far as Glasgow is concerned, it would appear to be a very considerable waste of time which could be put to a much more useful purpose.

New Legislation since the Passing of the 1956 Act.—The Food Standards (Butter and Margarine) Scotland Regulations, 1956, re-enacted provisions of the 1928 Act.

The Labelling of Food (Amendment) (Scotland) Regulations, 1956, provided for the marking of margarine and margarine cheese.

The Flour (Composition) (Scotland) Regulations, 1956, laid down provisions as to the composition of flour.

Difficulties were experienced by millers in the introduction of creta praeparata into flour. Creta praeparata is heavier than flour and consequently it was very difficult to add not less than 235 milligrammes and not more than 390 milligrammes per 100 grammes of flour or 2 ozs. to 128 lbs. as required by the Regulations. After four months of exhaustive experiment a successful method was perfected.

The Mineral Oil in Food (Amendment) (Scotland) Regulations, 1956, amended certain definitions.

The Food Standards (Curry Powder) (Scotland) Amendment Regulations, 1956, increased the limit of lead in Curry Powder from 10 to 20 parts per million.

The Food Standards (Tomato Ketchup) (Scotland) Amendment Regulations, 1956, reduced the limit of copper in Tomato Ketchup from 50 to 20 parts per million.

The Colouring Matter in Food (Scotland) Regulations, 1957—these provisions do not come into operation until 1958.

The following reports by Food Standard Committees and other bodies were issued during the year :—

Proposed Regulations on Antioxidants in Food.
Retail Names of Fish.
Colouring Matter in Food.
Ice Cream.
Fluorine in Food.

Food Sampling.—During the year a total of 5,098 of 166 varieties of foodstuffs were submitted to the City Analyst for examination, 1,339 being formal and 3,759 informal samples. Forty-nine (3·65 per cent.) of the former and 118 (3·14 per cent.) of the latter were found to be adulterated. The corresponding figures of adulterated samples last year were 46 (3·51 per cent.) formal and 110 (2·88 per cent.) informal. The number of cases in which proceedings were taken increased from 34 to 37. Thirty-seven convictions were obtained and penalties amounting to £161 compared with £130 in 1956 were imposed.

As in previous years Court proceedings instituted during the year against butchers greatly outnumbered those taken against other traders. Of the thirty-four cases, twenty related to preservative in mince during the proscribed period, and fourteen to sausage and mince containing excess of preservative.

Of the other three cases, only one was in connection with milk. Milk delivered to a city creamery was found to be deficient in milk fat to the extent of 19 per cent. A conviction was obtained and the respondent fined £5. The other two cases concerned the sale of diluted whisky. In one the person charged took advantage of Section 45 and consequently the case against him was *deserted simpliciter* and the charge hand of the public house was charged and convicted. He was fined £5. In the second case the person charged failed to satisfy the court that due diligence had been exercised in terms of Section 45 when the case went to proof. The alleged defaulter was therefore acquitted. The licensee (the owner) was found guilty and fined £5.

ABSTRACT OF TOTAL SAMPLES EXAMINED DURING 1957.

Article.	Informal.		Statutory.		Percentage adulterated.		Percentage of Samples taken in each Group to Total	
	No. Taken	No. Non-Gen.	No. Taken	No. Non-Gen.	Infor. %	Stat. %	Infor. %	Stat. %
Milk	2,614	25	868	5	0·96	0·58	69·52	64·82
Milk Products (Butter, Cheese, etc.)	77	1	70	1	1·30	1·43	2·01	5·23
Meat and Meat Products	191	39	181	40	20·42	22·10	5·05	13·52
Cereals	81	1	36	—	1·23	—	2·39	2·69
Spirituous Liquors	23	—	44	2	—	4·54	0·61	3·29
Drugs	129	4	8	—	3·10	—	3·40	0·59
Flavourings and Condiments	151	4	31	—	2·65	—	4·01	2·31
Ice Cream	161	37	1	1	22·98	100·00	4·22	0·08
Miscellaneous	332	4	100	—	1·20	—	8·79	7·47
	3,759	118	1,339	49	3·14	3·65	100·00	100·00

ABSTRACT OF INFORMAL AND STATUTORY SAMPLES OF
SWEET MILK EXAMINED DURING YEAR 1957.

Informal.				Statutory.				
No. Examined.	No. Non-Genuine.	Average percentage Composition.		1957 Month.	No. Examined.	No. Non-Genuine.	Average percentage Composition.	
		Fat. %	Non-Fat. %				Fat. %	Non-Fat. %
226	5	3.72	8.75	January	80	—	3.67	8.70
187	2	3.71	8.75	February	79	1	3.66	8.70
258	6	3.74	8.74	March	77	3	3.66	8.72
232	4	3.64	8.72	April	79	—	3.67	8.68
248	3	3.65	8.82	May	78	1	3.71	8.80
208	1	3.70	8.77	June	78	—	3.62	8.83
203	2	3.75	8.70	July	64	—	3.73	8.72
182	1	3.90	8.78	August	40	—	3.86	8.79
188	1	4.06	8.83	September	59	—	3.92	8.81
253	—	4.11	8.82	October	80	—	4.04	8.85
243	—	3.97	8.79	November	78	—	3.94	8.80
186	—	3.84	8.80	December	76	—	3.85	8.85
2,614	25	3.82	8.77		868	5	3.77	8.77

Percentage Adulterated : Informal—0.96 Statutory—0.58.
1956 " " : " —0.71 " —0.47.

THE PUBLIC HEALTH (PRESERVATIVES, ETC., IN FOOD) REGULATIONS
(SCOTLAND).

Foodstuffs of over 80 varieties comprising a great many samples were examined by the City Analyst for the presence of prohibited preservatives as well as an excess of permitted ones. No prohibited preservative was found in any foodstuff.

Although it is over 30 years since these Regulations became operative, there are still a great number of infringements. The number of cases in which proceedings were taken where sulphur dioxide beyond the permitted limit had been added to butcher's mince and sausages rose from 28 last year to 34 this year. During the period of October to May inclusive, when the use of preservative is prohibited, 20 samples of mince were found to contain preservative, while two samples of mince contained an excess amount during the permitted period—seven more and two fewer respectively than in 1956, and 12 samples of sausages

contained an excess amount—one more than last year. Convictions were obtained in every case. One respondent was convicted of a third offence and two of a second offence. The sellers of samples of mince and sausages found to contain minor amounts of preservative in contravention of the Regulations were warned.

A list of foodstuffs examined for the presence of preservatives is given below, in which it will be noted that the greatest amount found in mince was 1,335 parts of SO_2 per million and in sausages 3,309 parts, while of all the foodstuffs examined which did contain preservative, the lowest was 12 parts and many other samples examined were free.

Attention was also paid to the possible presence of boron compounds in 70 samples of a variety of dairy products. In no instance was this type of prohibited preservative found.

In addition, samples of a variety of foods were examined for the presence of prohibited colouring matter. Again this year none was found.

There was, however, a most interesting incident in which colouring material and black pudding were concerned. The purchaser had boiled the pudding and was rather disturbed when the water in which it was boiled turned purple. Some of the water, together with another black pudding purchased in the same shop, was sent to the City Analyst, who found that when the skin was rubbed with cotton wool black colouring material was removed, but that it was only associated with the outer layer of the skin and had not penetrated to the surface of the pudding. The manufacturer was informed of the incident and the analyst's findings. It so happened that the dyeing and washing off processes had been inefficiently carried out. The firm as a result carried out exhaustive tests with alternative dyes and methods until a satisfactory treatment had been found. It may be added that it is not the general practice for manufacturers in Scotland to colour the skins of black puddings: the use of black colouring is not prohibited but it is unnecessary.

Information was received from the Port Health Section of the Department that a quantity of prepacked mixed peel which contained an excess of preservative had reached the City through the Port of Glasgow. Arrangements were made with large bakery firms to use it in their baked products.

ABSTRACT OF ARTICLES OF FOOD IN WHICH PRESERVATIVES, ETC.,
WERE FOUND AND THE NATURE AND AMOUNT DURING YEAR ENDING
31ST DECEMBER, 1957.

Nature of Article.	Number examined.	Number in which Preservatives, etc., were found.	Nature of Preservative, etc.	Parts per Million.	
				Highest.	Lowest
Beer	3	2	Sulphur Dioxide	38	36
Corn Flour	8	1	" "		19
Fruit Chutney	2	1	" "		217
Fruit Cordials	3	3	" "	282	128
Fruit, Dried	21	1	" "		58
Fruit, Glace }	17	4	" "	58	12
Fruit, Glace }		9	Benzoic Acid	70	32
Fruit Squash	6	5	Sulphur Dioxide	198	14
Gelatine	3	1	" "		32
Jams	16	2	" "	32	29
Milk Flavouring }	4	3	" "	346	211
Milk Flavouring }		1	Benzoic Acid	236	
Mince	110	57	Sulphur Dioxide	1,335	19
Sausages	210	205	" "	3,309	26
Soft Drinks	4	3	" "	45	26
Soup, Dried	7	3	" "	344	166
Table Jellies and Jelly Crystals	37	7	" "	102	16
Vegetables, Dried	5	4	" "	260	115

THE FOOD AND DRUGS (SCOTLAND) ACT, 1956.

Table showing Nature and Number of Total Samples Procured and Examined during 1957.

Article	Informal		Statutory	
	No. Taken	No. Non-Genuine	No. Taken	No. Non-Genuine
Ale	2	—	—	—
Almonds, Ground	1	—	1	—
Alum, Powdered	4	—	—	—
Arrowroot	2	—	—	—
Aspirin	13	—	2	—
*Baking and Raising Powder	8	—	3	—
Barley	1	—	—	—
Beer, Bottled and Canned	11	—	—	—
Bicarbonate of Soda	9	—	3	—
Black Pudding	2	—	—	—
Boracic Powder	1	—	1	—
Borax and Honey	1	—	—	—
Brandy	—	—	7	—
Bread and Butter	1	1	—	—
Brose Meal	—	—	5	—
*Butter	21	—	33	—
Caraway Seeds	1	—	—	—
Cascara Sagrada	6	—	—	—
Cheese	3	—	17	—
Cheese, Processed	—	—	1	—

* Subject to Food Standard.

THE FOOD AND DRUGS (ADULTERATION) ACT, 1928—*Contd.*

Article	Informal		Statutory	
	No. Taken	No. Non-Genuine	No. Taken	No. Non-Genuine
Cheese Spread	5	1	—	—
Chewing Gum	1	—	—	—
Chemical Food	3	—	—	—
Chocolate Spread	1	—	—	—
Chutney	2	—	—	—
Cinnamon	2	—	—	—
Cocoa	2	—	8	—
Coconut, Desiccated	2	—	1	—
Cochineal	5	—	—	—
Codeine Tablets	2	—	—	—
Coffee	—	—	5	—
*Coffee and Chicory	16	—	—	—
Colourings	1	—	—	—
Confections	2	—	—	—
Cooking Fat	9	—	9	—
Cornflour	5	—	3	—
*Cream, Double	11	—	—	—
Cream, Canned	5	—	—	—
Cream, Sterilised	10	—	—	—
Cream, Imitation	9	—	—	—
Cream of Tartar	6	—	4	—
Currants	2	—	5	—
*Curry Powder	10	—	1	—
Custard Powder	7	—	3	—
Dates	5	—	—	—
Dripping	6	1	1	—
Essence of Rennet	1	—	—	—
Essences	3	—	—	—
Farola	1	—	2	—
Figs	4	1	5	—
Fish Dressing	3	—	—	—
*Fish Cakes	11	2	—	—
Fish, Canned	4	—	—	—
*Fish Paste	6	—	—	—
Fish, Potted	2	—	—	—
Flavourings	11	1	1	—
*Flour, Ordinary	8	1	3	—
*Flour, Self-Raising	31	—	2	—
Foam Crystals	9	—	—	—
Food Drink	1	—	—	—
Friar's Balsam	4	—	—	—
Fruit Juices	11	—	—	—
Fruit, Glace	11	—	6	—
Fruit Pudding	1	—	—	—
*Gelatine	3	—	—	—
Gin	—	—	1	—
Ginger, Ground and Preserved	4	—	2	—
Glucose D	—	—	1	—
Glycerine	2	—	—	—
Glycerine and Borax	1	—	—	—
Glycerine, Lemon and Honey	3	—	—	—
Glycerine and Thymol	3	—	—	—
Gregory's Powder	1	—	2	—
Herbs, Mixed	2	—	—	—
Honey	1	—	—	—
*Ice Cream	161	37	1	1
Iodine, Tincture of	2	1	—	—

* Subject to Food Standard.

THE FOOD AND DRUGS (ADULTERATION) ACT, 1928—*Cont.*

Article	Informal		Statutory	
	No. Taken	No. Non-Genuine	No. Taken	No. Non-Genuine
Iodine Solution	3	1	—	—
*Jams	16	—	—	—
Kez	—	—	1	1
Lard	—	—	1	—
*Lemon Curd	11	—	1	—
Liquorice Powder Compound	1	—	—	—
Liquid Paraffin	6	—	—	—
Lucozade	3	—	—	—
Macaroni	1	—	1	—
*Margarine	12	—	18	—
*Meat Paste	23	—	—	—
Meat Extract	4	—	—	—
Medicinal Mixtures	13	2	—	—
Medicinal Powders	3	—	—	—
Medicinal Tablets	1	—	—	—
Milk, Condensed and Evaporated	10	—	—	—
Milk, Sweet	2,614	25	868	5
Mince	40	14	70	27
Mince Meat	11	2	—	—
Monosodium Glutamate	—	—	1	—
*Mustard	12	—	—	—
Nutmeg, Ground	3	—	1	—
Oatmeal	9	—	—	—
Oil, Almond	7	—	—	—
Oil, Camphorated	1	—	—	—
Oil, Castor	6	—	—	—
Oil, Cod Liver	1	—	—	—
Oil, Eucalyptus	1	—	—	—
Oil, Halibut Liver	1	—	—	—
Oil, Olive	9	—	—	—
Ointment, Medicinal	7	—	—	—
Peas, Dried and Canned	6	—	—	—
Peel, Mixed	2	—	1	—
Peppers	12	—	16	—
Pickles	1	—	—	—
Popcorn	1	—	—	—
Potatoes	17	—	—	—
Prunes	5	—	6	—
Pudding Mix	5	—	—	—
Puff Pastry	2	—	—	—
Raisins	9	—	12	—
Rice	1	—	—	—
Rice, Canned	1	—	—	—
Rice Flour	3	—	—	—
Rice, Ground	1	—	3	—
Rum	—	—	4	—
*Saccharin	5	—	—	—
Sage	2	—	—	—
Sage and Onion Stuffing	1	—	2	—
Sago	1	—	1	—
*Salad Cream and Mayonnaise	9	—	—	—
Salt, Table	6	—	—	—
Salt, Iodised	11	1	—	—
Salts, Epsom	5	—	1	—
Salts, Glauber	3	—	—	—
Salts, Medicinal	2	—	1	—
*Sauces	16	—	—	—

* Subject to Food Standard.

THE FOOD AND DRUGS (ADULTERATION) ACT, 1928—*Contd.*

Article	Informal		Statutory	
	No. Taken	No. Non-Genuine	No. Taken	No. Non-Genuine
Sausages	104	24	106	13
Semolina	6	—	13	—
Sherry	1	—	—	—
*Soft Drinks	24	—	—	—
Soup and Soup Powders	19	—	—	—
Spice	3	—	—	—
Stomach Powders	7	—	—	—
*Suet	8	—	3	—
Sugar, Demerara	—	—	2	—
Sugar, Icing	5	—	3	—
Syrup of Figs	3	1	—	—
*Table Jellies	21	—	1	—
and Jelly Crystals	15	—	—	—
Tapioca	3	—	—	—
Tea	7	—	21	—
Thyme	3	—	—	—
*Tomato Ketchup	21	—	—	—
Tomato Puree	3	—	—	—
*Tonic Water	1	—	—	—
Vegetables, Canned and Dried	3	—	2	—
Vinegar, Malt	12	2	1	—
Whisky	—	—	39	2
Wines, Alcoholic	2	—	—	—
Wines, Non-Alcoholic	11	—	—	—
	<u>3,759</u>	<u>118</u>	<u>1,339</u>	<u>49</u>

* Subject to Food Standard.

The Food and Drugs (Scotland) Act, 1956—Section 9—Suspected Food.

The number of complaints lodged with this Department concerning food alleged to be contaminated, unsound or otherwise unfit for human consumption increased during the year to 144.

A thorough investigation was made into all the complaints and it is significant to note that in 20 instances the food or drink complained of was normal in taste and smell. In the cases of articles submitted for further examination or analysis, a copy of the analyst's report was obtained, and wherever it is possible the portions remaining after any such examination are returned to complainers for any further action they may wish to take. Several complaints again this year referred to salmon. One amusing case turned out to be fresh Scotch salmon, the flavour of which was strange to the consumer. Another concerned Lemburger Cream Cheese. This cheese was of German origin. It was prepacked in a foil wrapper, was dark in colour, and had a most unappetising odour. It was, however, sound and a delicacy to those who like it.

The majority of the remainder were justified, while a few raised doubts on the integrity of the complainer. There were 13 fewer complaints than last year of extraneous matter in various foods, and as in previous years these referred to such matters as pieces of cigarette ends, glass, sacking, string, nails, mouse droppings and insects. Thirty-six referred to unclean milk or soft drink bottles. Comments on these are made in the appropriate sections of this report.

One complainer alleged she had found a beetle in a prepacked packet of sugar. This beetle was identified as a South African beetle (*Mauphdeta Cineria*) not found in this country. Investigation carried out by the local authority concerned with the sugar refiners revealed that none of the sugar used came from South Africa, and it was assumed, therefore, that the beetle had been carried into the food cupboard on fruit.

Another complaint worthy of note concerned a tin of grapefruit in which yellowish-white specks were found floating on the syrup. When examined, these were found to consist of clusters of microscopic needle-shaped crystals having an intensely bitter taste and which were soluble in hot water. These properties are characteristic of Glucoside Naringin which is found naturally in the pith and to a lesser extent in the juice of grapefruit. Although even more bitter than quinine, the glucoside is not harmful, but may crystallise out, particularly if stored under cold conditions.

Inspection of Food and Food Premises.—Visits of inspection were made to markets, stores, wholesale and retail premises on 12,214 occasions for the purpose of inspecting the premises and/or examining suspected food. This entailed 1,108 visits more than last year. Of the large quantity of food examined, 2,851 lots—290 more than in 1956—amounting to 105 tons, 2 cwts., 7½ lbs. were considered to be unsound and destroyed with the owners' consent or otherwise disposed of in such manner as not to be used for human consumption. As in previous years some was salvaged for animal feeding. The service of issuing condemnation certificates for foodstuffs considered to be unsound was continued. The practice of submitting samples, where considered necessary, to a chemical and/or a bacteriological examination before judgment is passed was also continued.

Twenty written intimations were sent to occupiers of dairy and other food premises, excluding ice cream premises or owners of ice cream vehicles, bringing to their notice the need for repairs, cleansing or limewashing. As in previous years, many defects were pointed out to the occupier of the business at the time of visit. In all instances the work was satisfactorily carried out.

A number of visits, both individual and joint visits with the divisional inspectors, were made to assist and advise traders with regard to construction and equipment of food premises, intimation having been received in some instances from the Town Planning Authority.

The Milk and Dairies (Scotland) Act, 1914.

The Milk (Special Designations) (Scotland) Orders, 1951-52.

The number of registered milk producers in the city is now 29, one fewer than last year. One farmer gave up his farm, one which had been occupied by his forbears for nearly 200 years and incidentally the last farm in Glasgow which had wooden trevisses. These trevisses were scrubbed white, and a very high standard was maintained. He had only four failures of all samples taken since 1940. Another farmer vacated his farm owing to a redevelopment plan and moved into the first-mentioned farm. In co-operation with the divisional drainage inspector and the "laird," the drainage system was completely overhauled and greatly improved. The wooden trevisses were removed and the byre and farm buildings enhanced by repairs and improvements.

Two herds produce Certified milk, 26 produce Tuberculin Tested milk, and one attested herd produces milk which is undesignated and is pasteurised at a local creamery, while two attested herds of the Western Regional Board produce Tuberculin Tested milk for use in their own hospitals and institutions.

As in the past two years, the system of assessing points for clean milk production was continued. The interest shown by the city farmers was sustained by informing them of their results and the position occupied in the scheme. The general high standard of cleanliness and efficiency of the methods used was maintained.

One firm discontinued the pasteurising of milk during the year, leaving 19 pasteurising establishments still on the register. During the year numerous improvements were carried out or started in these creameries. These include a new pasteurising plant, an extension to increase the capacity, an entirely new refrigerator built and equipped, two mechanical can tippers, two mechanical can washers, completely new floors laid, walls tiled, etc., and in two instances the surrounding amenities improved.

There are now 1,582 dairies registered in the city, including the 29 producers, and 17 dairymen holding supplementary licences.

There is again a marked increase in the number of retail dairymen. There are now 1,536 retail dairymen, 58 more than in 1956 and 146 more than in 1955. More and more shop premises are being improved and being better equipped in order to permit the sale of milk therefrom.

To meet the requirements of the Milk (Special Designations) Order all dairymen were required to make fresh application by way of renewal for designated milk licences. This enactment lays down that these licences shall be renewed every five years—1st January, 1957, being the commencing date of the new licence—consequently this created an enormous volume of useless, laborious work which could have been obviated if these licences had been permitted to continue, as do certificates of registration under the Act, until there is a change of occupancy. The necessary forms of application were taken and in the case of multiples sent to every dairyman in the city for signature and return. Over 2,500 such licences were issued early in the year.

Only one of the 12 creameries holding a licence to deal in sterilised milk renewed the licence for the five ensuing years.

The approximate daily consumption of milk, excluding school milk, fell this year from 86,175 to 84,161 gallons—a decrease of 2,014 gallons. The percentage of failures in tests of Certified milk rose from 11 per cent. to 16.5 per cent. (There were no failures of the samples taken from the two Certified producers in the city). Failures of Tuberculin Tested milk dropped from 10 per cent. to 6.8 per cent.

Formal and informal samples of milk for analysis totalled 3,482. The average fat and solids not fat rose slightly again this year from 3.71 and 8.75 respectively to 3.80 and 8.77 per cent. The number of designated milks sampled during the year was 1,402.

Visits of inspection made to dairy premises were reduced, to devote time previously so spent to other duties in a wider field, from 10,733 to 10,066, while 266 inspections were made to 38 byres of the 29 milk producers. These byres have a total accommodation for 1,027 cows but over the year the average number kept is approximately 920.

CERTIFIED—	1957	1956	1955
Producers	2	2	3
Dealers	880	861	815
Total Average Daily Sales (Gallons) ...	1,965	2,402	2,471
TUBERCULIN TESTED—			
Producers	26	27	26
Dealers	692	673	627
Total Average Daily Sales (Gallons) ...	846	917	898
PASTEURISED—			
Pasteurising Establishments	20	20	20
Dealers	1,536	1,477	1,460
Total Average Daily Sales (Gallons) ...	*81,350	†82,856	†82,493
1957—* Includes 2,287 gallons Tuberculin Tested (Pasteurised).			
1956—† Includes 2,297 gallons Tuberculin Tested (Pasteurised).			
1955—† Includes 2,116 gallons Tuberculin Tested (Pasteurised).			
STERILISED—			
Dealers	1	12	12

RESULTS OF EXAMINATIONS OF DESIGNATED MILK (1).

	CERTIFIED	TUBERCULIN TESTED
	(a) Not more than 30,000 Bacteria per ml. (b) No Coliform Bacillus in 1/10 ml.	(a) Not more than 200,000 Bacteria per ml. (b) No Coliform Bacillus in 1/100 ml.
<i>Bacteriological Examinations—</i>		
Number examined	200	191
Number conforming to all requirements	167	178
Number exceeding count only	4	1
Number exceeding count and having coliforms present	4	5
Number conforming to count but having coliforms present	25	7
Agar Count per ml.—		
Highest	8,388,000	8,388,000
Lowest	200	Less than 1,000
Presence of Coliforms (—) ...	171	179
(+) ...	29	12
<i>Chemical Examination—</i>		
Fat Minimum 3%—		
Number (3% or over) ...	193	190
(below 3%) ...	7	1
Average butter-fat content	3.89	4.10
134 Examined Biologically with negative result.		

RESULTS OF EXAMINATIONS OF DESIGNATED MILK (2).

	*TUBERCULIN TESTED (PASTEURISED)	PASTEURISED
	(a) No Coliform Bacillus in 1/100 ml. (b) Not more than 2.3 Lovibond Blue Units (Phosphatase Test)	(a) No Coliform Bacillus in 1/100 ml. (b) Not more than 2.3 Lovibond Blue Units (Phosphatase Test)
Number examined	390	621
Number passing each test ...	380	606
Number failing in one or more of the tests	10	15
Milk-Fat Test—		
No. Satisfactory	389	621
No. Unsatisfactory	1	—
Average Butter-Fat Content	3.72	3.74

* Tests as for Pasteurised.

94.94 per cent. of the samples examined were in conformity with the terms of the Orders compared with 95.00 last year.

Chemical examination showed nine samples to be deficient in fat, while nine samples were found to be below 8.5 per cent. of solids not fat.

Milk Supply to the Hospitals of the Western Regional Board.—This service to the Board was continued. The results are shown as follows :—

	Examined	Failed
Certified	16	5
Tuberculin Tested	90	5
Pasteurised	204	13
Tuberculin Tested (Pasteurised)	37	2
	<hr/> 347	<hr/> 25

Last year 47 samples failed out of a total of 360 samples. In addition to the above examinations, 14 samples of Certified and

Tuberculin Tested milk were examined for the presence of the tubercle bacillus with negative results.

Non-Designated Milk Produced in Premises within the City.—There is still one of these dairy farms left on the register at the end of the year, but the herd, as already stated, is an Attested Herd and recorded with the Department of Agriculture. Seven samples were taken at this farm during the year and two of these samples were submitted to biological examination with negative results. The following table shows the results of bacteriological examinations of the seven samples. Although the bacteriological standard laid down is a bacterial count of not more than 200,000 per ml., none of these samples exceeded 58,000 with no coliform bacilli present.

Number Taken	Bacterial Count		Coliforms
	under 200,000	Over 200,000	
7	7	—	—

Milk for School Children.—Last year the supply of Pasteurised milk to the city schools was undertaken by 13 contractors. Two hundred and sixty-one samples were examined during the year in terms of the Milk (Special Designations) Order. Eight failed in one or other of the two prescribed tests, compared with 17 failures of 281 samples examined last year. One hundred and forty-three samples were submitted to biological tests with negative results.

Below is a table giving a summary of results of the sampling:—

SCHOOL MILK (PASTEURISED).

No. Examined	No. Passing both		No. Failing Coliform Tests only	No. Failing Both Tests	No. Tuberculous	Average Fat Solids	Average Non-Fat Solids
	Phosphatase and Coliform Tests	No. Failing Phosphatase Test only					
261	253	1	7	—	—	3.72	8.70

The second table shows the average daily quantity supplied each month with the number of school days in each. The total consumption this year amounted to 1,476,310 gallons, a decrease of 3,020 gallons from last year.

AVERAGE DAILY QUANTITIES SUPPLIED.

Month	Gallons	School Days	Month	Gallons	School Days
January ...	7,175	19	July ...	*16,797	†
February ...	7,278	20	August ...	*52,727	†
March ...	7,173	21	September ...	6,943	20
April ...	7,288	16	October ...	6,796	23
May ...	7,144	21	November ...	7,086	21
June ...	7,024	20	December ...	7,244	17

* Monthly totals.

† No school days, other than the transferred schools these months, but but children are supplied with milk at the feeding centres and schools.

The quality standards of these milks are being maintained.

The Scottish Dairy Show, 1957—Kelvin Hall.—Five samples of milk were obtained from bulk milk produced by the show cattle and were examined chemically and bacteriologically. The following table shows the results of the examinations :—

	11th Feb.	11th Feb.	13th Feb.	13th Feb.	14th Feb.
Fatty Solids	3.95%	4.40%	4.00%	3.00%	3.80%
Non-Fatty Solids	8.82%	8.99%	8.91%	8.69%	8.66%
Number of Bacteria per Milli- litre	1,800	1,800	10,000	24,000	28,000
Presence of Coliform Bacilli in 1/100 Millilitre (1)	—	Present	Present	Present	Present
(2)	—	—	—	"	"
(3)	—	—	—	"	"

Ten thousand seven hundred and eighty-five gallons were produced during the show, all of which was pasteurised at the Scottish Milk Marketing Board's Hogganfield Creamery.

Dairy and Canned Cream—Food Standards (Cream) Order, 1951.—Twenty-six samples of dairy and canned cream were obtained to ascertain their standard in relation to the above Order. It should be noted that although the Order lays down a fat standard of 18 per cent. for single cream the lowest fat content in the canned was 23.30 per cent. and the highest 24.83 per cent.; while the double cream standard is 48 per cent. the lowest was 49.87 per cent. and highest 54.51 per cent., and these were dairy creams produced in our city creameries.

Cleansing of Milk Bottles.—During the year 191 washed milk bottles were submitted to a bacteriological examination. Twenty-nine of the bottles, 15 more than last year, were reported as not complying with the accepted standard of less than 600 organisms per pint bottle. Results of all such examinations were notified to the dairymen concerned and repeat samples obtained where necessary, accompanied by an investigation into the cause of the failure. The results of bottles washed by different methods are as follows :—

	No. of Bottles	Satis- factory	Unsatis- factory	Percentage Satisfactory
Washed by Soaker Sprayer Machine	19	19	—	100.0
Washed by Jet Type Machine ...	160	131	29	81.9
Washed by Rotary Brushes ...	12	12	—	100.0
Washed by Hand	—	—	—	—

Eight bottles were sterile and more than half the number of bottles examined had a bacterial count of less than 30 organisms per inner surface.

There are four city farmers bottling milk, two Certified producers and two Tuberculin Tested producers. Samples of bottles washed by the rotary brush method at these farmers' were again most satisfactory, the highest count being 15 and six being sterile.

In 21 instances complaints were received of milk having been delivered in dirty bottles, 15 having been filled at creameries within the city and six at farms and creameries outwith the city. The complaints relating to city creameries were investigated and check samples of washed bottles taken, while those outwith the city were passed to the Local Authorities concerned.

Cleansing of Milk Cans.—A fuller investigation into the thoroughness of can washing in city creameries was started this year. Unlike milk bottles, it is not practicable to bring milk cans to the laboratory for bacteriological examination and so cans were rinsed with sterile water in the accepted manner. The water so used, called rinse water, is subjected to examination. Usually four cans are taken on such occasions, and during the year 97 milk cans so treated were examined. The following table shows the accepted bacteriological standards for washed cans :—

BACTERIOLOGICAL STANDARDS.

(Coliforms should not be present)

Satisfactory	...	...	...	...	...	Under 50,000
Fairly Satisfactory	...	...	...	...	...	50,000—250,000
Unsatisfactory	...	...	...	...	...	Over 250,000

Forty-four cans were satisfactorily washed ; 12 were fairly satisfactory, while 41 were unsatisfactory. It was noted that at only four creameries were the first batch of cans satisfactorily washed. Repeat samples were taken from all creameries with greatly improved results and many within the satisfactory category.

Copies of the reports of the examinations were sent in every instance to the dairyman concerned.

The Ice Cream (Scotland) Regulations, 1948.—There are 486 registered dealers in ice cream in the city in respect of premises, one

more than last year, while 352 certificates of registration are held by owners in respect of vehicles for the sale only of ice cream, 45 more than last year. Inspections of these premises and vehicles totalled 3,254 during the year, and 137 notices of contraventions were issued.

It was considered advisable that a check should be made on ice cream vehicles under working conditions in addition to their regular annual inspection. This was undertaken by car by the Senior Food Inspector, in co-operation with one of the food inspectors every Sunday afternoon during the months of June to September inclusive, with most revealing results. Six samples of two portions each of ice cream were obtained each Sunday from ice cream vans. One portion of the sample was submitted to the City Analyst and the other portion to the Bacteriologist. In many instances it was impossible to take repeat samples because the Analyst was working to capacity.

It was obvious from the conditions found in the 69 vans inspected that the visits were most unexpected. As stated above, 137 notices were issued; nearly all of these related to faults found in these vans. The owners were requested to rectify the faults and present their vehicles for further inspection.

Some of the faults were of a technical nature, such as failing to have the serial number inscribed on the near side. Other contraventions included empty or leaking water tanks used for holding water for hand washing, no soap, no hand towel, no overall, dirty hands and general carelessness. On the other hand, a number of vehicles were found to be in excellent condition, the owner and operator exercising every precaution.

In addition, during the routine inspection of ice cream shops and vehicles, minor repairs and improvements were reported and received attention.

It was also considered advisable to check on the bacteriological condition of ice cream sold in hotels, restaurants, works canteens, etc. Thirty samples were obtained and examined, but it is too early in the investigation to make comment. The survey continues and it is hoped to give detailed findings in the 1958 Report.

	No. Examined	No. under 100,000 with Coliforms Absent	No. under 100,000 with Coliforms Present	No. over 100,000 with Coliforms Absent	No. over 100,000 with Coliforms Present
1956	139	129	5	1	4
1957	222	170	24	8	20

The table shows 170 satisfactory samples or 76.58 per cent. compared with 129 or 92.8 per cent. last year. This year 20 (9 per cent.) of the samples failed in both count and coliform compared with four of 139 or 2.80 per cent. last year. Defaulters were visited and their methods checked and advice given.

During the year only one formal sample was procured. The sample was deficient in fat to the extent of 42.4 per cent. The case was heard in the Sheriff Court. The manufacturer pled guilty and was fined £5. One hundred and sixty-one of the 222 informal samples taken were subjected to both chemical and bacteriological examinations, while the remaining 61 samples were for bacteriological examination only, having been obtained from catering establishments or for repeat check purposes. Of the 161 informal samples, 37 failed to comply with the standard laid down in the Food Standards (Ice Cream) Order, 1953. The failures were in respect of a deficiency in fat or milk solids other than fat or both. None was deficient in sugar.

	No. Examined	No. Adulterated	No. Deficient in Fat	No. Deficient in Milk Solids Not Fat	No. Deficient in Sucrose	No. Deficient in Fat and Milk Solids Not Fat	No. Deficient in Fat and Sucrose	No. Deficient in all Three
1956	110	25	24	2	2	3	1	—
1957	161	37	32	10	—	5	—	—

AVERAGES

	Fat	Milk Solids	Not Fat	Sucrose
1956	7.90	9.62
1957	7.04	9.52

HIGHEST

1956	...	...	16.46	13.7	22.8
1957	...	...	15.17	15.5	27.7

In all the instances where deficiency was found, visits were made to the makers' premises, recipes were checked and discussed, and advice given. Repeat samples were obtained in a few isolated cases. Copies of reports on all samples failing to conform to the recommended bacteriological standard of under 100,000 bacteria with coliforms absent were sent to the dealer concerned.

As in previous years, samples of ice cream as supplied to school children through the School Meals Service were obtained each week during that period. All of these samples, 12 in number, were well over the statutory requirements, having been made to a special recipe with butter, and showed an excellent bacteriological standard.

Imitation Cream. Food and Drugs (Scotland) Act, 1956, Section 18.

—This product prior to the Act of 1956 was known as synthetic cream. Twenty-six samples were procured during the year and subjected to a bacteriological examination, 15 being taken at the manufacturers' premises, three prepacked ready for sale, and eight from bakers' premises. Of these eight samples taken from bakers' premises, two were found to have a bacterial count of 1,000,000+, but coliforms were absent. On investigation it was learned that the cream container had been allowed to stand in the warm bakehouse. The bakers were advised to keep this product under refrigeration as much as possible. Of the remainder, the highest count was 463,000 with no coliforms present, while the lowest (11 samples) was only 100 bacteria per gramme with no coliforms present.

Food and Drugs (Scotland) Act, 1956, Section 19. Horseflesh.—

Observations were again taken this year for contraventions of this Section, but none were found.

Food and Drugs (Scotland) Act, 1956, Section 20. Shellfish.—

Sixteen samples consisting principally of uncooked mussels, oysters and whelks were submitted to bacteriological examination. There are very few "oyster bars" in the city and the business from this type of shop is confined generally to the week-end. This year the shellfish reached the city from gathering grounds on the Clyde, the East Coast, Ireland and Cornwall. According to modern grading of shellfish (raw or cooked), 13 samples comprising several shellfish in each sample were clean, two were of doubtful purity, and only one showed evidence of pollution.

Egg Products.—Careful watch was maintained during the year on all imported egg products reaching the city by road, particularly with regard to the presence of Salmonella organisms and the bacterial count. Valuable co-operation was received from the large importers and dealers in these products.

These products may be divided broadly into three main groups:—

1) Chinese Egg Albumen Crystals; (2) Dutch Frozen Whites; (3) Irish Frozen Whole Egg.

1) *Chinese Egg Albumen Crystals.*

It will be remembered that in April of last year a form of heat treatment was devised and proved satisfactory for rendering this product safe. Approximately 17 tons, 13½ cwts., equivalent to 396 tins, were heat treated. One hundred and forty of these 396 tins were brought

to Glasgow for heat treatment and returned to the London firm. It is claimed that the treatment is more carefully supervised, in consequence of which the product retains its colour to a greater degree and is more soluble than crystals similarly treated in London.

Thirty-two test (initial) samples were obtained prior to heat treatment. In only two of these samples were *Salmonella* organisms found—one *S. thompson*, one *S. potsdam*. The tins from which these samples were taken were again sampled after heat treatment and reported negative *Salmonella* group, as was the total number of 156. In the early part of the year 50 per cent. of tins of heat treated crystals were sampled, but later the percentage was reduced to 25.

(2) *Dutch Frozen Whites.*

This name is used in the trade for frozen hen egg albumen shipped from Holland. Approximately 42 tons, consisting of a number of 6, 12 and 18 kilo tins, were landed at Leith and transported in insulated containers by road to a cold store in the city. Samples were drawn as soon as practicable after arrival in order to prevent any delay in its release. This entailed the taking of 215 samples, five per cent. of the number of tins. No organism of the *Salmonella* Group was isolated from any of the samples. Twenty-seven of these samples were subjected to a bacterial count. Six samples had counts of over 1,000,000; two over 100,000; ten over 10,000; four over 1,000; one of 200; one of 140; one of 70; and one of 50. *Faecal B. coli* was found in 20 samples; *staphylococcus aureus* (coagulase-positive) isolated from five samples.

The owners of the lots which had the very high counts and *faecal B. coli* present were requested to give an assurance that the "whites" would be used in a product which would be subjected to high temperature. Assurances were gladly given and the manufactured article was baked at a temperature of 400°F. for at least 25 minutes. The question of high counts and the presence of *faecal B. coli* and *staphylococcus aureus* was the subject of discussion between the importers in Glasgow and their agents in Holland with a view to having the product more hygienically produced.

One 12-kilo tin (the only one) of Dutch frozen whole egg was examined and found negative *Salmonella* group.

(3) *Irish Frozen Whole Egg.*

In the early part of the year a consignment of Irish frozen whole egg reached the city. Five per cent. amounting to 20 samples were

taken and submitted to examination for the presence of Salmonella organisms and four of these to a bacterial count.

All were negative Salmonella group. Eleven samples were negative Staphylococcus aureus. One sample was Staphylococcus aureus (coagulase positive).

The average bacterial count at 37°C. on four samples was 48,000, 37,000, 17,000 and 13,000 respectively; coliforms were present in all four samples and faecal B. coli present in one sample.

Another small lot of four plastic containers holding Irish frozen whole egg was individually sampled and found to be free from Salmonella organisms.

(4) *Liquid Whole Egg (Packed in Glasgow).*

In the Spring of the year a firm of egg importers built and equipped part of their premises for the purpose of breaking down shell eggs, tinning and freezing them for the baking industry, but owing to the short supply of eggs, this continued for only a very short period. One sample was taken and reported upon as follows:—

Average Bacterial Count	...	...	300 per ml.
Typical B. Coli	...	...	Present in 1/10 ml.
			Absent from 1/100 ml.

No Salmonella or other pathogens isolated.

The method adopted was to candle the eggs before breaking. Each egg was pierced by a dumb piercer on an Alfa-Laval machine—the contents, sucked by vacuum through a small opening on the stem of the piercer, passed through a fine mesh screen to the holders from which the tins were filled and weighed.

(5) *So called Fresh Eggs.*

These were shell eggs sold in a city retail shop as fresh eggs. Two lots of each one dozen eggs were examined and were taken from consignments dispatched from a Scottish and Irish egg packing station respectively. The age and source of the eggs were ascertained from markings on the eggs and cases. One dozen eggs were purchased on each occasion and divided into four lots of two half-dozen Scottish and two half-dozen Irish. One half-dozen of each was brought to the bacteriologist while the other half-dozen of each was left in the shop exposed

to the air and not protected in any way. The report on the examination of the first two half-dozens is as follows :—

“ Both samples practically sterile and no organisms isolated except a few *Staph. albus* from the Scotch eggs and this may be a contaminant.”

The second two half-dozens were uplifted from the shop 35 days later and taken to the bacteriologist. The report on this examination was :—

“ Both samples apparently sterile. No organisms isolated.”

At this stage the Scottish eggs were 46 days old and the Irish eggs 62 days old from the time of packing.

Cleansing of Beer, Soft Drinks and Mineral Water Bottles.—Thirty beer bottles were taken after washing at the factories and bacteriologically tested, when six were found to be unsatisfactorily cleansed. Forty-four mineral water bottles were also examined. Of these, eleven were found to be unsatisfactory. The firms concerned are notified of the results and repeat samples are taken where necessary. Although these samples are taken as a public health measure, it would appear that the bottlers appreciate the receipt of reports as a useful check on the efficacy of their bottle-washing methods and as a means of comparison with their own results.

Thirteen complaints, three more than last year—the alleged cause of contamination being the bottles having been used for holding some foreign liquid—were received. Of these, four were without foundation, the contents being normal and the bottles and stoppers clean.

In addition to the routine washing of bottles and stoppers in an endeavour to eliminate cause for complaint of contaminated stoppers, the practice has been adopted of smelling the stoppers individually after washing. According to report, this has resulted in a greater number of contaminated stoppers being detected.

Merchandise Marks Acts, 1887-1953.—Several shopkeepers were warned of their obligations under the various Orders of above Acts in regard to the labelling of their products, but in no case was court action necessary in this connection. The labelling of imported tomatoes has again improved.

It was noticed during May that many of the grocers' shops had Northern Irish and English eggs displayed with show tickets stating that they were Scottish eggs from Aberdeen, Elgin, Girvan, etc., etc. The managers and owners of the businesses concerned were warned against the use of false and misleading descriptions.

Towards the end of the year, complaint was received from the Citrus Marketing Board of Israel that Cyprus oranges were being ticketed and sold as Jaffas. Many shopkeepers were advised of the inaccuracy of the description.

Fertilisers and Feeding Stuffs Act, 1926.

Fertilisers and Feeding Stuffs Regulations, 1955-56.

Thirty-two samples of fertilisers and feeding stuffs were taken from producers', merchants' and farm premises during the year. Only one of these was reported as not being in accordance with the declared statement of analysis. The information was brought to the notice of the producer concerned for correction. As in previous years, all results were reported to the Department of Agriculture and Fisheries.

New legislation—The Fertilisers and Feeding Stuffs (Amendment) Regulations, 1956, came into operation on 1st January, 1957.

Prevention of Damage by Pests Act, 1949.

Threshing and Dismantling of Stacks (Scotland) Regulations, 1949.

These Regulations were given attention during the year when inspections of premises were made under the other statutes.

Infestation of Food Regulations, 1950.

A survey was carried out with regard to the use of chemical substances in food stores, with particular reference to the use of Dieldrin and Dipterex. Of the food stores and bakeries visited, only two firms—bakers—were found to have their premises treated, under contract, with Dieldrin. There was one flour mill, however, which had used a Dieldrin lacquer on the ends and joints of wood flooring boards during the reflooring of the eight flats of the mill.

In general it was learned that there were a variety of insecticides used. These included "Pybuthrin 33 and 44," a non-toxic proprietary product, D.D.T., and pyrethrum preparations. One manufacturer of meat products used Vulcason-O in tablet form which is sublimated into the air by the heat of the electric bulb when placed in the electric light bowl. Some storekeepers and food manufacturers had arrangements with private firms of exterminators or the Department of

Agriculture to treat their premises at regular intervals or called upon them as required. Gammexane was also used. Coal tar preparations were used in parts of premises where tinned foods had burst or were awaiting condemnation.

During the general examination of foodstuffs by the City Analyst over 100 samples of over 30 varieties of cereals in one form or another, dried fruit, sugar and ground nuts were examined for the presence of insects or insect debris. No insect contamination was found in any of the samples.

(See also the section of this report dealing with Metallic Contamination of Food.)

The Labelling of Food Order, 1953.

The Food and Drugs (Scotland) Act, 1956, Section 6.

Observations were continued with regard to inaccurate wording of labels on prepacked articles of food and misleading statements and claims of advertisements.

Inaccuracies in labelling were brought to the notice of food processers and packers. The articles of food involved were iodised salt—old stock ; honey—no name and address ; imitation cream—old cartons; fruit chutney—changes in ingredients from time to time—label corrected ; vinegar and distilled vinegar—labels had been mixed on the labelling machine and in a second instance the wording on the label was corrected ; butternuts—inaccuracy was due to a faulty batch in manufacture. A large firm of manufacturing chemists had a number of inaccurate labels—the recipes had been revised and improved but stocks of old labels had been used.

A quantity of Australian Cream of Tomato Soup reached the Port of Glasgow but on analysis it was found not to be in conformity with a code of practice, being deficient in fat. The consignment was held in store, new labels omitting the word "cream" were flown from Australia, the tins were relabelled by the importers and released.

Another importer received a consignment of foodstuff labelled Lactose Albumen Compound from Sweden. On analysis, this product was found to be wrongly labelled. It was agreed to permit the importer to use it in some of his own products.

Labelling infringements of ten samples were the reasons for the samples being reported as adulteration.

Bye-laws for Regulating Street Trading.—The number of the vehicles approved in accordance with the bye-laws as having suitable food storage accommodation increased again slightly this year from 1,220 to 1,241. Three hundred and fifty vehicles, which were also approved, 16 fewer than last year, were engaged in the sale of food where undertakings had been given that no food remained after each day's sales and therefore no overnight storage was required.

Each year as the Police permit becomes renewable each vehicle so engaged is inspected and as in previous years is marked with a stamp of approval which takes the form of the City Crest "Approved for Food" and the year of issue in black on a white background stencilled on the near side of the vehicle. The general good standard of these vehicles was maintained. A number of new vehicles were put into service during the year, some of the modern mobile shop type, while others, although new, tended to be rather small for the proper handling of the variety of foodstuffs which are carried.

Inspection of these vehicles also takes place from time to time in the district in which they operate. An opportunity of so doing was taken on the Sundays during the year when ice cream vehicles were being inspected. There is quite a considerable amount of Sunday trading. Letters of warning were sent to a number of street traders for contraventions of the bye-laws. There were 35 contraventions found, such as failing to have a permit or a badge or both, or using a vehicle which did not bear a stamp of approval. It was found necessary to take court proceedings against a butcher who was engaged in street trading from the boot and the back seat of a private car. He was fined £3.

Public Health (Meat) Regulations (Scotland), 1932, Section 15.

Sixteen certificates of registration were granted in respect of meat storage premises, two more than last year. Thirty-seven copies of certificates were provided for vehicles operating from these premises, 15 fewer than in 1956.

During the year extensive alterations and renovations were commenced in several meat products factories, and it is intended to give a fuller account of these changes in a future report.

Metallic Contamination of Food.—One hundred and fifty-seven samples of a wide variety of foodstuffs were examined for the presence of metallic contamination. During the year copper was found to be present in 70 samples of foodstuffs in varying amounts from 60 to 0.06 parts per million parts of the food examined; lead in 37 samples in varying amounts from 10 to 0.1 parts per million; arsenic in 12 samples

varying from 8 to 0.6 parts per million; zinc in four samples varying from 57 to 38 parts per million; iron in four samples varying from 160 to 120 parts per million. In no sample was tin found, and in 43 samples there was no metallic contamination. All the samples were within the statutory standard or Food Standards Committee's recommendation.

Towards the latter part of the year an article on the use of lead arsenate in spray form for the destruction of potato haulms was noticed in a trade journal. In co-operation with the City Analyst a spot check was made on the possible contamination of the flesh of the potato. Seventeen samples of potatoes were used for the purpose between 13th November and 11th December. The locality from which they were grown was ascertained at time of purchase, and the soil adhering to the potatoes and the washed potatoes were examined.

Arsenic was found in varying amounts from 0.01 to 32 parts per million in the soil of 15 samples, while none was found in the soil taken from two of the samples. In the washed potatoes, arsenic was absent from five samples and found in varying amounts from 0.0003 to 0.005 parts per million in the remaining 12 samples. Such minute quantities can be considered harmless. All the potatoes had been grown in Scotland.

ARSENIC IN SAMPLES OF POTATOES.

No. of Sample	Growing Area	Arsenic (As.) p.p.m. in	
		Washed Potatoes	Soil
3,297	Methil, Fife	0.005	5.6
3,298	Kirkcaldy, Fife	0.004	1.5
3,299	Paisley, Renfrewshire	0.002	—
4,026	Grown locally	Absent	0.1
4,035	Grown locally	0.001	—
4,036	Grown locally	0.002	32
4,039	Grown locally	0.002	17
4,058	Buchlyvie, Stirlingshire. Redskin	0.0003	0.9
4,059	Lekybank, Fife Majestic	0.0003	1.3
4,060	Ladybank, Fife Kerr's Pinks	0.0003	1.9
4,067	Cupar, Fife	Absent	0.04
4,068	Grown locally	Absent	0.02
4,092	Crossgates, Fife	Absent	0.01
4,094	Bardowie, Stirlingshire	0.001	0.9
4,095	Gartfinnan, Clackmannanshire	0.002	1.2
4,096	Bannockburn, Stirlingshire	0.002	1.8
4,246	Milngavie	Absent	0.04

Mineral Oil in Food.—Fifty samples of eleven varieties of foodstuffs were examined for the presence of mineral oil. This is the second year in which no sample was found to contain mineral oil, although a small amount is permissible in certain foods.

Food Standards.—Foods to which a standard has been applied are marked with an asterisk in the list of foods sampled. A spot check

was made in regard to table salt and iodised salt in relation to a Food Standards Report—seventeen samples, six of the former and eleven of the latter. Table salt is a “free running” salt and may be described as such. The six did contain a small proportion of magnesium carbonate to improve its free running qualities. Iodised salt, on the other hand, it is recommended, should contain magnesium carbonate and iodine to the extent of 433 to 725 micrograms per ounce. All samples conformed and were in substantial agreement with the declared statement and the Code of Practice.

Two manufacturers of fish cakes were warned regarding a deficiency of fish in the product. Repeat samples were satisfactory.

Food Hygiene.—The Food Hygiene Regulations awaited under the Food and Drugs Act are still not to hand. They were, however, re-drafted and a draft copy circulated for consideration. During routine inspection of food premises, advice and guidance to effect a higher standard of cleanliness were given by the food inspectors to shopkeepers and others engaged in food handling. Two letters of complaint were received concerning the handling of foodstuffs.

Lectures on “Clean Food” were again given to selected groups.

ABSTRACT OF COURT PROCEEDINGS.

ADULTERATED SAMPLES AND CONTRAVENTIONS DURING 1957.

FOOD AND DRUGS (SCOTLAND) ACT, 1956.

No. of Com-plaints	Nature of Sample and Alleged Offence	No. of Convic-tions	Amount of Fines Imposed	No. No. Action	No. Admon-ished	No. Obstruc-tion
1	<i>Sweet Milk</i> Deficient in Milk Fat	1	£5	—	—	—
12	<i>Sausages</i> — Contained an excess of Preservatives ...	12	£49	—	—	—
20	<i>Mince</i> — Contained Preservatives during Proscribed Period ...	20	£87	—	—	—
2	<i>Mince</i> — Contained an excess of Preservatives during Permitted Period	2	£10	—	—	—
2*	<i>Whisky</i> — Reduced below Statutory Limit ...	2	£10	—	—	—
—		—	—	—	—	—
37		37	£161	—	—	—
—		—	—	—	—	—

* One case charge hand convicted.

ABSTRACT OF COURT PROCEEDINGS.

OTHER THAN FOOD AND DRUGS ACT.

No. of Com- plaint	Nature of Sample and Alleged Offence	Number of Con- victions	Amount of Fines Imposed
<i>Food Standards (Ice Cream) Order, 1953.</i>			
1	Selling Ice Cream deficient in Fat	1	£5
<i>The Milk and Dairies (Scotland) Act, 1914.</i>			
1	Carrying on the Business of a Dairyman without a Certificate of Registration	1	£1
<i>Bye-Laws (As Amended) for Regulating Street Trading, 1952.</i>			
1	Storing food for human consumption in a vehicle not approved by the Medical Officer of Health ; failing to have a permit, and failing to have a badge	1	£3
<hr/> 3		<hr/> 3	<hr/> £9
<hr/> 40	Grand Totals	<hr/> 40	<hr/> £170
<hr/> <hr/>		<hr/> <hr/>	<hr/> <hr/>

HARRY T. SMITH,
Senior Food Inspector.

SECTION XIII.

AIR PURIFICATION AND SMOKE ABATEMENT.

In the Annual Report for 1956 special reference was made to the changing attitude of both industry and the general public to the requirements of the Clean Air Act. It was stressed that prior to the inception of the Act atmospheric pollution had been more or less tolerated as something that was apparently inevitable but that there had since been a general change of attitude.

During the year 1957 there has been a continuance and development of that interest in all urban districts and the experience of all the Local Authorities in this connection is very similar.

Under the terms of the "prior approval" section of the Act (Section 3) there has been a ready co-operation by industry and national undertakings. In all schemes of alterations and additions coming to the notice of this Department, either by intimation or casual discussion, the particular claims and aspirations of the Act are given a prominent place. It is felt that this attitude and interest are distinct from the statutory obligations actually imposed by the Act.

So also is it in the domestic field. It has been generally known for some time that a smoke-control area in the city was being arranged and in this area, shortly to be defined and confirmed, there is a ready acceptance by the purely domestic users and the extensive commercial premises using domestic-type fires of both the principle and its practical application. In this sphere the Department receives almost daily requests for technical and procedural advice. It is also to be noted that many domestic users, even in outlying suburban districts remote from the central areas, are altering fire grates and effecting changes to coke and other prepared fuels; this in order to conform to both the spirit and practical realisation of the Clean Air Act. This awareness on the part of the public is very encouraging to the Local Authority administration.

It is to be hoped that the plans for the electrification of the railways and the introduction of diesel locomotives will be steadily accelerated.

Administrators of the Clean Air Act in those areas where smoke abatement and clean air come within the scope of routine health and

sanitary duties and where intensive work in this field has not been carried out, will have found a close ally in the work organised and operated by the National Industrial Fuel Efficiency Service (N.I.F.E.S.). Here a specialised engineering and combustion service is available to such Local Authorities to call upon when necessary. The use of such services by the Authorities has in many instances resulted in contracts being entered into by industry for systematic and continuous survey leading to both fuel efficiency and cleaner air conditions.

Fumes and Gas Emissions. During the past year problems in connection with the escape and emission of fumes and gases involving heat treatment processes were again experienced. It must be emphasized that where such nuisances exist, especially contiguous to a built-up area, either domestic or industrial, the conditions become almost intolerable. Some of these cases occurring during the past year were found difficult to resolve and only a partial remedy was found. In a few of the recurrences a nuisance still exists, although sporadic. Continuing attention is being directed to these "chronics" with a view to some solution of their difficulties being eventually arrived at. The specialised technical knowledge of the Chief Alkali Inspector from the Department of Health was in several instances again called upon. Such has been the practice in all past years where this type of problem arose. Assistance by the Inspector has always been freely given and such action has been much appreciated by this Department.

Under the provisions of the Clean Air Act (Section 17) a number of processes which normally come within the scope of local smoke enactments are now designated as scheduled processes and will be administered by the Alkali Inspector. Close collaboration between the Local Authority services and those of the Alkali Inspectorate will be necessary for some time to come.

SUMMARY OF DISTRICT WORK DONE DURING 1957.

Number of observations of chimneys	26,834
Number of inspections of steam boiler and other furnaces	400
Number of intimations of excess smoke given	293

The above figures do not include the work done in connection with the investigation and follow-on procedure with the large number of complaints received. Those are of daily occurrence and are very time-consuming. The figures given include the work involved around the river and harbour areas. Much time has to be spent on this work owing to the lay-out of that area. It will be seen that many inspections

of plants were made and in a proportion of the number necessitated subsequent visits to ensure that recommendations made and advice offered were being given effect to.

Complaints Investigation. It is very evident that since the subject of clean air became a topic of common and more popular interest the number of such complaints has steadily increased. This was expected as the previous attitude of toleration to what was considered a necessary adjunct to industrial operations has changed and the demand for elimination of smoke nuisance, both local and general, is insistent in all areas of the city. This is also reflected in the vehemence expressed in the intimations of the complaint, especially by 'phone call. All complaints are carefully investigated and invariably a personal contact is made with the complainer. The executives of the plant involved are interviewed and the technical and practical aspects discussed. Advice is offered and recommendations are made as to plant alteration where considered necessary. In so many instances the primary cause of nuisance is due to faulty management. In the majority of cases the advice given is acted upon and suitable remedial measures taken or adopted. Sporadic and short emissions are accepted as the normal day-long behaviour, but a small number of plant owners are lax in their efforts to rectify conditions and there are repeated occurrences of avoidable nuisance. Finally other methods of enforcing compliance have to be sought.

The complaints received involve either smoke, dust or fumes and sometimes all three combined. While the growing awareness of the public will result in extra work in this field such an attitude is indicative of an awakening desire for a cleaner atmosphere.

Prosecutions. The total intimation notices of excess smoke emission served on offending plant owners was 293. The total number of prosecutions taken during the year was 12. From this comparison it will be readily seen that punitive action by this Department against offenders is only resorted to when there is an obvious lack of collaboration on the part of such offenders, resulting invariably in a series of infringements. In every case repeated warnings have been given. It is instances such as this when it is known that there are not reasonable grounds for the offence that recourse is had to prosecution.

Of the total of 12 prosecutions taken, 10 were in respect of first offences. The average penalty imposed was £2 in six cases, while in the remaining two complaints reported to the Police Procurator Fiscal, the

cases were deserted *simpliciter* on an assurance being given to the court that immediate steps would be taken to remove the primary causes of infringement. One of the above cases was taken directly by the Police in respect of an open fire—an old car body being burned carelessly in an alleyway to the detriment of the surrounding neighbourhood. Immediate complaint to the local police was the result. Technical cases such as the above are heard before the Stipendiary Magistrate in the Central Police Court. All were taken under the terms of the Glasgow Police (Further Powers) Act, 1892, Section 31.

Plant Improvements noted during the Year. Year by year a list is included in the Annual Report giving examples of various types of plant improvements that may come to the knowledge of the Smoke Inspectors during their work in the various districts of the city. The list given this year does not include by any means the full number known to the Department. Under the prior approval requirements of the Clean Air Act the Local Authority must now be notified when any alterations are planned and it will now be possible to maintain a complete record over the years of new plants and alterations to old ones. Some of the examples cited below have meant large capital expenditure to the authorities and firms carrying them through. Purely maintenance repair work effected on furnaces, both boiler and process, flues, chimneys, etc., is not included.

Number of new steam boilers installed to give increased capacity	20
Number of mechanical stokers fitted to steam boilers and other furnaces	10
Number of new chimneys erected or existing chimneys heightened	12
Number of steam boilers or process furnaces converted to gas or oil fuel	17
Number of mechanical grit and dust arrestors fitted	4
Number of improvements not included under the above headings	16

Details of some of the major improvements effected and included in the above figures are referred to in some detail herewith.

At Pinkston Power Station to the north of the City, where many major replacements have taken place recently, one high pressure water tube boiler of the La Monte type has been installed during the past year, replacing an older water tube boiler. This new boiler is mechanically stoked and fitted with grit arrestor and full instrumentation. During the long phase of alterations at this station, carried through under extreme difficulty, conditions had not been good but are now very satisfactory.

At the premises of the United Co-operative Society, Ltd., on the south side of the city, two large Economic type boilers, replacing two water tube boilers, chain grate stoked, have been installed. The new plant is oil-fired and well instrumented.

The Scottish Co-operative Wholesale Society, Ltd., at their Shieldhall Works, have installed two Super Economic boilers, oil-fired, replacing two water tube boilers which were mechanically stoked. These units are completely instrumented. A further programme of replacement is to be carried out in this factory and, when completed, all such steam units will be oil-burning.

A well-known firm of stationery manufacturers in the east end of the city have installed an Economic dry back boiler, together with the necessary chimney, oil-fired, replacing a Cornish type boiler, hand stoked.

The Scottish Co-operative Wholesale Society, at another of their premises in the Kinning Park area, have installed an Economic type boiler, mechanically stoked, replacing a Lancashire type boiler which had been hand fired.

A firm of building contractors in the north-central area of the city have installed a large gas-fired space heating boiler. This unit is fully automatically controlled and replaces a large sectional type heating boiler which had been hand-stoked.

A well-known insurance company in the central portion of the city have installed a very large sectional type heating boiler, oil-fired. The new unit will be capable of heating an extensive office block and, in addition to extending the previous range of central heating, will replace over fifty open fires.

At Hawkhead Hospital, Crookston, two of the Lancashire type boilers on the main steam plant have been fitted to burn oil fuel. The necessary instrumentation has also been installed. These units were previously hand-stoked with bituminous fuel.

The free availability of oil, a fairly wide choice of grates and the general convenience of rapid combustion adjustments to suit varying load conditions are the factors which have influenced so many present users to adopt oil fuel burning.

There is no doubt that such facilities will lead to a much greater changeover from solid to liquid fuels in the immediate future. Other minor types of improvements are not detailed but many are very conducive to improvement in combustion conditions and an important adjunct in the clean air programme. Some of such minor alterations have involved a considerable capital expenditure.

Shipping in Harbour Areas. The dock and quayside berthing space in the harbour areas within the city boundaries is very extensive and it extends on the River Clyde itself right into the centre of the city. When smoke emission occurs from shipping it is invariably heavy and can be prolonged. It is very obnoxious because of its comparatively low level of emission and should this take place in manoeuvring or other operations it is a source of immediate annoyance and a danger to road traffic in the neighbourhood. Load conditions and practice in marine work are very different from those of stationary plants. An intimate knowledge of such practice is therefore a necessary adjunct to the control exercised in a port of the extent and concentration such as Glasgow. The smoke inspectorate are all qualified marine engineers and being thus experienced are in an advantageous position to offer advice to ships' staff involved when excessive smoke emissions occur. Apart from negligence in operation, which can and does occur, the alterations in stokehold procedure suggested depend on a variety of factors involving lay-out and load demand and these factors must in all cases be given individual consideration. Ships' engineroom staffs are highly skilled and, in the main, close control on combustion conditions is maintained. Unfortunately, in spite of this skill exercised by the staffs and the desire of shipowners to avoid smoke emission, contraventions occur. There was one prosecution during the year in respect of heavy smoke emission from a ship.

Grit and Dust Emission. A grit or dust nuisance is intolerable and is a direct menace to a community. The evidence of its existence may be in the immediate locality or it may be of a more general character and involve a whole district. Sources of grit emission are varied and all combustion processes result in dust evolution and release. In addition there is the dust resulting from many process operations. The source of this type of nuisance includes straight steam raising practice under both natural and mechanical draught conditions, various types of metallurgical furnaces and many industrial processes involving heat application. The majority of such combustion operations lend themselves by design and arrangement to dust and grit control, while a smaller number, unfortunately usually connected with larger-scale

plants, do not. In almost all purely process operations outwith combustion, precautionary and eliminating action can be taken. In some processes involving combustion dust arrestation is difficult, e.g., coke oven plant, incineration plant, public destructors, foundry cupolas and large heat treatment furnaces, etc. Railway locomotives are a case in point. The increasing use of small grade fuels with the necessary use of mechanical draught is an aggravation of the nuisance. During the past year many such problems were dealt with and occupied much time in their abatement or partial reduction. The installation of mechanical dust arrestors in a number of cases brought about necessary improvement, while the adoption of screens and water sprays in others effected a definite reduction in the final dust content of the gases emitted. The problem of wet coke quenching in coke oven practice remains, owing to the great volume of free air and gases involved. In certain cases the existence of dust and chemical fumes and effluents necessitated the collaboration of the Chief Alkali Inspector of the Department of Health. Under the terms of Sections 5 and 6 of the Clean Air Act, 1956, it is incumbent that plant users make "use of any practicable means there may be for minimising the emission of grit and dust in any furnace burning solid fuel".

Oil-burning Installations. The extension in the adoption of oil fuel to existing plant goes on apace and during the year further similar changes were noted. Most installations of this nature are now fully or semi-automatically controlled and, in so far as smoke emission is concerned, they are satisfactory. When, however, maladjustment of the plant takes place, the combustion conditions are seriously impaired and very heavy smoke may be the result. Such occurrences are very annoying when they take place, especially in the central areas of the city. Some years ago, when solid fuel prices were considerably lower than is current now and the relative cost of oil high, the economic aspect of oil burning loomed large in the considerations of potential users because of the wide disparity in relative running costs. To-day the position has changed. The frequent advances in coal prices and comparative stability in oil cost has resulted in a closer approximation in the economic use of the two types of fuel. It is claimed that oil burning is now only about twenty per cent. above solid fuel.

Simplicity of installation, especially in smaller plants, and convenience and freedom from the generally dirtier conditions of coal burning are strong incentives to the adoption and conversion to oil. Again, oil qualities are generally stable for given grades and for specific purposes.

Road Transport Nuisance and Highways Operations. The problem of road vehicular exhausts still continues within the closely built central districts of the city. As a result of research and tests, several types of neutralising exhaust systems have been devised and are operated elsewhere but they have never been considered wholly satisfactory and further research and development in this field will continue. In so far as heavy exhausts are concerned, these come within the Police Traffic Administration, under the terms of the Construction and Use Regulations and when these exhausts are observed the attention of the vehicle operating authority is directed to particular vehicles which may be defective due to excessive wear or maladjustment.

Highway Plant and Road Surfacing Operations. Reference has already been made in the Annual Report for 1956 to this aspect of air pollution. During the past year there were several instances of this type of nuisance and these were immediately taken up with the operators. Special catalytic tests and demonstrations were carried through in specified areas and also on normal contract work, with continuing success and it could almost be said that most of the original difficulty experienced during these operations has now been overcome. It is only when on resurfacing work the underlying blinding material is of an especially bituminous or "tarry" nature that some local trouble may be caused but during the year it was not found to be in any way extensive.

Several complaints were intimated of a number of nuisances caused by the operation of ordinary pitch-melting boilers in the streets and in confined spaces, due to the fact that the local operators were making use of ordinary bituminous coal. In each case the operations were stopped until a supply of coke was obtained. This is the normal fuel used by such contractors and nowadays little trouble is experienced in this direction.

Nuisance from the escape of vaporising pitch still continues but again it is not extensive as such roadway operations are now much less frequent than they were heretofore.

Railway Operation and Servicing Sheds. During the year complaints were investigated in connection with locomotives operating adjacent to terminal stations and stationary at junctions and main signals close to dwelling-houses.

Within the Glasgow area there are a number of such running sheds servicing a very large number of steam locomotives, in one particular

case up to as many as 150 per day. The main operations involve fire and internal boiler cleaning and refuelling. Such operations and the general layout of the extensive shed areas do not lend themselves to smoke concentration in individual chimneys or shafts. As a result, a general smoke haze pervades each area.

It is a subject which has been discussed on many occasions and at a considerable length with the Railway Executive. They are fully alive to the problem and from time to time alterations in local procedure and timing have been evolved and acted upon. This has certainly resulted in some reduction in the total smoke emitted and improvement in the conditions existing but it is obvious that a problem still exists. In the writer's opinion such a problem will only be finally resolved when schemes of electrification are complete and diesel trains come into operation.

EDUCATIONAL ACTIVITIES.

Annual Courses in Boiler House Practice and Smoke Abatement.—

The post-war years have seen many developments take place in the field of educational activity in connection with fuel technology and the training of operators. Most of the larger Local Authorities, especially in industrial areas, have such educational schemes being offered in their areas, these being run by Technical Colleges and Education Authorities. There is also the correspondence and practical course which has been organised under the aegis of the National Industrial Fuel Efficiency Service (N.I.F.E.S.). Much advantage is being taken of the training courses of instruction and while the need for such instruction has been clamant in the past, the necessity for such activity is more so now and will be in the future as the more restrictive requirements of the Clean Air Acts, both south and north of the border, will show. Such educational activity in the particular field has long been the declared and active policy of the Corporation of Glasgow and Glasgow was one of the two earliest pioneers to institute such organised courses. They were first instituted as early as 1910 and, with the exception of the First War years, have been carried on ever since during each winter session.

In continuance of the above, the usual winter sessions of the Courses in Boiler House Practice, Fuel Economy and Smoke Abatement were carried through. During the past winter these courses in Glasgow were under the joint auspices of the Scottish Division of the Society for Clean Air and the Health and Welfare Department of the Corporation. It can be said that these courses in the past have been very

successful indeed and the latter session was no exception. Ordinary and Advanced Courses on successive evenings during the months of October to January constitute the scheme of our instruction and training. The total enrolment in this session was 62. Of this number, 40 were Ordinary or first year students and 22 were Advanced or subsequent year students. Attendance over the session was 76 per cent. Ordinary and 70 per cent. Advanced, giving a combined average of 73 per cent.

The students catered for in these courses are those who propose to take examinations and are in three categories—those intending to take the local Class Examinations, the City and Guilds of London Institute's Examinations comprising the examination for the Certificate in Boiler Practice (Boiler Operator's Certificate) and also others going forward to more technical examinations in Boiler House Practice and Combustion Engineering. A total of 25 lectures was given and, in addition, two further refresher lectures of 2½ hours each were delivered during April to intending candidates for the Institute's Examinations. Twelve candidates intimated their intention of going forward to these later this year. The local written class examinations were held at the end of January. Thirty-two men came forward, 25 taking the Ordinary and 12 the Advanced papers. Twenty-one men of the Ordinary and 11 of the Advanced gained Merit Certificates. As has been usual practice, the Certificates and book prizes are presented each year at a meeting convened during May. Members of the Health and Welfare Committee of the Corporation, Clean Air Society executives, and several other Local Authority officials address the students on various aspects of the requirements of the new Clean Air Act Regulations.

SOOT AND DUST COLLECTION STATIONS.

Since 1914 the Corporation of Glasgow has been a co-operating body under the atmospheric investigation carried out year by year by the Department of Scientific and Industrial Research all over the country, north and south. Local Authorities both county and burghal, co-operate in this work, normally *pro rata* with the density of population for their respective areas.

Initially there were nine such collecting stations and gauges within the city boundaries, the number being later reduced but within the last two years the number has again been increased to thirteen in an endeavour to cover all areas of the city, especially those contiguous to the ever-extending and developing building centres. In addition to those

within the city, there are two country area "check" stations; one such is sited at Mugdock Estate, ten miles north and the other on the north shore of Loch Katrine, approximately forty miles north-west of the city centre. Year by year the recordings from the monthly analyses as carried through by the Corporation Chemist and City Analyst are tabulated and the following such table is a summary of the results obtained during the past year and also for 1956.

DEPOSIT OF EACH ELEMENT OF ATMOSPHERIC POLLUTION
FOR 1956 AND 1957.

	Tons per Square Mile per Annum	
	1957	1956
Tar	3.40	3.32
Carbonaceous, other than Tar	44.06	36.22
Ash	94.98	80.09
Total Insoluble Matter	142.44	119.63
Total Soluble Matter	64.42	81.55
Total Solids	206.86	201.18
Rainfall in Millimetres	914.00	834.00

During the year under review the average weight in tons per square mile of solid deposit was 0.226 per millimetre of rainfall, while for the preceding year (1956) this figure was 0.241. There was an increase in precipitation of 5.68 tons per square mile for 1957. The total deposit for the year 1957 was 206.86 tons per square mile, while for the preceding year of 1956 the figure was 201.18 tons per square mile, an increase of 5.68 tons. The average yearly figure for the preceding six-year period was 225.45 tons per square mile. During the "winter" period (October-March) the average monthly rainfall amounted to 85 millimetres with a corresponding deposit of 18.99 tons per square mile. The "summer" months (April-September) gave an average figure of 67 millimetres of rainfall and an accompanying deposit of 15.48 tons per square mile. The average total rainfall, (as indicated by the gauges) for 1957 was 914 millimetres, while this figure for 1956 was 834 millimetres.

Over a course of years it has been noted that the total deposit and total rainfall are by no means in direct ratio. Undoubtedly the nature and frequency of rainfall over a period have a direct effect on the total of precipitation. It has been noted that where there is a frequency of light rain, as against long heavy downpour, a higher deposit figure is the result. This would indicate that such showery weather has a greater scavenging effect on the solid impurities held in suspension in the atmosphere.

AVERAGE DEPOSIT OF EACH ELEMENT OF ATMOSPHERIC POLLUTION FOR EACH MONTH OF 1957.

ENGLISH TONS PER SQUARE MILE.

	Month	Rainfall in millimetres	INSOLUBLE MATTER						Included in Soluble		TOTAL SOLIDS						
			Tar	Carbonaceous less Tar	Ash	Total Insoluble Matter	Total Soluble Matter	Total Solids, 1957.	Sulphate as SO ₄	Chlorine as Cl.	1956.	1955.	1954.	1953.	1952.	1951.	
Mean of 12 Stations	...	...	130	.36	3.85	9.51	13.72	8.77	22.49	2.97	2.91	18.88	19.91	31.33	21.68	33.82	27.20
"	"	...	70	.26	5.89	10.71	16.86	6.63	23.49	1.57	1.59	21.85	20.67	20.57	17.02	27.86	23.18
"	"	...	88	.30	4.01	9.66	13.97	4.94	18.91	2.02	0.68	13.60	21.12	23.14	20.87	19.84	25.24
"	13	...	51	.25	3.94	8.08	12.27	3.85	16.12	1.39	0.41	16.33	12.16	13.84	13.16	19.78	20.35
"	"	...	59	.29	3.62	6.95	10.86	3.86	14.72	1.59	0.44	13.71	21.09	19.44	15.64	16.41	11.65
"	"	...	43	.26	4.37	7.81	12.44	3.37	15.81	1.22	0.31	16.65	18.22	12.20	16.17	17.66	22.81
"	12	...	84	.23	3.35	7.92	11.50	3.69	15.19	1.21	0.34	13.65	9.13	14.37	13.83	11.08	13.99
"	"	...	97	.24	3.97	6.24	10.45	6.85	17.30	1.86	1.40	17.93	17.00	16.95	15.45	16.03	12.84
"	"	...	68	.44	2.61	5.73	8.78	4.99	13.77	1.67	0.80	16.36	12.81	17.91	13.61	18.43	16.93
"	"	...	86	.29	2.17	7.54	10.00	5.36	15.36	2.18	0.87	16.17	15.09	20.12	16.48	19.07	16.08
"	"	...	44	.20	2.81	6.03	9.04	5.28	14.32	1.64	1.17	14.19	14.42	24.81	19.83	18.03	23.49
"	"	...	94	.28	3.47	8.80	12.55	6.83	19.38	2.15	1.57	21.86	36.94	22.00	20.74	30.48	29.53
Yearly Deposit in tons per square mile	...	...	914	3.40	44.06	94.98	142.44	64.42	206.86	21.47	12.49	201.18	218.56	236.68	204.48	248.49	243.29
Monthly mean of all Gauges	...	...	85	.28	3.67	7.92	11.87	5.37	17.24	1.79	1.04	16.76	18.21	19.72	17.04	20.71	20.27

SECTION XIV.

GENERAL SANITARY OPERATIONS.

The city is divided into 37 wards which, for convenience, are administered in five Public Health Divisions, shown as follows :—

EAST.		NORTH.		CENTRAL.	
Ward No.		Ward No.		Ward No.	
1.	Shettleston and Tollcross.	8.	Cowlairs.	11.	Exchange.
2.	Parkhead.	9.	Springburn.	12.	Anderston.
3.	Dalmarnock.	10.	Townhead.	13.	Park.
4.	Calton.	14.	Cowcaddens.	19.	Kelvinside.
5.	Mile End.	15.	Woodside.	20.	Partick (East).
6.	Dennistoun.	16.	Ruchill.	21.	Partick (West).
7.	Provan.	17.	North Kelvin.	22.	Whiteinch.
		18.	Maryhill.	23.	Yoker.
				24.	Knightswood.

SOUTH-EAST.		SOUTH-WEST.	
Ward No.		Ward No.	
25.	Hutchesontown.	27.	Kingston.
26.	Gorbals.	28.	Kinning Park.
33.	Camphill.	29.	Govan.
34.	Pollokshaws.	30.	Fairfield.
35.	Govanhill.	31.	Craigton.
36.	Langside.	32.	Pollokshields.
37.	Cathcart.		

The area, population and average density (persons per acre) of each Division in 1957 was as follows :—

	Area	Population	Density
East	8,855 acres	227,173	26
North	8,172 ..	240,369	30
Central	7,050 ..	217,053	30
South-East	8,246 ..	211,580	25
South-West	7,402 ..	183,625	25
City	39,725 ..	1,079,800	27

The following table which is based on information supplied by the City Assessor, shows the number of occupied and unoccupied houses in each Division as at Whitsunday, 1957 :—

	Number of Houses		Total
	Occupied	Empty	
East	67,922	576	68,498
North	69,219	705	69,924
Central	68,068	946	69,014
South-East	68,219	806	69,025
South-West	50,922	514	51,436
	<u>324,350</u>	<u>3,547</u>	<u>327,897</u>

A report on the sanitary operations carried out in each Division during 1957 will be found in the pages that follow and the work of this section is summarised in Appendix Table XVI—Operations of Sanitary Section.

CENTRAL DIVISION.

No report of the work of the sanitary inspectorate could fail to mention the serious inroads upon normal duties made necessary by the preparatory and supervisory work entailed by the highly successful Mass Radiography Campaign held in the early part of the year. This probably accounts for the greater part of the fall in the number of nuisances dealt with during the year. A fairly complete description of the physical characteristics of the divisional area was given in last year's report ; suffice it to say that nothing of a major nature occurred to disturb that picture.

Slum clearance operations continued at the level of the past year. This rate is dictated by the number of new houses allocated by the Local Authority for this purpose. An increase in this allocation would enable action to be taken to get rid of a number of properties which, while not in the first degree of priority for clearance, are nevertheless having to be maintained reasonably wind and water-tight at a cost quite disproportionate to their limited life. This cost generally falls to be borne by the Corporation owing to lack of funds on the part of the owners.

In the paragraph devoted to nuisance abatement, attention is drawn to two cases of nuisance arising from an escape of coal gas which illustrate the necessity for extreme vigilance and sustained effort in the investigation of such complaints.

An extreme example of the conditions into which old people living alone can so easily lapse is reported on under the appropriate heading. It is a disturbing reflection that so many cases of this kind come to the notice of the Department more or less by chance and that there may be many others whose existence is so far unknown.

In the paragraph dealing with the maintenance of the cleanliness of walls and ceilings of common closes, staircases, etc., some comment is made on the lack of support given in the Magistrates' Courts to this very necessary though possibly prosaic sanitary service.

The onset of the Rents Act, 1957, brought quite a substantial demand for Certificates of Disrepair following notice of increase. This expected spurt died off fairly soon and has now reached a comparatively low figure. The conclusion would seem to be that tenants are on the whole accepting the increase in rentals, if not with acclamation, at least with resignation.

All these and other aspects of sanitary administration are more fully discussed under the appropriate headings in the body of the report and detailed figures will be found as usual in Table XVI of the Appendix.

Nuisance Abatement :

As stated in the introductory paragraph, a fall in the number of nuisances removed is recorded. It is to be expected, however, that as the worst of the tenement property is cleared away, the incidence of nuisances arising from structural and drainage defects should show a progressive decline. The nuisances dealt with were of the normal type but two, arising from coal gas leakages, call for some comment.

In one case affecting a flat in a residential area, the district inspector suspected coal gas as the cause. Although he was informed that the Gas Board employees had already carried out three checks of pipes and fittings, he insisted on a further check being made. This resulted in two small leakages being found.

The other case concerned the basement of business premises in the centre of the city. The smells had been experienced intermittently during the past two years. On each occasion the Gas Board had been called in and had found no source of leakage. In this case, also, the district inspector was suspicious of coal gas. After checking all possible causes, he submitted to the City Analyst a sample of air from the affected premises. This showed a fairly high concentration of coal gas. The Gas Board were informed and asked to examine a gas main

in a lane adjoining the premises. This they did and subsequently reported that the 4-inch main had been found to be fractured. In a footnote to his report the City Analyst wrote : " It is disquieting that coal gas should be detected after the Gas Board had stated that coal gas was not present."

So far as our inspectors are concerned there are two lessons to be learned from these cases : (1) Where coal gas is suspected, an insistence on the most thorough checking and rechecking by the Gas Board ; and (2) the enlistment of the aid of the City Analyst in all cases of doubt.

There was no easement of the difficulties encountered during recent years in securing the abatement of nuisances, as is made plain by the following figures :—Authority to serve statutory notices was required in 229 cases ; with a back-log of 48 notices from the preceding year, a total of 277 notices was dealt with. Of these, 85 were abated after service, 36 before service, 18 cancelled for various reasons, 13 outstanding and 125 submitted for court action. Of these latter, 34 were abated, 2 cancelled and 89 outstanding at the end of the year. These outstanding cases include a number in which the nuisance has been abated but the case cannot be closed until the submission of accounts by the Housing and Works Department. It is impossible to give a clear-cut and complete picture for any particular year. The figures given above represent a very severe administrative burden and the very heavy costs being incurred by the Local Authority in abating many of these nuisances seems to call for a re-examination of the whole complex problem. Examples of costs incurred during the year are (1) £439 16s. 4d., (2) £863 3s. 10d., and (3) £2,288 19s. 3d.

Factories Act, 1937.—The administration of this Act followed normal lines with nothing worthy of special comment. The changes in the various types of factories and bakehouses were of a minor nature.

Common Lodging Houses.—There was no change in the number of such establishments. There were six on the register at the end of the year, with accommodation for 1,177 persons, together with two boarding-houses for seamen accommodating 168 persons. One common lodging house has received notice to quit from the owners of the building but this will not come into effect until May, 1958. Again there were a number of cases of men and women from these houses presenting themselves for disinfection. All were treated at Ruchill Disinfecting Station. So far there is no word of any move to bring common

lodging houses under full control again by an alteration of the statutory definition. Until this is done complete enforcement of the bye-laws is impossible.

Rodent Control.—This work followed normal lines throughout the year. A slight increase in the number of premises treated and of rats killed is to be noted, together with a fall of 50 per cent. in the number of mice killed. The only "kill" out of the ordinary was obtained in a refuse disposal work and adjoining railway embankment when 82 rats were accounted for. The type of premises treated was on the usual lines, with dwelling-houses forming a large proportion. The year's activities are summarised in the following table:—

Number of premises treated...	...	...	...	868
Rodents killed : Rats	...	...	...	835
Mice	...	...	...	315
			—	1,150
Accounts rendered	...	...	...	£1,683 8 9
Accounts paid	...	...	...	£1,455 5 8
Houses treated free of charge	...	...	...	267
Cost of free treatment	...	...	...	£226 2 6

Housing (Scotland) Act, 1950.—As during last year, it was possible to secure the closure or demolition of a number of the worst houses in the Division under the slum clearance procedure of the Act and 397 houses were so dealt with. A further 61 were condemned as dangerous by the Dean of Guild, 19 closed voluntarily by the owners and 38 earmarked for demolition to make way for an extension of the University. The occupants of the latter are in process of being rehoused by the Local Authority. A total of 515 houses was thus reached. As 91 per cent. of these houses were of one or two apartments, a very valuable by-product of these clearance operations must be the alleviation of a great deal of overcrowding.

The abandonment of properties showed a steep increase over last year's figures—33 as against 11. Of the 18 abandoned properties in the Division at the end of last year, 3 were dealt with under the Housing Act, 2 acquired by the Local Authority under Section 3 of the Housing (Repairs and Rents) Act and one demolished by the Dean of Guild. Thus there were 45 abandoned properties in the Division at the end of the year under review. However, 8 of these have been represented for demolition or closure and one condemned by the Dean of Guild; rehousing of the tenants is now under way. It is hoped to take action under the Housing Act against a number of the others during 1958.

The details of the properties dealt with by representation, closure or demolition are given in the following table :—

PROPERTIES REPRESENTED, CLOSED OR DEMOLISHED DURING 1957.

Address	No. and Size of Houses					How dealt with	Current Condition
	1 Apt.	2 Apts.	3 Apts.	4+ Apts.	Total		
252/258 Stobcross Street ...	—	3	6	—	9	Dean of Guild	Demolished December, 1957
73 William Street ...	—	16	—	—	16	Dean of Guild	Awaiting rehousing
45 Smith Street ...	2	14	—	—	16	Dean of Guild	" "
9/11 Grace Street ...	3	8	3	—	14	Closing Order	Demolished, December, 1957
14 Walker Street ...	16	1	—	—	17	Demolition Order	Demolished, November, 1957
4 College Street ...	15	—	—	—	15	Closing Order	Closed, 12/8/57
67 Vine Street ...	32	—	—	—	32	Demolition Order	Awaiting demolition
14 Grace Street ...	13	3	—	—	16	Demolition Order	Awaiting rehousing
62 Anderson Street ...	20	6	—	—	26	Demolition Order	" "
54 Anderson Street ...	19	6	—	—	25	Closing Order	" "
50 Anderson Street ...	20	5	—	—	25	Closing Order	" "
76 Carrick Street ...	—	8	—	—	8	Voluntarily closed	Demolished, August, 1957
407½ Argyle Street ...	2	—	4	—	6	Voluntarily closed	Demolished, August, 1957
2 Moy Street ...	1	4	7	—	12	University Extension	Awaiting rehousing
4 Church Street ...	—	7	6	—	13	University Extension	" "
6 Church Street ...	—	7	6	—	13	University Extension	" "
1 Broomhill Road ...	—	—	—	1	1	Voluntary	" "
1305/1317 Dumbarton Road ...	—	—	—	4	4	Voluntary	Demolished, September, 1957
2/4 Crimea Street ...	15	17	—	—	32	Closing Order	Awaiting rehousing
6/8 Crimea Street ...	1	2	—	—	3	Closing Order	" "
100/102 Purdon Street ...	16	4	—	—	20	Demolition Order	" "
108/110 Purdon Street ...	18	3	—	—	21	Demolition Order	" "
7 Gilbert Street ...	9	14	—	—	23	Demolition Order	" "
70 Wemyss Street ...	4	4	—	—	8	Closing Order	" "
67 Cowcaddens Street ...	1	5	—	—	6	Closing Order	" "
70 Merkland Street ...	8	10	—	—	18	Closing Order	" "
21 Shamrock Street ...	—	1	—	—	1	Closing Order	Closed, 30/12/57
32 McFarlane Street ...	—	—	1	7	8	Dean of Guild	Awaiting rehousing
66/68 McAlpine Street ...	—	12	—	—	12	Dean of Guild	" "
118 Castlebank Street ...	6	6	—	—	12	Closing Order	" "
124 Castlebank Street ...	11	5	—	—	16	Demolition Order	" "
130 Castlebank Street ...	11	5	—	—	16	Demolition Order	" "
138 Castlebank Street ...	11	5	—	—	16	Demolition Order	" "
142 Castlebank Street ...	8	6	—	—	14	Closing Order	" "
77 Merkland Street ...	4	4	—	—	8	Closing Order	" "
81 Merkland Street ...	7	6	—	—	13	Closing Order	" "
	<u>273</u>	<u>197</u>	<u>33</u>	<u>12</u>	<u>515</u>		

Rents Acts.—Undoubtedly the main feature in this field of activity was the coming into force of the Rents Act, 1957. The outstanding effect was the freeing from control of all houses of a rateable value of £40 or over. It had been anticipated that the application by owners

of the permitted increase of 25 per cent. would result in a flood of applications for certificates of disrepair by tenants. This, in fact, did happen but not in the volume expected and in the latter months of the year had fallen to a comparatively low level. The following figures make the position clear :—

Between 1st January and 5th July, 51 applications for certificates were made; between 6th July and 31st December this figure had jumped to 212, of which 210 were inspired by notice of increase of 25 per cent. as permitted under the new Act. Of this total of 263 applications, 197 were granted, 53 refused, 8 cancelled and 5 left outstanding. Applications for revocation by owners totalled 49, of which 48 were granted and 1 was outstanding.

Glasgow Police Act, 1866, and Confirmation Act, 1934.

Painting, Limewashing, etc., of Common Closets and Staircases.—A survey of 4,429 tenement properties was carried out, resulting in the issue of 679 notices to cleanse, limewash and/or paint. Of these notices, 475 were complied with, 196 properties were dealt with voluntarily by the owners, and 165 as a result of notices issued in 1956, making a total of 836. In the case of 13 properties, every possible effort was expended without avail to secure compliance with notices. Finally recourse was had to court action which resulted in 10 admonitions, 2 absolute discharges and one desertion *per loco*. From this result it is obvious that the court regards breaches of this particular law as of minor importance. Considering the very considerable administrative effort spent on this work this attitude is disappointing and frustrating. If this particular law can be flouted with impunity there is little or no incentive for its administration.

Drainage.—The virtual completion of house-building at Drumchapel was reflected in the total of 317 houses completed as against 1,439 the previous year. Private building provided a further 127 of between 3 and 6 apartments. A number of conversions of large houses into flats took place. The testing of the drainage of these houses and that of many commercial and factory premises was carried out without any major issue arising.

Planning permission.—There were 78 applications for planning permission to change the use of premises referred to the Division by the City Architect for report. In 40 instances these involved the conversion of 102 houses to business premises of one sort or another. The two next largest groups concerned catering establishments and betting

shops. In the case of proposed catering establishments an effort is always made to anticipate the probable requirements of the Food and Drugs Regulations which have been "imminent" for so long by demanding as high a standard as possible of kitchen equipment and structure, hot water supply, sanitary conveniences, staff rooms, etc., in the interests of hygienic catering. There does seem to be a new awareness among catering people of the necessity for higher standards in this respect and this may be the fruit of the constant propaganda of the past few years. It is at least an encouraging thought.

Aged Persons.—The Divisional Medical Officer found it necessary to secure the removal to appropriate institutions of three old persons (all women) under the National Assistance Acts of 1947 and 1951. One of these cases is that mentioned in the introductory paragraph to this report. The state of the house was drawn to the attention of the Department by the Police. It turned out to be one of three apartments, situated 2 stairs up in a quite good-class neighbourhood. It was found to be occupied by two elderly sisters, both spinsters. How they lived, moved (especially moved) and had their being in such surroundings remains a mystery. From floor to ceiling and from entrance lobby to back wall was one mountain of refuse which had submerged furniture, bedding and fittings. After removal of the two occupants by the Divisional Medical Officer, the work of cleaning the Augean stable had to be faced. This Herculean task was finally accomplished with the co-operation of the Welfare Section who had a searcher continuously on duty at the house for two weeks, setting aside what was salvageable. In the end 22 two-ton truckloads of material were removed. During this prolonged operation the house required to be sprayed almost daily to allow the men engaged to work in reasonable comfort. It seems incredible that such a condition of affairs could exist for so long in a tenement of houses without someone bringing it to the notice of the Department.

Ten cases occurred during the year of houses occupied by elderly or incapacitated people requiring to be cleansed and purified by the Department. In some cases this involved distempering and in one case painting. Bedding, etc., was treated at the Disinfecting Station. A great deal of time and patience is expended by the nurse-inspectresses on some of these cases but the results are very worth-while.

Miscellaneous Duties.—This description covers a wide range of duties, e.g., piggeries, Rag Flock, etc., Act administration, brokers' premises and so on which were adequately covered but without any special comment being called for.

Nurse-Inspectresses.—The diminished inflow of new tenants to Drumchapel gave the nurse-inspectresses the opportunity to assess the results of their previous supervisory work in this area. Of 739 houses utilised for the rehousing of tenants from condemned property, 647 were found "clean," 78 "fair" and 4 "dirty"; the remaining 10 had not been visited by the end of the year. Of the other houses in Drumchapel (approximately 7,000) let in the ordinary way, 435 were found to be "fair" and only one "dirty." This is a very heartening picture and without doubt a great deal of credit must be accorded to the "Green Ladies." They have performed a really valuable service to a new community with the maximum of tact and the minimum of friction. The supervision of the older schemes and the cleanliness inspections of school children were carried out on normal lines.

Sanitary Conveniences Used in Common.—The demolitions and closures reported on elsewhere enabled a further reduction to be recorded in the number of water closets used in common. The figures are now as under :—

Serving 2 tenants	933	Decreased by	...	8
" 3 "	1,100	"	...	37
" 4 "	456	"	...	41
" 5+ "	112	"	...	52
	<u>2,601</u>			<u>138</u>
Dry closets and privy middens				8
Ashpits				11
Houses without internal water supply				8
Houses with baths				43,437

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Divisional Sanitary Inspector.

NORTHERN DIVISION.

The population of the Division is 240,369 persons, a reduction of 4,181 persons in the total for the previous year, and is a continuance of the trend first noted in 1955. The movement of 1·7 per cent. of the population from the Division indicates to some extent the progress being made in dealing with uninhabitable property.

The density of population although reduced from 30 persons to 29 persons per acre, still compares unfavourably with 27 persons per acre for the city as a whole.

Problems arising from housing in its various aspects have occupied a considerable part of the time of the staff, especially the attempt to check the increasing dilapidation occurring in domestic property. More and more responsibility is being placed on the Department for maintaining property in good repair. During 1957, work to the value of £10,300 was carried out on instruction of the Department, and many times this amount was spent by owners of property at the instigation of the Department.

The following account describes in detail some of the activities of the inspectorate in maintaining a reasonable standard of sanitation in the Division.

Public Health (Scotland) Act, 1897.—The Act requires the Local Authority to have their district inspected from time to time to ascertain what nuisances exist. Also, 4,657 complaints were investigated. Formal intimation of nuisances was made to those responsible for abatement on 14,283 occasions. At the end of the year 13,471 nuisances had been abated. The type dealt with and the incidence of each are itemised in Table XVI in the appendix.

Nuisances arising from structural defects in dwelling-house property can be exceedingly costly to abate, i.e., defective slating on roofs, blocked or broken chimney-heads, dry rot in floors, etc., or blocked or collapsed drains. In consequence, many owners of property are not financially in a position to have the nuisance abated. In other instances nuisances are allowed to continue through irresponsibility. These cases have to be reported to the Local Authority so that sanction can be obtained to issue a Statutory Notice in terms of Section 20 of the Act. One hundred and forty nine notices were issued during the year; this brought about the abatement of 93 nuisances, leaving 56 to be referred to the Sheriff Court.

Summary of Action taken to have Nuisance Abated.

Formal Intimation to Owners	14,283
Nuisances Abated	13,471
Service of Statutory Notices	149
Nuisances Abated after Service of Notice ...	93
Referred to Sheriff Court, including Carry-Over from 1956	69
Successfully dealt with in Court	37
Outstanding at at end of Year	32
Cost to Department of Work done to abate Nuis- ances	£6,550 4 3
Legal Costs recovered from Owners	£92 8 0

Insect Infestation.—Three hundred and nine complaints of insect infestation were investigated, and 1,154 houses were visited in connection with bug infestation prior to the rehousing of the tenants in Corporation houses. The Disinfestation Unit was requested to treat 1,716 apartments for the usual household pests—flies, bugs, beetles, etc. Woodworm (*anobium punctatum*) commonly known as the furniture beetle, is becoming more widespread. A higher number of complaints are being received, and while not an insect that in any way can spread disease, it causes concern because of the damage to furniture and structural timbers. The adult beetle is $\frac{1}{8}$ inch long, dark brown in colour. The female produces up to 50-60 eggs and these are laid in cracks or raw ends of suitable timber. The eggs hatch out in 3-5 weeks and the grub burrows into the timber. The grub stage lasts from 2 to 3 years, during which period burrowing in the affected timber continues. A pupal stage, lasting a few weeks, precedes the emergence of the adult beetle complete with wings for flight. Nuptial flight periods last only a few weeks, when the above cycle is again repeated. The primary or initial attack of woodworm will occur some considerable time before the discovery of the emergence holes. Skilful treatment with some of the proprietary wood preservatives or insecticides will limit the extent of an infestation. To reduce the risk of an occurrence, furniture and exposed woodwork should be washed regularly with hot water to which has been added a detergent and a small quantity of paraffin. Some proprietary furniture and wax polishes contain insecticides for protection against woodworm.

Another and more serious cause of destruction in structural timbers is dry rot. This is not an insect infestation but a fungus that flourishes prolifically on timbers under damp and unventilated conditions.

There are two types of the fungi, True Dry Rot (*Merulius lacrymans*) and Cellar Fungus (*Coniophora cerebella*), which are somewhat prevalent in Glasgow. True Dry Rot is the more serious, spreading from place to place by minute spores which on settling on damp timbers in unventilated dark spaces readily grow into extensive areas of snowy-white cotton wool-like growths over the surface of timber. It may spread over plaster surfaces and through porosities of brickwork to attack further areas of timber. Timber attacked is quickly reduced to a brittle condition and finally crumbles away causing collapse of floors, stairs, etc.

Cellar Fungus is not so prolific in growth as is True Dry Rot and, as its name indicates, is more often found in cellars, garden sheds, and

attacking other outdoor timbers. It is more difficult to detect than is *Merulius lacrymans*, but the presence of thread-like growth, brown or almost black in colour, with shrinking of timber indicates activity. Early and radical cutting away of all affected timber and the treatment of adjacent structure by burning or with approved chemicals is essential if an attack of dry rot is to be overcome. All new timbers should be impregnated with suitable wood preservatives. Where an attack is widespread expert advice as to treatment should be sought.

Offensive Trades, Piggeries, etc.—Regulations and bye-laws made under the Public Health (Scotland) Act to prevent nuisances arising from the conduct of offensive trades, piggeries, common lodging houses and siting of dwelling-vans were enforced. Details of visits and irregularities appear in Table XVI. Generally conditions in these places are satisfactory.

Glasgow Police Acts. Cleansing of Common Passages and Stairs.—The enforcement of the bye-laws for regulating the cleansing of common passages and stairs by tenants of houses requires a considerable part of the inspectors' time. During the year 389 complaints of neglect were investigated and 418 cards regulating the rotation of cleansing were issued. Some 3,248 visits were made to properties in this connection.

Limewashing and Painting of Walls, Etc., of Closes and Staircases.—The bye-laws require the proprietor of any tenement in which any common passage or common stair or staircase is not in a cleanly state to cleanse and limewash not more often than once in every year, or to paint not more often than once in three years the painted portions of such passage or staircase. Usually two years elapse before a proprietor is called upon to cleanse and limewash the passages and staircases of tenements, sometimes longer; even so, this work is undertaken with some reluctance because of the expense involved. Recent experience has made it necessary to refer some cases to the Procurator-Fiscal for action in the Police Court. During 1957, 743 notices to limewash and 113 notices to limewash and paint passages and staircases of tenements were issued to factors. A total of 1,115 tenements received attention, including 270 done voluntarily by the owners and 61 for which notices were issued in the previous year. Seventy-four remained to receive attention during the current year.

Drainage.—The Glasgow Streets, Sewers and Buildings Act, 1937, require that all drainage has to be installed to the satisfaction of the

sanitary inspector. In the course of the year 1,159 visits were made to various building sites and 94 smoke tests were applied. Work completed included :—

Dwelling-houses	...	...	...	...	...	48
Factories and Workplaces	...	...	...	...	...	16
Shops and Offices	...	...	...	...	...	34
Hospitals and Ancillary Building	...	...	...	...	...	4
Schools and Community Centres	...	...	...	...	...	6

Water Supplies.—The routine check on the bacteriological quality of the water supplied to the city from Loch Katrine was maintained. Weekly visits were made to Milngavie Reservoirs and 431 samples of water collected before and after chlorination for submission to the City Bacteriologist for analysis. The water entering the city's service mains was found to be of a consistently high quality.

In certain high areas of the Division, cisterns for the storage of water for dietetic purposes are located in attic spaces. These have to be examined from time to time to ensure that they are clean and free from contamination. During the year 818 visits were carried out and 240 cisterns were cleansed and the coverings and ventilation secured. Complaints from householders regarding quality or lack of supply or defective appliances were investigated on 165 occasions, and in the course of routine visits to property 651 burst pipes or other defects were discovered. These were brought to the notice of the Water Engineer for his attention.

Factories Acts, 1937 and 1948.

Factories registered in terms of the Acts include—

Factories (Mechanical Power)	...	...	...	...	659
Factories (Non-Mechanical Power)	...	...	...	...	29
Bakehouses (Mechanical Power)	...	...	...	...	54
Bakehouses (Non-Mechanical Power)	...	...	...	...	26

In the course of the year 1,818 visits were made and 250 defects remedied.

Forty-one homeworkers were listed and their homes visited on 49 occasions.

Catering establishments, including restaurants, fish restaurants and canteens, were visited on 1,995 occasions to ensure that hygienic conditions were maintained.

Prevention of Damage by Pests Act, 1949.—Operations under this Act continued throughout the year and much effective work was done as detailed in the following table :—

RODENT CONTROL OPERATIONS, JANUARY TO DECEMBER, 1957.

<i>Visits—</i>							
Primary	...	...	...	...	...	...	2,725
Intermediate	...	...	...	...	...	...	908
Proofing	...	...	...	...	...	...	226
Total Visits							3,859

Type of Premises Surveyed—

Tenements	...	...	...	...	...	...	3,030
Offices and Institutions	...	...	...	...	...	...	103
Factories (General)	...	...	...	...	...	...	157
Factories (Food)	...	...	...	...	...	...	43
Shops (General)	...	...	...	...	...	...	201
Shops (Food)	...	...	...	...	...	...	168
Offensive Trades	...	...	...	...	...	...	26
Restaurants	...	...	...	...	...	...	27
Coups	...	...	...	...	...	...	76
Farms	...	...	...	...	...	...	25
Sewers	...	...	...	...	...	...	3
Total							3,859

* Number of rats killed and carcasses recovered	...	696
Number of mice killed and carcasses recovered	...	230

* Does not take account of those destroyed by poison and where carcasses have not been recovered.

Warfarin—a blood anti-coagulant—is being used almost exclusively for the destruction of rats and mice. It is clean to handle, comparatively safe where animals are concerned, and simple in application. Some expert knowledge is necessary if baiting is to be effective and the best results obtained.

Much help could be given by the public in preventing infestations of rats and mice by the careful storage of food in rat-proof premises; by placing waste food in bins with covers and stopping the practice of indiscriminate dispersal of bread, etc., in the feeding of birds.

The cost of destruction operations in the Northern Division during the year to owners and occupiers amounted to £425 and to the Department £1,000 approximately.

Housing (Scotland) Act, 1950.—It is the duty of the Local Authority to inspect their district and deal with insanitary or uninhabitable houses; to prevent overcrowding and to assess the housing needs and to make proposals for new houses.

The following table indicates the total number and size of houses in the Division at Whitsunday, 1957 :—

NUMBER OF HOUSES IN NORTHERN DIVISION AT WHITSUN, 1957.

Ward	Size of Houses					Total	Total at Whitsun, 1956
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.		
8	1,228	4,373	1,709	247	38	7,595	7,909
9	616	2,213	2,903	3,097	344	9,173	9,218
10	1,222	4,993	2,422	682	147	9,466	9,570
14	1,239	4,222	1,361	178	62	7,062	7,230
15	1,570	4,143	1,213	404	307	7,637	7,698
16	646	2,834	6,080	2,741	361	12,662	12,682
17	1,315	4,148	1,821	552	598	8,434	8,448
18	613	3,354	2,850	796	282	7,895	8,033
Total	8,449	30,280	20,359	8,697	2,139	69,924	70,788

It will be noted that there is a net decrease of 864 houses. This is primarily due to the closing or demolition of houses under Section 9 of the Housing Act, and the demolition of houses declared structurally unsound by the Dean of Guild Court. There has been little new building to compensate for the loss of houses under these operations. Only 48 houses of three apartments and six houses of four apartments were completed and made ready for occupation by the Corporation, and eleven houses of three and four apartments completed by private building in connection with industry and institutions, a total of 65 new dwellings in the Division during 1957. Against this, 675 houses were either closed or demolished by various agencies during the period Whitsun, 1956-1957.

The tables hereunder indicate the houses represented as unfit or which have become dangerous during the year 1957 :—

HOUSES REPRESENTED UNDER SECTION 9,
HOUSING (SCOTLAND) ACT, 1950.

Ward	Address	Houses in Apartments					Total	Represented
		1	2	3	4	5+		
8	54/56 Turner Street ...	2	9	—	—	—	11	3/6/57
	109 Royston Road ...	—	9	3	—	—	12	3/6/57
10	9 Rosemount Street ...	6	7	—	—	—	13	6/5/57
	15/17 Rosemount Street ...	6	7	—	—	—	13	6/5/57
	258/260 Roystonhill ...	1	10	—	—	—	11	3/6/57
	52 Rosemount Street ...	4	6	—	—	—	10	3/6/57
	100A Cathedral Street ...	—	12	—	—	—	12	3/6/57
	251 Cathderal Street ...	—	1	—	—	—	1	4/9/57
	112 Parson Street ...	16	5	2	—	—	23	28/10/57
14	17/27 Mary Street ...	1	9	—	—	—	10	3/6/57
	33 Mary Street ...	5	5	—	—	—	10	3/6/57
	37 Mary Street ...	5	5	—	—	—	10	3/6/57
	41 Mary Street ...	5	4	—	—	—	9	3/6/57
	5 Swan Lane ...	7	9	—	—	—	16	14/10/57
	3 Swan Street ...	1	13	—	—	—	14	14/10/57
	4 Swan Street ...	1	12	—	—	—	13	14/10/57
	5 Swan Street ...	7	9	—	—	—	16	14/10/57
	6 Swan Street ...	7	9	—	—	—	16	14/10/57
	7 Swan Street ...	6	14	—	—	—	20	14/10/57
	9 Swan Street ...	2	14	—	—	—	16	14/10/57
	30 Canal Street ...	6	9	—	—	—	15	28/10/57
	52 Canal Street ...	7	9	—	—	—	16	28/10/57
	54 Canal Street ...	2	13	—	—	—	15	28/10/57
118 High Craighall Road ...	18	—	—	—	—	18	11/11/57	
15	51 Wigton Street ...	15	9	—	—	—	24	25/3/57
	55 Wigton Street ...	—	15	4	—	—	19	25/3/57
	59 Wigton Street ...	1	18	1	—	—	20	25/3/57
17	13 Clouston Street ...	—	—	—	—	1	1	14/1/57
		131	242	10	—	1	384	

HOUSES CLOSED either BY MASTER OF WORKS
OR HOUSING DEPARTMENT OR OTHER AGENCY.

Ward	Address	Houses in Apartments					Total	
		1	2	3	4	5+		
9	3 Torrance Street ...	—	1	1	—	—	2	} Demolished by Owners, May, 1957.
	9 Torrance Street ...	4	2	—	—	—	6	
10	30 Rosemount Street ...	11	7	—	—	—	18	} Demolished by Housing Department.
	16 Dunolly Street ...	4	8	—	—	—	12	
	116B Rottenrow ...	8	8	—	—	—	16	
	116c Rottenrow ...	4	8	—	—	—	12	
56	James Nisbet Street ...	—	9	3	—	—	12	Demolished by Town Planning Department.
	68 St. Mungo Street ...	4	8	—	—	—	12	} Demolished by Master of Works.
	88 McAslin Street ...	1	7	4	—	—	12	
14	3 Fountainwell Road ...	2	5	4	—	—	11	Demolished by Master of Works.
15	19 Rodney Street ...	—	16	—	—	—	16	} Demolished by Master of Works.
	21 Rodney Street ...	—	9	—	—	—	9	
18	18/21 Leyden Gardens	—	1	2	—	—	3	Demolished by Owners.
Totals ...		38	89	14	—	—	141	

Since 1945, 3,101 houses in the Division have been closed or demolished, as indicated in the following table:—

HOUSES DEMOLISHED OR CLOSED DURING THE YEARS 1945-57.

Year	Houses Demolished									Houses Closed								Grand Total	
	Ward								Total	Ward							Total		
	8	9	10	14	15	16	17	18		8	9	10	14	15	16	17			18
5/55	447	26	334	422	373	66	1	86	1,755	60	1	36	107	126	9	4	1	344	2,099
66	16	—	32	136	53	—	—	10	247	88	—	1	48	34	1	2	—	174	421
57	48	8	76	89	77	—	—	3	319	54	35	120	5	42	1	2	3	262	581
	511	34	442	647	503	66	1	99	2,321	202	36	157	160	202	11	8	4	*780	3,101

* 451 subsequently demolished.

Royston Road Clearance Areas.—Three areas situated on the north side of Royston Road and intersected by Turner Street, Villiers Street, Bright Street and Cobden Street were surveyed, and of the 295 houses

in the three areas 272 houses, or 92 per cent., were considered unfit for human habitation. Actually 243 of these houses had already been closed in terms of Section 9 of the Act and were empty but could not be demolished, the ground floors consisting of business premises. On representation being made to the Local Authority it was resolved that the areas be Clearance Areas in terms of Section 25 of the Act. Subsequently it was resolved to acquire compulsorily all lands in the Areas and also that adjoining, and submit Clearance Orders for approval of the Secretary of State for Scotland. With the clearance of these areas there will be removed some of the worst slums in the city and made available approximately 11 acres of ground for residential development. (See photographs between pages 280 and 281 in Annual Report for 1956).

Abandoned Properties.—A considerable increase in the number of houses abandoned by their owners occurred during the year. Over 700 houses in 58 properties are now without owners, the tenants of which are paying no rent. Little or no maintenance is being done and sooner or later these houses will become uninhabitable and require to be dealt with by Closing or Demolition Orders. Twenty properties containing 255 houses have already been dealt with in this way. It was necessary to have repairs done to abate nuisance at a cost of £601 3s. 1d. in some of these properties.

In order that a block of four houses which had been abandoned about two years ago might continue to be useful, representation in terms of Section 7 of the Act was made to the appropriate Committee. After service of notice on the occupiers of the houses in lieu of the owner, whose address was unknown, extensive repairs at an estimated cost of £1,060 were to be undertaken. This work is in progress at time of writing. On completion of the work the houses will in all respects be fit for habitation and it is hoped that they will be acquired and tenancies put on a proper basis.

Properties Offered to the Corporation.—Since 1948, 193 properties containing 2,057 houses have been offered and acquired by the Corporation. During the year a further 71 properties were offered. Not all offers were accepted, however, as the two main conditions could not be met—(a) that the property has a useful life for a period of years or the site is in an area suitable for future residential development, and (b) that the ground burdens can be acquired at a reasonable cost and bonds on the property be discharged at no cost to the Corporation.

PROPERTIES OFFERED TO CORPORATION DURING 1957.

Ward	Number of Properties	Houses					Total	Accepted		Refused		Pending		Total
		Apartments						Properties	Houses	Properties	Houses	Properties	Houses	
		1	2	3	4	5								
8	8	2	43	10	5	—	60	4	26	4	34	—	—	60
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	23	41	141	14	29	4	229	13	138	—	—	10	91	229
14	11	18	75	19	12	—	124	2	18	—	1	9	105	124
15	16	26	180	5	—	—	211	2	32	5	66	9	113	211
16	7	25	67	1	—	—	93	7	93	—	—	—	—	93
17	5	10	44	11	—	—	65	3	41	—	—	2	24	65
18	1	—	8	4	—	—	12	—	—	—	—	1	12	12
	71	122	558	64	46	4	794	31	348	9	101	31	345	794
Properties offered in previous years and negotiated in 1957								10	108	—	—	—	—	108
Total number of properties accepted, refused or pending in 1957								41	*456	9	101	31	345	902

* 374 houses have been dealt with in terms of Section 9 of the Housing (Scotland) Act, 1950, and acquired in terms of Section 3 of the Housing (Repairs and Rents) (Scotland) Act, 1954.

The acquisition of these older properties forms a useful reservoir of houses to which families who do not qualify for an ordinary Corporation house can be transferred; also for providing small houses for elderly persons from unfit property.

In Section 105 of Part VII of the Act provision is made for the improvement of housing by means of conversion of other buildings and for an exchequer contribution towards losses incurred by Local Authority.

Two tenements of four-storeys each comprising twelve two-apartment and four one-apartment houses with a common water-closet in close and on each landing shared in common by the tenants were acquired by the Corporation for a nominal sum of £112. Structurally the properties were sound but internally a considerable amount of dilapidation existed and the majority of the houses were defective in design, being back-to-back in type and therefore deficient in ventilation. Also, all were lacking inside sanitary, food storage and other facilities.

Prior to the acquisition of the property the sum of £1,700 had been spent on renewing floors in the ground flats and re-covering the roofs to abate nuisance.

Having regard to the amount of money spent on the properties and the spaciousness of the flats, it was thought desirable to convert

the thirty-two houses of one and two apartments into sixteen houses of two and three apartments, each with kitchenettes and bathrooms, at an estimated cost of £17,000, about £1,000 per house. See plans on page 333).

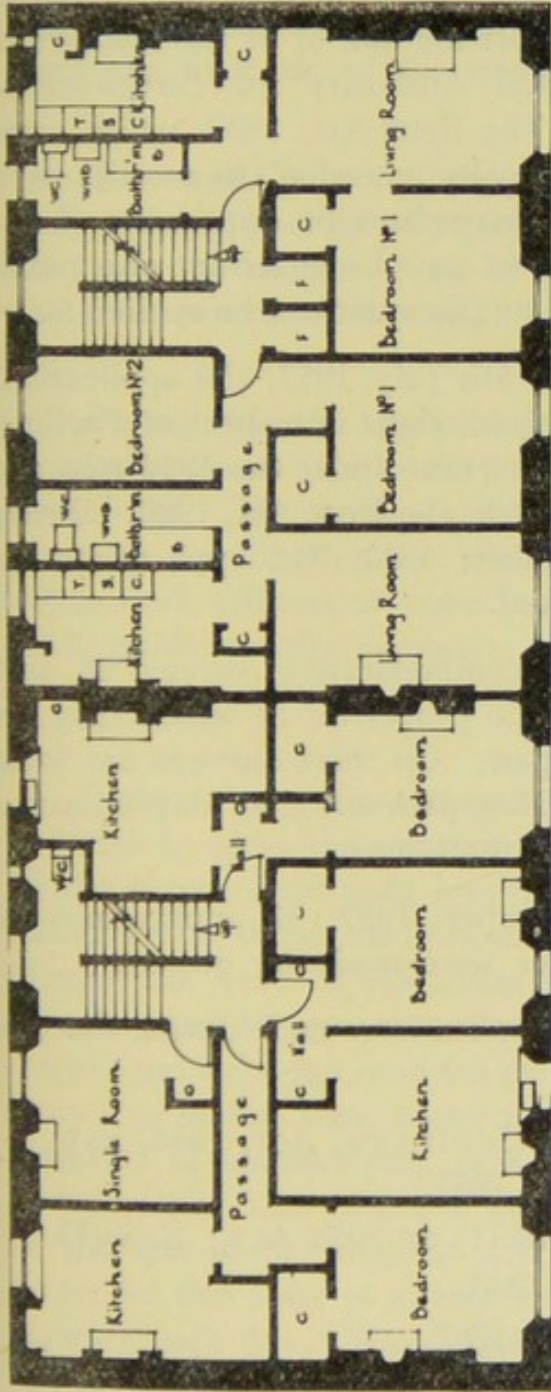
The actual capital cost per house after all works had been completed amounted to £1,767. See statement below. Much more dilapidation of internal structure was found as the work progressed than was apparent at the original survey. Before similar conversions are undertaken in the future, it would seem that a more detailed survey of the properties should be undertaken and a fixed price schedule of work be prepared.

The result of the conversions is that there are now sixteen standard houses with an estimated life of thirty years instead of 32 unsatisfactory houses with a potential life of five years.

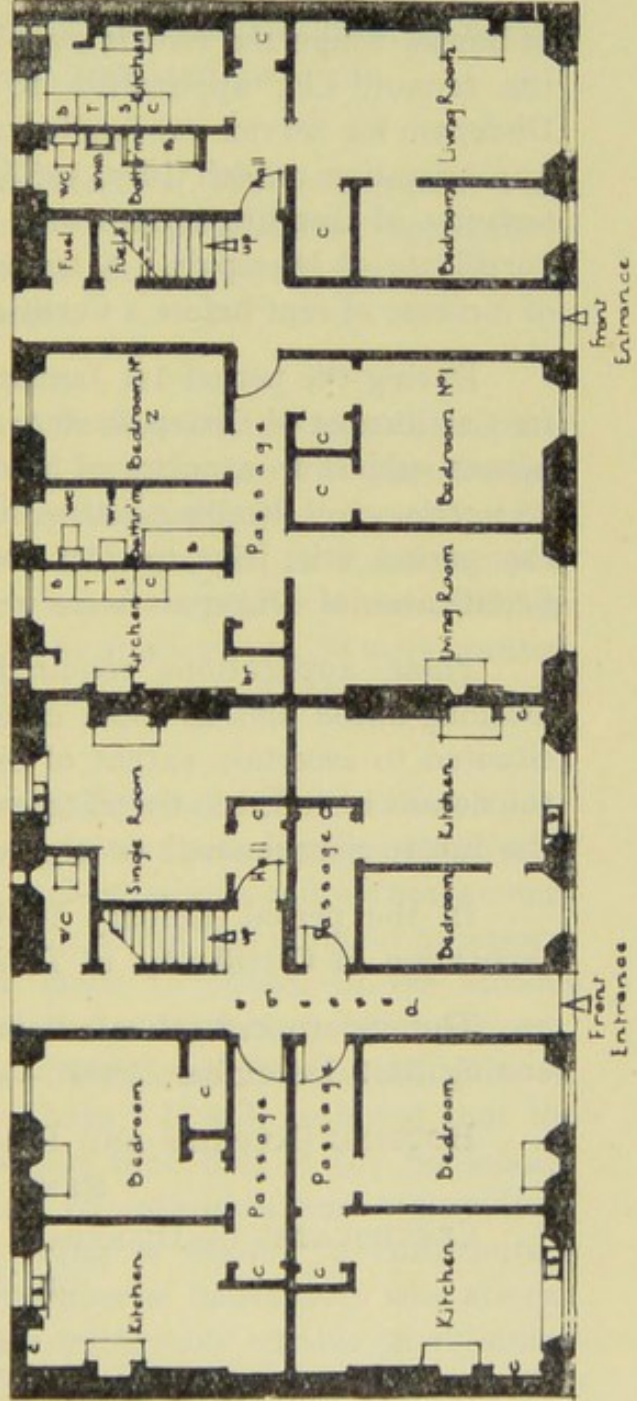
STATEMENT OF CAPITAL COST, ETC.

	Original Estimated Cost	Capital Cost to Date
Cost of acquisition	£112 0 0	£100 0 0
Cost of conversion	£15,500 0 0	£27,642 0 0
City Architect—Proportion of expense (estimated)	£1,432 0 0	£540 0 0
	<u>£17,044 0 0</u>	<u>£28,282 0 0</u>
Capital cost per house	£1,768	
Capitalised value of annual income from converted property :—		
Rent for 16 houses	£226 0 0	
Less—Repairs and management	£176 0 0	
Net annual income	<u>£50 0 0</u>	
Capitalised value of net annual income for 30 years Interest at 5½%		£726 13 9
Capitalised loss over 30 years		<u>£27,555 6 3</u>
Annual equivalent of capitalised loss on 20 years' basis		<u>£2,305 16 2</u>
Met thus :—		
Exchequer subsidy (see Note)		£720 6 0
Contribution from rates (assumed at ¼ exchequer subsidy	£240 2 0	
Further deficit to be met from rates	£1,345 8 2	
		<u>£1,585 10 2</u>
		<u>£2,305 16 2</u>
<i>Notes—</i>		
(1) The exchequer subsidy, which is payable for 20 years, based on the estimated costs, thus :—		
Cost of acquisition	£112 0 0	
Estimated cost of conversion	£15,500 0 0	
Less disallowed items	£3,715 0 0	
		<u>£11,785 0 0</u>
		<u>£11,897 0 0</u>
(2) The life of the converted houses is estimated at a minimum of 30 years.		

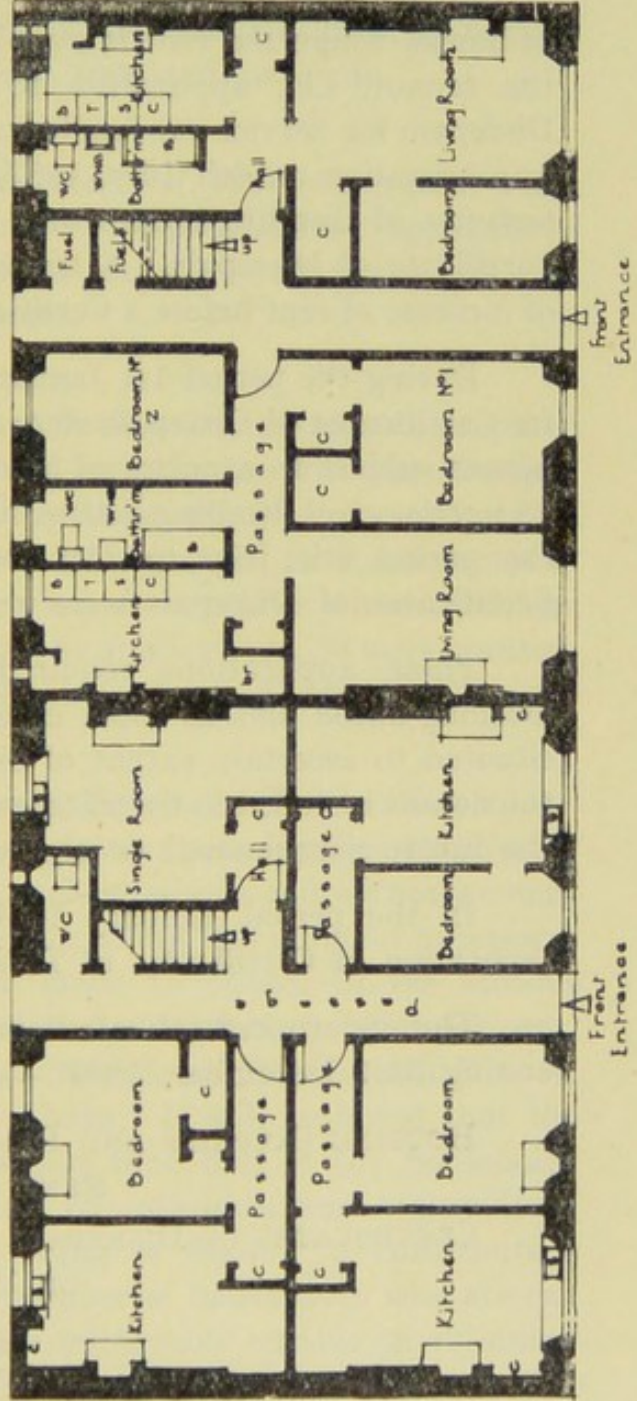
UPPER FLOOR
PLAN PRIOR TO
RECONSTRUCTION.



UPPER FLOOR
PLAN AFTER
RECONSTRUCTION.



GROUND FLOOR
PLAN PRIOR TO
RECONSTRUCTION.



GROUND FLOOR
PLAN AFTER
RECONSTRUCTION.

Overcrowding.—A further 1,154 families involving 6,121 persons have been transferred from unsuitable accommodation to larger houses in the various housing schemes within the city. Since 1935, 18,002 families have been provided with houses more suitable for their needs.

Housing (Repairs and Rents) (Scotland) Act, 1954, Part II, and Rent Act, 1957.—In principle, these Acts operate either at the instance of the landlord, i.e., issue of notice of increase of rent and decontrol of houses where the rent is over £40 per annum, or at the instance of the tenant, i.e., application to Local Authority for Certificate of Disrepair for service on landlords. The Rent Act, 1957, which came into operation on 6th July, 1957, radically amended the conditions of tenancy of dwelling-houses and the procedure of application for a Certificate of Disrepair. A tenant must now be in receipt of a notice of increase of rent before a Certificate of Disrepair can be applied for.

During the period 1st January to 5th July, 1957, 106 applications for Certificates of Disrepair were received, eight in respect of dwelling-houses subject to a notice of increase of rent under the 1954 Act, and 98 in respect of dwelling-houses subject to the Rent Act, 1920. During the period 6th July to 31st December, 1957, 315 applications for Certificates of Disrepair were received.

These applications required a comprehensive survey of each dwelling-house and to some extent the properties in which they are situated to ascertain extent of disrepair. On these surveys are based the details included in Certificates of Disrepair, and they may determine the future maintenance or neglect of the houses.

In the period January to December, 1957, 81 applications for revocation of Certificates of Disrepair were made by owners.

The undernoted table indicates applications made during the year ending 31st December, 1957 :—

HOUSING (REPAIRS AND RENTS) (SCOTLAND) ACT, 1954, AND
RENT ACT, 1957.

CERTIFICATES OF DISREPAIR S. 18 (1) OF 1954 ACT ; S. 8 (1)
OF 1957 ACT.

Act	No. of Applica- tions	Granted	Refused	With- drawn	Still under Con- sidera- tion	No. of Applica- tions for Revocation of Certi- ficates	Granted	Refused	With- drawn	Still under Con- sidera- tion
1954	106	75	18	4	9	20	17	—	—	3
1957	315	228	71	8	8	61	51	6	1	3
Total	421	303	89	12	17	81	68	6	1	6

Basically these Acts were intended to free property from the financial restrictions of earlier Rent Acts so that more money would be available for maintenance and property would be preserved thereby from the dilapidation threatening most residential property.

It is much too early yet to assess the efficacy of the Acts to achieve this objective in the better and higher rented properties. In the lower rented properties the oncost of repairs and rehabilitation is beyond what the majority of the owners are prepared to incur.

Town and Country Planning (Scotland) Act, 1947.—In recent years an increasing number of reports have to be prepared on applications involving the change of use of premises where the change might give rise to nuisance in the neighbourhood.

During 1957, 84 applications were dealt with and reports prepared in collaboration with the City Architect for submission to the Planning Committee. The premises affected by these applications were retail shops or dwelling-houses, which were to be used as small factories where heat, effluvia or noise might arise, or as offices where members of the public would congregate. Of the 84 applications, 28 were granted, 17 refused, and 32 were pending. Nine applications were withdrawn.

Supervision of Tenants in Rehousing Schemes.—The housing nurses continue to serve the community by helping those families transferred to new houses from unfit properties, and by advice and encouragement obtain better standards of house-keeping where this is found necessary. During the year 32,615 visits were made to houses in the various schemes, and 58 per cent. were found to be satisfactory, 40·8 per cent. were found to be fair, and 0·3 per cent. were found to be unsatisfactory. Only five houses were found to have bugs. It will be noted that the standard of housekeeping in a little less than half of the households is only fair. This means a good deal of untidiness and a casualness in the day-to-day dusting and cleansing of floors: a contributory factor for this state of affairs is the number of housewives who are out at work each day. The nurses have considerable trouble in obtaining access to many homes because the whole household are at work.

Inspection of School Children.—Another important duty performed by the nurse is the cleanliness inspection of school children at school. There are 34 schools, with some 25,000 scholars on the rolls, which are

visited twice in each year. During 1957, 17,132 boys and 14,666 girls were seen and the following conditions found :—

Boys found infested (pediculus capitis)	...	...	2
Boys found infected (nits only)	...	...	1,957
Girls found infested (pediculus capitis)	...	...	6
Girls found infected (nits only)	...	...	4,344
Boys with fleas	...	...	8
Girls with fleas	...	...	8
Boys dirty in body and clothing	...	...	336
Girls dirty in body and clothing	...	...	69

In a follow-up of the worst cases, 601 homes were visited and the parents appropriately dealt with. Fortunately no case had to be referred to the Police Court.

The nurses also kept in touch with 28 households with elderly people in need of care and attention and arranged for appropriate care and regular laundry.

Sanitation.—All households have available to them a water supply at a fixed sink in the house ; 43,696 houses (62·5 per cent.) are provided with an internal water-closet ; and 27,551 houses (39·3 per cent.) have a fixed bath. Refuse disposal is by individual or shared bins.

Apart from a few installations, most of the drains are connected to a public sewer. There are a small number of septic tanks in use in the landward area of the Division. These are inspected at regular intervals to ascertain that they are functioning satisfactorily.

The following table indicates the number and to what extent water-closets are shared in common :—

WATER-CLOSETS USED IN COMMON, 1957.

Ward	Common to				Totals
	2 Tenants	3 Tenants	4 Tenants	5 Tenants	
8	387	853	158	13	1,411
9	195	468	105	15	783
10	424	619	341	77	1,461
14	333	878	272	77	1,560
15	177	722	233	102	1,234
16	129	116	128	5	378
17	87	902	171	18	1,178
18	141	530	108	8	787
Totals	1,873	5,088	1,516	315	8,792

JOHN D. ARTON,
Divisional Sanitary Inspector.

EASTERN DIVISION.

The development of Easterhouse Housing Scheme is now well forward and unit numbers 1 and 2 were nearing completion at the end of the year. Before undesirable houses and slum properties can be dealt with it is essential to have alternative accommodation for rehousing of the tenants and the large number of new houses being erected throughout the City has enabled a corresponding large number of houses to be condemned in 1957.

Deterioration in the value of old property is further emphasised by the number of properties offered to the Corporation. In most cases these offers are made free of price and the reason for their being offered is due to the owner's inability to meet his liabilities for rates, maintenance, repairs, etc. In many cases the structure is fairly sound and it is considered good policy by the Corporation to take over the houses and by carrying out limited maintenance repairs the properties can be retained as dwelling-houses. This action prevents further deterioration of the structure and also enables the Corporation to carry out their redevelopment plans. "Abandoned" properties are fair game for vandalism which increases the usual wear and tear resulting from lack of maintenance.

In this manner some 87 properties, involving approximately 860 houses, were offered to the Corporation and after inspection and due consideration of all the factors concerned, it was recommended that 65 properties containing approximately 590 houses should be retained. In a few cases the properties were noted for early demolition under the Housing Acts and these were taken over in order that they could be demolished as soon as possible.

Altogether 1,794 new houses were completed in the Division as follows :—

One-apartment houses (for single persons)	...	...	...	52
Three-apartment houses	...	...	...	1,423
Four-apartment houses	...	...	...	291
Five-apartment houses and over	...	...	...	28
				<hr/>
Total	...	...	...	1,794
				<hr/>

The removal of families who have been allocated Corporation houses is supervised by the inspectors in order to ensure that no furniture or furnishings infested with vermin are taken into Corporation property, and in many cases the families have to be visited two and three times before they are disinfested and permitted to move in. There were 2,247 families rehoused from the Eastern Division and of those rehoused by the Corporation, 1,300 were living in overcrowded conditions. Visits carried out to the families who moved into the vacated houses showed that 177 or 13·61 per cent. of the houses had again become overcrowded by the in-coming tenants.

Demolition or Closing Orders were applied to 346 houses and 92 were demolished by the Dean of Guild as being dangerous, making a total of 438 houses in the Division removed as unfit for use as dwelling-houses.

Sanitary Conveniences used in Common.—The reduction in the number of sanitary conveniences used in common continues and with a reduction of 111 common w.c.'s the number remaining is 9,102. This total includes 22 privies or dry closets and one privy midden which is a reduction of 5 privies during the year.

It should be pointed out that the premises using dry closets are mostly situated in the semi-rural areas of the Division.

Nuisances.—In the prevention and removal of nuisances affecting the public health some 124,050 visits were made by the staff of the Eastern Division. This resulted in 11,336 nuisances being brought to light and removed. Most of this work involves defects of fittings and fixtures and items of disrepair. These matters are usually dealt with by the factors or owners without undue delay but in 24 cases it was necessary to take court proceedings.

Results of these cases :—

Legal proceeding started—no fines or expenses	...	7
Corporation authorised to do the work and recover expenses	... ..	11
Cases dealt with by owner after court proceedings had started	... ..	4
Cases not yet completed	... ..	2

Decrees were granted for recovery of £137 3s. 1d. but this figure is not complete as some cases have not yet been finally settled in Court. This also applies to expenses granted to the Corporation which at the end of the year came to £47 5s.

Certificates of Disrepair.—The number of applications for Certificates of Disrepair was considerably increased, there being 298 applications against the figure of 169 for 1956. This may have been due to the terms of the Rent Act, 1957, which permitted a 25 per cent. increase without proof of repairs having been previously carried out. In dealing with these applications, 154 were granted Certificates of Disrepair and 144 applications were refused.

Applications for revocation of Certificates of Disrepair were received from factors in respect of 23 houses and 20 of these applications were granted while 3 were refused. Where the work carried out by the factor does not satisfactorily repair all the items listed on the Certificate the application for revocation of the certificate must be refused.

Septic Tanks.—There has been a reduction of one in the number of septic tanks used by dwelling-houses while the number used by business premises remains unchanged. Regular and systematic visits are made to all septic tanks in use in the Division to ensure that any nuisance which may arise is attended to. It is usually found that any defects brought to the notice of the owner by the inspector are dealt with without delay.

Piggeries.—Two piggeries have been removed from the list, one because it is not now used for housing pigs and the other has been demolished. The 19 piggeries licensed in accordance with the Byelaws are well maintained and only two nuisances were found during the year.

Offensive Trades.—A new business of tripe boiling was sanctioned and established during the year, raising the number of offensive trades established in the Division from 40 to 41. The premises were already being used in the business of tallow melting and gut or tripe cleaning so the granting of permission to establish the business of tripe boiler did not require building new premises or enlargement of existing premises.

An interesting case concerned a firm who had established the business of gut cleaning without having obtained the sanction of the

Local Authority. When the inspector visited the factory he found six female workers employed in the operation of cleaning gut. Heavy and offensive odours were experienced in the area and a number of householders complained of offensive smells. This business was being carried on in direct contravention of the regulations and when the matter was brought to the notice of the owners no action was taken, the owners contending that they were not operating in contravention of the enactments. Legal action was taken and by December, 1957, the firm had discontinued the operations in the factory; the workers were dismissed and the cleaning apparatus removed. The case was taken in the Sheriff Court at a later date when the defendants pled guilty and the Sheriff imposed a fine of £20.

In the supervision of the registered offensive trades every co-operation is given by the owners and only 12 nuisances were found during the year. These were promptly dealt with when brought to the notice of the persons concerned.

Details of the businesses are as follows :—

Blood Boiler	1	Manure Manufacturers	3
Bone Boilers	7	Soap Boilers	2
Glue and Size Maker	1	Tallow Melters	12
Gut Cleaners	3	Tanners	8
Hide and Skin Factors	2	Tripe Boilers	2

Common Lodging-Houses.—The number of lodging-houses in the Division is unchanged, there being one for females and four for males, with total cubic capacity for the accommodation of 2,096 adults. There were 99 visits of supervision by the inspectors and 10 cases of nuisances or contraventions of the Byelaws were reported.

Much of the supervision is required to control infestation of bed bugs and other vermin due to the number of casual lodgers using this type of accommodation. Seventeen lodgers were found suffering from body infestation. These people were sent to the Disinfecting Station where they were provided with bathing facilities while their personal and body clothing was disinfested. Five other persons not residing in common lodging-houses were given similar facilities in respect of body infestation, bringing the number of persons treated in this manner to 22. Follow up visits are made to the homes of persons suffering from body infestation in the same manner as cubicles and beds occupied by lodgers in the lodging-houses are inspected and the conditions treated as required.

Farmed-Out Houses.—Houses represented as unfit for human habitation in terms of the Housing (Scotland) Act, 1950, included 40 farmed-out houses. Therefore the 98 farmed-out houses at present on the divisional register will be adjusted accordingly when re-registration takes place in March next year as it is expected that the 40 houses represented as unfit will have been vacated by that time. In the routine inspections during the year no conditions were found which required action in terms of the Byelaws for farmed-out houses.

Factories.—Considerable changes took place concerning the numbers of factories operating in the Division during the year and by December the number on the register was 1,103. Routine visits by the inspectors were 1,380 and these visits brought to light 284 defects which were promptly dealt with.

Details of the factories are as follows :—

		Mechanical Factories	Non- Mechanical Factories	Mechanical Bakehouses	Non- Mechanical Bakehouses
New	... ..	73	5	2	Nil
Total	... ..	936	94	64	9

Rat Infestation.—The work of rat and mice extermination is proceeding in the same manner as in the past few years and the number of rats destroyed was 2,686 while 1,094 mice were destroyed.

Details of the properties dealt with and action taken are as follows :

Premises Inspected—

Local Authority Property (excluding dwelling-houses and work places)	... ..	32
Dwelling-houses (Local Authority and Privately Owned)	... ..	683
Business Premises	... ..	425
Agricultural Premises	... ..	7
Total	... ..	<u>1,147</u>

Infested Premises treated by the Rodent Control Section—

Local Authority Property (as above)	... ..	12
Dwelling-houses (as above)	... ..	225
Business Premises	... ..	130
Agricultural Premises	... ..	2
Sewer treatments	... ..	4
Properties treated prior to demolition in terms of Housing Acts	... ..	16
Total	... ..	<u>389</u>

Premises where rat-proofing was carried out under supervision of the Local Authority	70
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In carrying out this work it is usual to find that the owners and occupiers of property give the maximum co-operation and there is therefore no need to apply the legal powers of the Prevention of Damage by Pests Act, 1949. One case dealt with during the year proved the exception, however, and the full powers of the law had to be employed. This set of premises was found to be infested with rats and complaints were received from tenants in the area. At the request and advice of inspectors from this Department the owners agreed to employ the rodent control operators from this Department but stipulated a cost which had not to be exceeded without further consultation. This work was satisfactorily completed within the sum stipulated but due to failure of the owners to take proper control measures the land soon became re-infested. An additional item to be considered at this time was the fact that the premises had become in such a condition as to constitute a nuisance in terms of the Public Health (Scotland) Act, 1897. Co-operation from the owners was not forthcoming at this stage and indeed no satisfactory methods for dealing with either the nuisance or the infestation were being adopted.

In view of the nature of the nuisance and condition of the premises it was decided that the two cases could not be dealt with simultaneously and it was decided that action should be taken first for removal of the nuisance. Consequently the usual procedure was followed by serving a Section 19 intimation drawing attention to the existence of the nuisance, followed after a reasonable period by a notice to remove the nuisance in terms of Section 20 of the Public Health (Scotland) Act, 1897. As no action for removal of the nuisance had been taken within the time stated on the Section 20 notice the matter was reported for the institution of legal proceedings. Before the case appeared in court, however, measures were adopted by the owners to deal with the nuisance which was eventually satisfactorily removed.

No action was yet taken to exterminate the rats which were infesting the land and an offer was made to the owners that the services of the Rodent Control Section of the Department could be engaged at a nominal rate of 5s. per man-hour. This offer was not taken up and as the owners still continued to take no action a notice in terms of Section 4, Prevention of Damage by Pests Act, 1949, was served, requiring that steps be taken as specified to deal with the infestation within a stated period.

On the expiration of this period and as action had not been taken as required, operators from the Rodent Control Section of this Department carried out rat destruction measures and satisfactorily treated

the premises. Subsequent proceedings are now being preferred against the owners for failure to comply with the notice and for recovery of expenses incurred in the treatment of the premises.

Tents, Vans and Sheds.—The permanent caravan site at Vinegarhill which is mainly occupied by travelling showmen has an average number of 50 to 60 vans on the site. The numbers alter a little according to the season and the movements of the showmen. There are four privately owned sites which are granted permission annually. Each one is well kept and the owners take all necessary steps to prevent nuisance arising. Very little trouble is experienced on the privately owned sites and at the permanent site at Vinegarhill all matters brought to the notice of the person in charge are given prompt attention.

Rag Flock Act.—There are 20 registered premises operating in terms of the Rag Flock and Other Filling Materials Act, 1951, and there are three premises licensed annually for the manufacture or storage of rag flock. No contraventions of the enactments were found during routine inspections carried out during the year and no complaints were received concerning dirty rag flock or other filling materials in use.

Squatter Families.—Regular visits are paid to the premises occupied by five squatter families and owing to the supervision maintained there were no cases of nuisance requiring special attention. All defects are immediately brought to the notice of the families and without exception prompt and satisfactory attention to detail has been obtained.

Elderly and Infirm Persons.—Close co-operation is maintained between the various sections of the Department and every help and encouragement is given to elderly and infirm people living alone. From time to time elderly people are found completely unable to attend to the usual household chores, and many of them are very difficult to deal with. In many instances this difficulty is due to misplaced independence and great care has to be taken to overcome their opposition to accepting help.

During the year cleaners were employed by the Department to deal with 22 dirty houses and 89 washings mostly of heavy blankets and bed linen were carried out. Twenty-three verminous people were sent to the disinfecting station where they were given facilities for bathing while their clothing was disinfested.

Nurse-Inspectress.—A total of 73,967 visits to houses and schools were carried out by the Nurse-Inspectresses, of which 10,855 were primary house visits which brought to light 245 dirty houses. There were 39,646 visits to rehousing schemes and 5,731 visits to intermediate schemes, which revealed dirty houses on altogether 1,019 occasions and 17 houses showing evidence of bed-bug infestation. In dealing with dirty houses it was found necessary to issue 880 written notices to the occupiers before a satisfactory standard of cleanliness was obtained and 146 cases of dirty bed linen were dealt with.

In visits to schools children found infected were 954 boys and 3,404 girls and children found dirty were 745 boys and 199 girls. Written notices were issued in respect of 50 boys and 114 girls. The cases were satisfactorily treated without requiring further action.

Visits to tenants of ordinary housing schemes newly completed in the Division have been maintained and in this connection 8,132 houses have been inspected. In some cases there was considerable room for improvement and this improvement has been obtained without any trouble by reason of the tact employed by the Nurse-Inspectresses and their long experience in dealing with conditions resulting from unsatisfactory housekeeping.

ALEXANDER EASTON,
Divisional Sanitary Inspector.

SOUTH-EASTERN DIVISION.

It was a normal year in the day-to-day activities of the Division. It was an eventful year in the history of the Department in respect of the successful Mass Radiography Campaign. Several members of the staff were seconded full time to the recruitment of volunteers and the arrangements for centres. Others served part-time but each and all played their part in one way or another to make the Campaign the success it turned out to be. The sanitary work of the Division was not neglected although routine inspections in the pre-campaign period were not as thorough as usual.

It was not possible to complete the comprehensive survey of the places of business by the end of the year. Complete information will not be available until next year.

Mention is made of the increased activity of the Rodent Control Section and three unusual occurrences are worthy of recording. It was found necessary to request assistance from the Central and Northern Divisions. One trapper from each Division was seconded, bringing the operational staff temporarily to four.

The tempo of slum clearance continues. Open spaces can now be seen throughout the congested areas. The activity in terms of the Housing Act is given in detail.

No action has yet been taken to remedy the unsatisfactory sewage polluted Mallsmire water course.

General Nuisances.—Nuisances regarding which action was taken varied little in nature from previous years. Complete details of the work carried out can be seen in Table XVI of the Appendix.

There was a marked increase in the number of complaints reported to the Procurator for action in the Court in default of the proprietors to carry out the work to remedy nuisances. Several were in abandoned properties of which the owners were unknown. In most cases the work involved was costly roof repairs which the proprietors were unable to meet. In the majority of tenement properties in the age group of 50 years and upwards, the roofs, through the lack of proper maintenance over the years, have now reached the stage when a complete overhaul is essential. Not all the properties are ready to be dealt with in terms of the Housing Act, consequently Court action is taken in default

The number of intimations in terms of Section 19 of the Public Health (Scotland) Act, 1897, issued and removed during the year was 5,342. It was necessary to issue 141 statutory notices in terms of Section 20 of the Act to defaulting proprietors where the work had not been carried out within a reasonable time. Sixty-one nuisances were dealt with by the Sheriff Court and one was dealt with by the Stipendiary Magistrate. This latter case involved the filthy condition of a grocer's shop and in spite of repeated warnings the tenant refused to clean the premises. The case was heard in Court and the tenant fined one pound. The shop is now closed.

The following is a list of the nuisances submitted to the Court for action :—

Address	No. of Nuisances	Nature of Nuisance	Cost of Work involved	Fines or Expenses Awarded	Remarks
28 Camden Street	... 1	Choked drain	Not forward	—	
149 Wolseley Street	... 2	Roof defects and collapsed ceilings	Not forward	—	
155 Wolseley Street	4	Roof defects and collapsed ceilings	Not forward	—	
163 Wolseley Street	... 3	Roof defects and collapsed ceilings	Not forward	—	
171 Wolseley Street	4	Roof defects and collapsed ceilings	Not forward	—	
188 Hospital Street	... 2	Choked drain and accumulation of refuse	£49 2 11	} £10 10 0	
192 Hospital Street	... 2	Roof defects and broken waste pipes	£372 15 2		
317 Thistle Street ...	... 3	Roof defects and collapsed ceilings	£412 12 7	£10 10 0	
188 Florence Street	... 3	Roof defects	Not forward	—	
211 Hospital Street	... 3	Roof defects and collapsed ceilings	—	£5 5 0	Work completed owners
82 Thistle Street ...	... 1	Decayed wood floor	£56 13 0	—	
50 Brownlie Street	... 13	Roof defects and collapsed ceilings	£461 17 3	£12 12 0	
222 Newlands Road	... 2	Decayed woodwork	£87 4 2	—	
99 Camden Street ...	... 1	Defective waste pipe	£3 9 11	£2 2 0	
327 Caledonia Road	... 2	Roof defects and collapsed ceiling	£255 14 5	—	
333 Caledonia Road	... 3	Roof defects and collapsed ceilings.	£475 9 5	—	
108 South Portland Street	2	Defective water closets	—	—	Work completed owner
114 Hospital Street	... 2	Roof defects	—	—	Work completed owner
180 Hospital Street	... 1	Accumulation of refuse	—	£2 2 0	Work completed owner
92 Camden Street ...	... 1	Choked drain	£29 13 1	£10 10 0	
323 Thistle Street ...	... 3	Roof defects and collapsed ceilings	Not forward	—	
69c Adelphi Street	... 4	Defective drains, roof, etc.	Not forward	—	
6/12 Bedford Street	... 1	Dirty premises	—	£1 0 0	Police Court fine
18 Wolseley Street	... 3	Roof defects	Property Closed	—	No action taken
12 Alice Street ...	... 3	Roof defects	Property Closed	—	No action taken
391 Caledonia Road	... 1	Defective waste pipe	—	—	Work completed owner
286 Thistle Street ...	... 1	Roof defects	—	—	Work in progress
292 Thistle Street ...	... 1	Roof defects	—	—	Work in progress
	62				

The types of complaints registered varied little from previous years and nothing of an unusual nature is recorded. Their composition and distribution throughout the several wards in the Division are shown by the following table. In connection with the abatement of nuisances, 60,620 visits were made during the year.

ANALYSIS OF COMPLAINTS, 1956.

Ward	Dirty Stairs and Closes	Choked Drains	Disrepair in Houses	Flooding	Defective Chimneys	Offensive Smells	Dirty Houses	Misc. Reports	Insect Infestation	Noise	Total
25	50	213	312	21	83	11	1	35	90	—	816
26	177	332	417	16	70	28	4	59	126	1	1,230
33	46	38	75	23	9	8	—	10	16	2	227
34	18	25	58	10	10	12	—	11	8	—	152
35	44	53	100	23	25	13	—	25	26	—	309
36	27	19	75	19	11	8	—	2	8	—	169
37	33	20	71	11	18	19	—	20	15	1	208
Total ...	395	700	1,108	123	226	99	5	162	289	4	3,111

Rodent Infestation.—The rat menace continues to be with us in spite of the ceaseless efforts of the Department's control operators. The number of infested premises treated and the number of rats killed during the year is greatly in excess of previous years but this does not necessarily mean that the situation is worsening.

Rats are by nature migratory and when food and shelter become scarce or the colony becomes overcrowded they will seek new quarters. Many premises and dwelling houses which hitherto enjoyed complete immunity are now being visited. It is not always the untidy premises that are selected; experience has shown that rats will burrow in the soft earth outside and forage for their food to nearby premises. They will burrow unceasingly underground until a weakness in the under-building is found—usually a service entry—which enables them to gain access to the building. They may only forage about the under-floor space, gnawing at joists without appearing above floor level so long as a food supply is available elsewhere.

It is comparatively easy to kill rats which have invaded a building. It is not so easy to determine the means of ingress, particularly where the under-floor space is limited to a few inches in depth. One interesting infestation in a ground floor dwelling house was dealt with during the year. The house was in a good class tenement property. It was substantially built and the standard of housekeeping was excellent. The tenant had complained intermittently over a period of years but at no time had the rats appeared above the floor. The tenant only heard scrapings and scurryings. On receipt of each previous complaint traps and poison were laid and a number of rats killed. The means of ingress had not been found in spite of excavations at the front and the rear of the building.

On the last occasion 10 rats were killed under the floor but in spite of this test baits were consumed nightly. No other house in the property was affected and as the front and rear walls had been sealed on previous occasions it was reasonable to assume that the rodents were entering from within the four walls of the house. The floor in the two front rooms was lifted revealing some holes in the asphalt-covered solum. The close was then opened from front to rear and the drain exposed, without result. A smoke test to the drain proved negative.

As the burrows appeared to go deeper into the ground beneath the house the tradesmen were instructed to excavate further and at a depth of 8 feet a brick-built culvert was found running under the property, parallel with the close. There was an opening in the crown of the arch, where a partial collapse had taken place, permitting rats to enter and leave. Owing to the constricted space no further excavation was possible within the building.

The City Engineer willingly agreed to assist in exposing the culvert and instructed openings to be made in the roadway and the footpath. It turned out to be a 3 foot diameter brick-built structure running underneath the property at right angles to the roadway at a depth of some 8 feet.

Its origin and termination were not traced but it provided an easy access to rats from an undetermined origin to the property. It has now been sealed off in two places and the infestation has ceased.

Another infestation dealt with is worthy of mention by reason of its magnitude. In this case tenement properties and back courts, together with the adjoining railway embankment, were involved. The rodents were harbouring in burrows along the entire stretch of the railway embankment where it adjoined the properties, under the outhouses in the tenement back courts and in the basements of the properties. The co-operation of the British Transport Commission and the proprietors of the properties was readily given and the operation lasted two weeks. A combination of gas, traps and poison was used and it is estimated that approximately 1,000 rats were destroyed.

The connection between a surface infestation and the sewer is not always easy to determine. When a sewer is suspected of being the reservoir the City Engineer's Department are always willing to co-operate in the treatment of the sewer together with the surface infestation. In one instance where the sewer was suspect smoke was pumped into a burrow in the soft earth of a garden adjoining the roadway and it was seen to escape from the sewer manhole in the roadway. The defect in the sewer, which permitted rats to enter and leave, hitherto undetected, was easily traced by the smoke and made good.

I again refer, as in previous years, to the unsocial habit practised by many people of throwing scrap food carelessly into the ash-bin recesses or over windows on to the back courts. There is no doubt that this forms the only food supply of rats infesting tenement properties and if care and thought were given to the disposal of household scraps there would be fewer complaints of rat infestation. Certain sections of the area are particularly bad and recurring infestation in the back courts require regular treatment.

With the co-operation of the City Engineer's staff the sewers were poisoned within the area bounded by Adelphi Street, Hospital Street, Caledonia Road and Florence Street. The operation lasted from 29th April to 1st June, during which 394 lbs. of prebait and 174 lbs. of poison bait were consumed. It is not possible to estimate accurately the number of rats killed in a sewer operation as no bodies are recovered but a conservative figure in this case would be 2,340.

Some indication of the activity of the section can be seen from the table on the next page.

RODENT CONTROL 1957.

	RATS KILLED		MICE KILLED		SUMMARY			
	Infestations Treated	Trapped Poisoned Gassed	Total Kill	Total Kill	Total Premises Proofed	Total Premises Proofed	Total Infestations	
Dwelling Houses ...	417	52	3,100	21	389	3,274	174	438
Basement Cellars ...	99	87	1,692	—	—	1,692	57	99
Back Courts ...	276	—	4,388	—	—	4,388	—	276
Shops (General) ...	41	43	361	1	18	379	35	42
Food Premises ...	21	20	223	1	20	243	21	22
Other Premises ...	3	—	48	2	25	73	3	5
Business Premises ...	40	63	468	6	364	832	17	46
River Banks ...	2	—	44	—	—	44	—	2
Farms ...	1	11	18	—	235	253	—	1
Railway Embankments ...	1	—	270	—	—	270	—	1
Sewers ...	18	—	2,340	—	—	2,340	—	18
Grand Totals ...	919	276	12,952	31	1,051	13,778	307	950

957 complaints were registered during the year.

Housing.—The following list shows the action taken in terms of the Housing (Scotland) Act, 1950, to deal with houses which were considered to be no longer fit for human habitation. The closing and demolition of houses by other Departments is also indicated.

DEMOLITIONS—MASTER OF WORKS.

Ward	Address	Apartments					Total.
		1	2	3	4	5	
Gorbals—26	13 Thistle Street	—	9	3	—	—	12
"	201/205 Nicholson Street ...	—	—	—	—	8	8
"	4 Pollokshaws Road	10	8	—	—	—	18
"	188 Lawmoor Street	—	12	—	—	—	12
"	127 Surrey Street	2	10	—	—	—	12
		—	—	—	—	—	—
		12	39	3	—	8	62
		—	—	—	—	—	—
Hutchesontown—25	26 Wolseley Street	2	13	—	—	—	15
		—	—	—	—	—	—
		2	13	—	—	—	15
		—	—	—	—	—	—

PRIVATE DEMOLITIONS.

Gorbals—26	147 Surrey Street	1	—	—	—	1	2
		—	—	—	—	—	—
		1	—	—	—	1	2
		—	—	—	—	—	—

CLOSURES AND/OR DEMOLITIONS BY CITY ARCHITECT.

Gorbals—26	9 Commercial Road	5	10	—	—	—	15
"	124 Adelphi Street	6	3	—	3	—	12
"	3 Commercial Road	—	5	3	—	—	8
"	72 Lawmoor Street	—	3	6	—	—	9
		—	—	—	—	—	—
		11	21	9	3	—	44
		—	—	—	—	—	—

HOUSING (SCOTLAND) ACT, 1950.

Address	Size of Houses in Apartments					Total Houses	Date Repres- ented	Date of Closing Order	Date of Demo- lition Order	Muni- cipal Ward
	1	2	3	4	5					
490 Crown Street	—	1	—	—	—	1	8/4/57	6/5/57		26
29 Bedford Street	—	—	—	—	1	1	8/4/57	6/5/57		26
50 Oregon Street, 2/4	1	—	—	—	—	1	6/5/57	3/6/57		25
50 Oregon Street, 2/5	1	—	—	—	—	1	6/5/57	3/6/57		25
50 Oregon Street, 2/6	1	—	—	—	—	1	6/5/57	3/6/57		25
50 Oregon Street, 3/1	1	—	—	—	—	1	6/5/57	3/6/57		25
50 Oregon Street, 3/5	1	—	—	—	—	1	6/5/57	3/6/57		25
50 Oregon Street, 3/6	1	—	—	—	—	1	6/5/57	3/6/57		25
50 Oregon Street, 3/7	1	—	—	—	—	1	6/5/57	3/6/57		25
54 Oregon Street	1	—	—	—	—	1	6/5/57	3/6/57		25
22 Oregon Street	6	7	—	—	—	13	6/5/57	—	3/6/57	25
30.32 Oregon Street	7	6	—	—	—	13	6/5/57	—	3/6/57	25
50 Oregon Street	9	2	1	—	—	12	6/5/57	3/6/57		25
50 Oregon Street, 1/4	1	—	—	—	—	1	6/5/57	3/6/57		25
50 Oregon Street, 1/5	1	—	—	—	—	1	6/5/57	3/6/57		25
50 Oregon Street, 2/2	1	—	—	—	—	1	6/5/57	3/6/57		25
50 Oregon Street, 0/1	1	—	—	—	—	1	6/5/57	3/6/57		25
50 Oregon Street, 2/1	1	—	—	—	—	1	6/5/57	3/6/57		25
50 Oregon Street, 0/4	1	—	—	—	—	1	6/5/57	3/6/57		25
60 Gilmour Street, M/D	1	—	—	—	—	1	6/5/57	3/6/57		25
14 Oregon Street	9	1	—	—	—	10	26/5/57	17/6/57		25
14 Oregon Street, 0/1	1	—	—	—	—	1	26/5/57	17/6/57		25
14 Oregon Street, 0/2	1	—	—	—	—	1	26/5/57	17/6/57		25
14 Oregon Street, 1/3	1	—	—	—	—	1	26/5/57	17/6/57		25
14 Oregon Street, 1/5	1	—	—	—	—	1	26/5/57	17/6/57		25
14 Oregon Street, 2/2	1	—	—	—	—	1	26/5/57	17/6/57		25
14 Oregon Street, 2/4	1	—	—	—	—	1	26/5/57	17/6/57		25
14 Oregon Street, 2/5	1	—	—	—	—	1	26/5/57	17/6/57		25
14 Oregon Street, 3/4	1	—	—	—	—	1	26/5/57	17/6/57		25
16 Oregon Street, M/D	1	—	—	—	—	1	26/5/57	17/6/57		25
1510 Pollokshaws Road	2	4	—	—	—	6	2/9/57	—	30/9/57	34
31 Pleasance Street, B/L	13	1	—	—	—	14	2/9/57	—	30/9/57	34
31 Pleasance Street, F/L	3	2	—	—	—	5	2/9/57	—	30/9/57	34
12 Alice Street	4	8	—	—	—	12	10/9/57	—	14/10/57	25
18 Wolseley Street	3	8	—	—	—	11	14/9/57	—	14/10/57	25
64A Florence Street	9	—	—	—	—	9	2/9/57	30/9/57		26
*114 Portugal Street, 0/1	1	—	—	—	—	1	30/9/57	—	—	26
12/14 Kilbarchan Street	4	2	2	—	—	8	28/10/57	—	25/11/57	26
45 McNeil Street	—	16	—	—	—	16	11/11/57	—	9/12/57	25
47 McNeil Street	—	16	—	—	—	16	11/11/57	—	9/12/57	25
49 McNeil Street	—	16	—	—	—	16	11/11/57	—	9/12/57	25
51 McNeil Street	—	16	—	—	—	16	11/11/57	—	9/12/57	25
53 McNeil Street	—	12	1	—	—	13	11/11/57	9/12/57	—	25
Total	94	118	4	—	1	217				

* Undertaking 28/10/57, not to be used for human habitation.

The rate of house building continued on a level with the previous year and 3,268 new houses were completed, 144 by private firms and 3,124 by the Corporation.

New Houses.

Ward	Apartments					Total
	1	2	3	4	5	
35 Govanhill	—	—	83	33	—	116
36 Langside	—	—	150	90	—	240
34 Pollokshaws	—	—	220	132	—	352
37 Cathcart {	Private	—	51	39	54	144
	by Corporation ...	69	52	1,670	558		67
Total						3,268

Reconditioned Houses.

Ward	Apartments					Total
	1	2	3	4	5	
37 Cathcart	—	—	1	—	—	1

Housing (Repairs and Rents) (Scotland) Act, 1954, and Rent Act, 1957.—In the first part of the year the number of applications for Certificates of Disrepair in terms of the 1954 Act was small. From 6th July, the date of the coming into operation of the Rent Act, the number increased appreciably. This, no doubt, was due to notices of increased rent being served on tenants of houses.

The following is a tabulated return of the activity in respect of both Acts.

HOUSING (REPAIRS AND RENTS) (SCOTLAND) ACT, 1954.

APPLICATIONS FOR CERTIFICATES OF DISREPAIR.

Housing (Repairs and Rents)(Scotland) Act, 1954.	Number				Total
	Granted	Refused	With- drawn	Out- standing	
Application 1/1/57 to 5/7/57 ...	18	56	6	—	80
Applications for Revocation ...	3	—	—	—	3
Rent Act, 1957					
Applications 6/7/57 to 31/12/57 ...	141	136	7	44	328
Applications for Revocation ...	10	3	1	6	20

Supervision of Housing Scheme Tenants.—The visitation of houses in the new areas continued throughout the year and it is satisfactory to record how well the advice of the visiting nurse inspectors was received and taken where needed. There are a number of tenants who will require constant supervision, but generally speaking an initial visit was all that was found to be necessary. In several cases severe reprimands were given and one was reported to the City Factor as totally unsuitable. The family was rehoused in older tenement property elsewhere.

The normal visitation to the houses in the older housing schemes and to other special houses throughout the Division was maintained. The result of the high standards set is appreciated by all who are concerned or interested in this work.

The number of inspections made to all classes of houses was 15,920.

The Care of Aged Persons.—There are 64 aged persons living at home who are visited regularly by the nurse inspectors. These men and women are mostly bedridden, without relatives and dependent on the charity of neighbours for meals. The visit from the nurse is eagerly looked forward to by the old folks.

Many of the houses have to be cleaned from time to time and the bed clothes washed regularly.

Inspection of School Children.—Eighty-seven visits were made to schools for the purpose of examining the boys and girls in attendance and it is regrettable that the records show a high incidence of dirty and verminous children. Two hundred and seventy-six visits were made to the homes of these children and advice and assistance given to the parents.

	Examined	Infested	Infected	Fleas	Dirty
Boys	5,078	36	315	7	91
Girls	5,165	50	763	3	48
Total	10,243	86	1,078	10	139

Commercial Premises.—During the year a survey of the places of employment in the Division was carried out and many small offices, warehouses and factories were found which hitherto had not been visited. It was not possible to finish the survey by the end of the year and the complete analysis must be delayed until next year.

The number of visits made to factories in terms of the Factories Act, 1937, was 1,614 and the number of contraventions found was 435. Want of cleanliness and insufficient or improperly constructed sanitary conveniences formed the major portion of the 191 notices issued to owners of premises.

The number of factories at present on the register can be seen in the attached table.

WILLIAM RAE,
Divisional Sanitary Inspector.

Factories in South-Eastern Division, 1957.

Ward	Factories Act, 1937.										Public Health (Scotland) Act, 1957							
	Total on Register as at 31.12.56				New Registrations during 1956				Removals during 1956		Catering Establishments		Workplaces					
	Mech.	Non-Mech.	Bakehouses Non-Mech.	Mech.	Non-Mech.	Bakehouses Non-Mech.	Mech.	Non-Mech.	Mech.	Non-Mech.	New	Removals	Total at 31.12.56	New	Removals	Total at 31.12.56		
25	62	9	13	3	11	1	2	—	2	1	—	—	18	1	1	8	5	2
26	223	33	21	3	33	5	2	—	30	7	2	—	33	2	3	81	24	15
33	65	18	10	2	13	6	—	—	10	3	—	—	8	3	—	19	9	3
34	89	9	5	4	18	4	—	1	16	1	—	1	9	2	—	17	11	4
35	58	7	8	2	3	—	—	—	1	—	1	—	13	—	—	13	—	—
36	42	8	5	2	18	—	2	1	4	1	1	—	8	3	1	18	14	3
37	40	5	6	—	9	1	3	—	2	3	—	3	2	—	1	11	6	2
	579	89	68	16	105	17	9	2	65	16	4	4	91	11	6	167	69*	29

SOUTH-WESTERN DIVISION.

The beginning of the year saw a great deal of preliminary work behind the scenes in preparation for the X-ray Campaign. Some members of the staff devoted the greater part of their normal working hours to the Campaign and others carried on with additional duties and also assisted when the flood of work in the Campaign became too great.

The work of the Division was steadily maintained although there was a decrease in the general duties compared with previous years. Infectious disease, nuisance and housing visits take up a great deal of the inspector's working day; there was an increase in the number of nuisance cases before the Sheriff and while a small allocation of houses continues for the closing and demolishing of those which are uninhabitable we are still only at the fringe of the problem. In last year's report mention was made of a house in an abandoned property which was dealt with under Section 7 of the Housing (Scotland) Act, 1950, and I am glad to see that the Corporation are in the process of negotiation for this property by Compulsory Purchase.

Nuisance Detection and Removal.—The difficulties in abating nuisance work were revealed by the issue of 139 statutory notices and the majority of these notices resulted in Court action as the work was not done. At the end of the year 29 cases were still pending, either waiting on Court decisions or accounts to be rendered as a result of work authorised by the Sheriff. In one case where there was a mass application by tenants in two properties for Certificates of Disrepair and the nuisance conditions therein resulted in Court action the owner decided to do the repairs himself. My report to the Town Clerk indicated that some work was still outstanding and that other items, particularly pointing of the window frames of houses, had not been satisfactorily done. The Sheriff appointed a "man of skill" to report as the owner had objected. The report of the "man of skill" corroborated my statement and remarked particularly about cement being used for the pointing of window frames and of the manner in which astragals had been repaired. He stated "this is not a good medium to use for this purpose, as it contracts badly from wood, thereby leaving window sash exposed to the elements. The windows will therefore require attention in a very short time" also, "astragal mouldings of windows where badly worn have been replaced by the use of putty and not as they should have been, i.e., by wood. The continual opening and closing of the windows will cause the putty to come off, thereby

leaving glass practically free to fall out." By the end of the year the Sheriff had not given his decision on the report. The reluctance of owners to do major repairs is mostly confined to the poorer properties even although an increase in rent has been made but this is not surprising as the cost of these repairs is prohibitive in relation to the financial return.

COMPLAINTS RECORDED IN THE NUISANCE DIARY
DURING THE YEAR.

Choked drains, w.c.'s, conductors, etc.	385
Rat and Mice infestation	233
Insect Infestation	225
Dirty stairs, lobbies, w.c.'s	216
Dirty houses	16
General disrepair	193
Dampness due to defective roof	211
Dampness due to defective pointing and condensation ...	40
Dampness due to lack of D.P.C., ground damp	15
Burst pipes, defective water fittings	175
Defective vents, smoke pollution	171
Offensive smells	62
Complaints <i>re</i> garbage bins, refuse, etc.	35
Applications for Certificates of Disrepair before 1st June, 1957 ...	64
Applications for Certificates of Disrepair after commencement of new Act	231
	2,272
	2,272

Housing (Overcrowding).—The number of families rehoused through the Corporation was 1,359 and of that number 689 families were living in overcrowded conditions. The overcrowding figure has remained steady over the past four years. A decrease of 11 cases resulted from the previous year, although 23 families less were rehoused. In 88·84 per cent. of the cases overcrowding was abated and in 77 cases or 11·16 per cent. houses were again overcrowded.

Housing (General).—New housing in the Division consisted mostly of tenements and semi-detached villas constructed by private builders for sale. The exception was in Ward 29 where the Corporation continued their plan for the erection of new houses on the sites of demolished properties in Orkney Street/Vicarfield Street.

BY NEW BUILDING.

Ward	Address	No. of Houses	Size of Houses						
			1	2	3	4	5	6+	
29	21 Orkney Street ...	6	—	—	6	—	—	—	} New Corporation Tenements on old Building sites.
	29 Orkney Street ...	6	—	—	6	—	—	—	
	126 Vicarfield Street ...	6	—	—	6	—	—	—	
31	35/37 Barshaw Road ...	2	—	—	—	2	—	—	Privately owned houses.
	67/101 Wedderlea Drive	30	—	—	24	6	—	—	Corporation houses.
32	Braidcraft Road/Lint-haugh Road ...	1	—	1	—	—	—	—	Clinic.
	Crookston Road ...	1	—	—	—	1	—	—	Groundsman's house, Rolls Royce Sports Pavilion.
	Belltrees Road ...	1	—	—	—	—	—	1	Chapel House.
	Brockburn Road ...	1	—	—	—	1	—	—	New Cleansing Depot.
	124/172 Maxwell Drive	25	—	—	—	25	—	—	Privately owned semi-detached villas.
34	Darnley Gardens	1	—	—	—	1	—	—	Janitor's House, New Hutcheson's Grammar School.
35	Darnley Gardens	6	—	—	—	6	—	—	} New privately built tenements.
31	Darnley Gardens	6	—	—	—	6	—	—	
9	Mariscat Road ...	6	—	—	—	6	—	—	
	26/28 Herries Road ...	2	—	—	—	—	2	—	New semi-detached.
	6/28 Meldrum Gardens	26	—	—	24	—	2	—	New privately built tenements.
	Total ...	132	—	1	66	60	4	1	

BY SUB-DIVISION.

Ward	Address	No. of Houses	1	2	3	4	5	6+	
32	312 Albert Drive ...	2	—	—	—	—	2	—	} Converted from large single houses.
	317 Albert Drive ...	2	—	—	—	2	—	—	
	360 Albert Drive ...	2	—	—	—	—	1	1	
	59 Aytoun Road ...	2	—	—	—	—	2	—	
	48 Dalziel Drive ...	2	—	—	—	1	—	1	
	8 Hamilton Avenue	2	—	—	1	1	—	—	
	7 Leslie Road ...	2	—	—	—	1	1	—	
	10 Netherby Drive ...	2	—	—	—	1	1	—	
	45 Newark Drive ...	2	—	—	—	—	1	1	
	17 Sherbrooke Avenue	2	—	—	—	—	1	1	
58 St. Andrew's Drive	2	—	—	—	1	—	1		
	Total ...	22	—	—	1	7	9	5	

NUMBER OF HOUSES CLOSED AND/OR DEMOLISHED
DURING 1957.

	1	2	3	4	5	6+	Total
	Apt.	Apts.	Apts.	Apts.	Apts.	Apts.	
*Represented as Unfit	90	176	9	1	—	—	276
Dangerous Building	5	27	6	—	4	—	42
Voluntary Closing by Factor ...	14	9	2	1	—	—	26
Absorbed into Business Premises ...	3	8	—	—	—	—	11
Abandoned Property	—	1	—	—	—	—	1
Property Acquired by Corporation	—	4	2	1	—	—	7
†Industrial Development	—	15	1	2	—	—	18
Road Widening Scheme (Paisley Road West)	—	1	—	—	—	—	1
	112	241	20	5	4	—	382
	112	241	20	5	4	—	382

* Including one house represented in 1955 and 66 houses represented during 1956.

† Houses (in Ward 30) being closed and demolished to make way for further development of Stephen's Shipbuilding Yard.

Abandoned Properties.—Two properties containing 28 houses were represented as unfit and in the course of the year another eight properties were abandoned making a total of 29 in the Division. Some of the properties abandoned were offered to the Corporation and negotiations to acquire the subjects are in progress.

Housing (Repairs and Rents) (Scotland) Act, 1954 Rent Act, 1957.—The much debated Rent Act, 1957, came into operation on the 6th July, 1957, and from that time to the end of the year the number of applications for Certificates of Disrepair more than trebled the number in the preceding six months of the year. It is too early yet to assess the benefits to property as a result of the new Act. Certainly I think that in the better properties proper maintenance will be done and deterioration arrested in most properties as a result of the additional funds accumulated. The problem type of property is the low sub-standard one where an increase in rent is applied and the tenant through application for a Certificate of Disrepair has certain repairs attended to. These repairs are confined almost entirely to internal work and do not include disrepair of common passages and staircases, wash-houses and badly drained or earth surface back courts which are continually in a miry condition. The latter items were omitted in Certificate of Disrepair following a decision by Sheriff Walker not long after the 1954 Act came into force.

HOUSING (REPAIRS AND RENTS) (SCOTLAND) ACT, 1954.

	(a)	(b)	(c)	Total
Number of Applications for Certificates of Disrepair to 5/7/57	3	63	—	66
Granted	1	45	—	46
Refused	2	14	—	16
Cancelled	—	4	—	4
Number of Applications for Revocation to 5/7/57	—	26	—	26
Granted	—	25	—	25
Refused	—	1	—	1
Cancelled	—	—	—	—
Number of Applications for Certificates of Disrepair after the Rent Act, 1957, came into operation (i.e. 6/7/57—31/12/57)	—	—	215	215
Granted	—	—	147	147
Refused	—	—	45	45
Cancelled	—	—	12	12
Still under consideration at 31/12/57 ...	—	—	11	11
Number of Applications for Revocation	—	—	13	13
Granted	—	—	9	9
Refused	—	—	2	2
Cancelled	—	—	—	—
Still under consideration at 31/12/57 ...	—	—	2	2

(a) Dwelling-houses which have been subject to a notice of repairs increase of rent under Part II of the 1954 Act.

(b) Dwelling-houses which have not been subject to the notice of repairs increase of rent under the 1954 Act but in respect of which permitted increase of rent is recoverable under Section 2 (1)(c) and (d) of the Increase of Rent and Mortgage Interest (Restrictions) Act, 1920.

(c) Dwelling-houses which have been subject to a notice of repairs increase under the 1954 and 1957 Acts.

Limewashing of Closets and Staircases.—Towards the end of the year some 650 Notices were issued in connection with the cleansing of the walls and ceilings of closets and staircases and of that number 184 had been completed before the end of the year; 586 were done

voluntarily, 500 limewashing and/or paintings were completed from notices issued in 1956, and the overall total as a result of notices and voluntary action is 1,270.

The ever increasing number of owner-occupied houses in tenements presents a problem as regards the above especially in the issue of notices in good residential areas where all or the majority of houses in a tenement are often separately owned. The Glasgow Corporation Order Confirmation Act, 1934, states that—

(1) *The Inspector of Nuisances may by notice to the proprietor of any *tenement in which any common passage or common stair or staircase is not in a cleanly state require the said proprietor to cleanse and limewash not more often than once in every year such common passage, common stair or staircase to such an extent as may be specified in such notice.*

* (2) *For the purposes of this section "tenement" means a building constructed in flats or storeys, occupied wholly or principally as dwelling houses **let** to separate tenants.*

From the preceding paragraphs the conclusion would appear to be that in properties where houses are **not** wholly or principally let to separate tenants one cannot serve notice under the Act for the Limewashing of Closes and Staircases, etc. The Act therefore does not seem to protect the minority occupier tenant.

Cleansing of Common Passages and Staircases.—In three instances Court proceedings were necessary during the year, all proved successful and fines of 10s., 10s. and £2 were made respectively.

Again, owner-occupied houses in tenements may present a problem should Court action fall in the failure to sweep and wash common stairs and lobbies as the bye-laws state "Every tenant" or "Each tenant" whose dwelling is entered from or by means, etc. The interpretation of the word "tenant" means occupant under a landlord. The inconsistency of the bye-laws is further revealed when under Parts (IV) Passages, and (V) and (VI) (Stairs and Pathways) it states that "Each tenant, whose dwelling is entered directly from a passage herein before defined as a Close or Entry, or from a Lobby running off such passage, and every shop-keeper or *other person* dwelling in or occupying premises entering from the front of the building or from the back thereof."

In other words if the strict meaning of tenant is to be understood Parts II and III of the bye-laws should not apply to owner-occupiers. Obviously the bye-laws were not intended to apply for owner-occupiers in tenements and consideration should be given now to an amendment in the light of up-to-date experiences.

Factories.—There are 732 factories in the Division a decrease of four from the previous year. Inspections to the number of 1,669 were carried out and in 96 instances written notices were served for contraventions under the Act.

Details of factories registered in the Division are as follows :—

Mechanical Factories	...	...	...	...	620
Non-Mechanical Factories	...	...	...	...	72
Mechanical Bakehouses	...	...	...	...	31
Non-Mechanical Bakehouses	...	...	...	...	9
					<hr/>
Total	...	...	...	...	732
					<hr/>

Drainage.—As there has not been much new house building during the year drain tests and inspections were mostly confined to alterations in existing property. At the end of the year the Scottish Special Housing Association Ltd. were given permission to erect over 300 houses on a site off Langlands Road, formerly used by the Education Department for recreational purposes.

Rag Flock and Other Filling Materials Act, 1951.—Fourteen premises are registered in terms of the Act and during the year thirty-three inspections were carried out and the premises found satisfactory. There are no licensed premises for the manufacture of Rag Flock in the Division.

Rodent Control.—The undernoted table gives a summary of operations carried out and the figures are almost identical with the previous year. There was an increase of three on the number of visits and 21 in the premises found infested. There were no serious infestations and in the large factory premises, e.g., Refuse Power Works, Helen Street, Shieldhall premises of the S.C.W.S. and Riverside Milling Co., the respective occupiers maintain their own Rodent Operators.

RODENT CONTROL OPERATIONS UNDERTAKEN DURING 1957.

Type of Premises	No. visited	No. found infested	Degree of Infestation		Hours worked on treatment	Premises satisfactorily proofed after treatment
			Light	Heavy		
Dwelling-houses, Basement						
Cellars and Back Courts ...	281	212	199	13	1,285	35
General Factories ...	16	15	13	2	81	1
Food Factories ...	6	6	3	3	38	1
General Shops ...	8	8	6	2	32	4
Food Shops ...	9	8	7	1	23	2
General Stores and Warehouses	3	3	2	1	35	—
Public Houses ...	3	3	2	1	13	—
Halls ...	1	1	1	—	7	—
Common Lodging Houses ...	1	1	—	1	9	—
Offices and Institutions ...	3	2	2	—	11	2
Allotments and Plots ...	3	3	1	2	39	—
Railway Embankments ...	3	3	1	2	28	—
Churches ...	2	2	2	—	8	1
Building Sites ...	2	2	—	2	12	—
Sewers ...	3	3	—	3	26	—
Sewage Works ...	1	1	—	1	10	—
	<u>345</u>	<u>273</u>	<u>239</u>	<u>34</u>	<u>1,657</u>	<u>46</u>

Insect Infestation.—Two hundred and twenty-five complaints were received and when added to the number of infestations found as a result of inspections under the Housing (Scotland) Act, 1950, the following is a summary of infestations dealt with.

Beetles ...	37
Bugs ...	232
Cockroaches ...	121
Fleas ...	3
Flies ...	12
Total ...	<u>405</u>

Offensive Trades, Piggeries and Common Lodging Houses.—There are three offensive trades, two piggeries and one common lodging house in the Division and when inspected in the course of the year were always found to be in a satisfactory condition.

Shops, Catering Establishments and Places of Public Entertainment.—At the end of the year a re-survey was started on these premises to bring information up-to-date and it is hoped to show the result of this work in the next annual report.

Tents, Vans and Sheds.—At one of the sites the occupier of the land carried on a business of breaking up old motor vehicles and was warned that permission was not granted for that purpose. He was advised to obtain planning permission and took so long in doing so that his application for renewal of permission to place or keep on land tents, vans, sheds or similar structures at the end of the year was withheld.

Nurse Inspectors.

Supervision of Rehousing Schemes.—Of the 9,611 houses inspected 8,106 were found to be clean and 1,441 fair. None of the houses showed evidence of bug infestation which speaks volumes for the past work of the staff as many of the houses previously occupied by these tenants before rehousing were bug infested.

Schools.—During the year visits were made to schools on 74 occasions when 7,418 children were examined; 158 boys and 400 girls were found to be infected, a reduction of more than 50 per cent. from the previous year.

Elderly Persons.—The invaluable work by the Nurse Inspector in this type of visit cannot be measured by numbers, 1,764 during the year, but by the immense good will she brings to the Department through her contact with lonely, helpless, infirm and in many cases ill-fed elderly men and women. Where necessary the nurse asks for the co-operation of the various sections of the Department and this is always willingly given.

W. B. EASTON,
Divisional Sanitary Inspector.

RAG FLOCK AND OTHER FILLING MATERIALS ACT, 1951.

Five firms applied during the year for registration of their premises under the above Act. After inspection, certificates were granted in each case.

Three firms cancelled their registrations and were removed from the register.

The total number of premises registered at the end of 1957 was 84 compared with 82 in the previous year.

Eleven licences were granted to firms to store or manufacture Rag Flock on their premises. This is the same number as in 1956.

Division				Registered Premises	Licensed Premises
Central	...	...	...	22	3
Northern	...	...	...	13	1
Eastern	...	...	...	20	3
South-Eastern	...	...	...	15	4
South-Western	...	...	...	14	—
				—	—
				84	11
				—	—

DISINFECTION.

This Section is responsible not only for the disinfection of premises, clothing, books, etc., but also assists the public by the loan of equipment and the supply of materials so that in suitable cases they may themselves carry out cleaning and whitewashing.

In addition 449,205 articles of second-hand clothing and 149 bales of rags, etc., all for export, were disinfected.

Disinfection of Premises, etc.—The table shows the number of premises and library and school books dealt with on account of infectious disease.

Houses, etc., disinfected	...	...	...	...	7,150
Houses whitewashed, stripped and cleaned	...	...	...	...	2
Library and school books disinfected	...	...	...	...	1,214

The amount of material used for these purposes and also issued to the public is shown below.

Whiting	...	...	...	...	3,743 lbs.
Colour (dry)	...	...	...	...	441 lbs.
Brushes loaned	...	...	...	...	25
Disinfectant (crude)	...	...	...	...	70 galls.
Formaldehyde 40 per cent.	...	...	...	...	106 galls.
Naphthalene Powder	...	...	...	...	2,086 lbs.

Disinfection of Second-hand Clothing.—This department also undertakes the disinfection of second-hand clothing for export to Eire and other countries abroad. During 1957 863 consignments of second-hand clothing were disinfected by steam or formalin for export abroad and to Eire. In 1957, for the first time, parcels to Italy required to be disinfected and the above figure includes a number of small parcels sent from this country to relatives in Italy.

The total revenue amounted to £539 10s. 9d. compared with £479 9s. 6d. in 1956.

Disinfecting Stations.—A variety of material is washed and disinfected at the two Disinfecting Stations at Ruchill and Belvidere,† chiefly clothing, bedding and bed linen from houses in which an infectious disease has occurred and including some from dirty houses and verminous persons. In the case of the infirm elderly compassionate washings are undertaken when necessary. Bedding and bed-clothes, etc., from the Education Authority Holiday Camps, from Police Cells and from two Ambulance Associations are also dealt with. Work is also carried out for various branches of the Health and Welfare Service, viz., Day Nurseries, Old Folks' Homes, Clinics, etc., and for private firms exporting straw packing, second-hand clothing and rags, in respect of which a certificate of disinfection must be obtained from this department. A much appreciated service is that offered to men living in lodging houses who may have their clothes cleaned while they themselves have a bath on the premises. The number of washings, etc., carried out at the two stations during 1957 was as follows:—

	Ruchill	Belvidere	Total	
			1957	1956
Number of washings	10,395	5,412	15,807	16,050
Average number per day ...	38·96	37·04	76·00	56·28
Articles washed and disinfected	507,434	229,384	736,818	655,498

† The figures for Belvidere are for the period ending 24th June, on which date the staff was transferred to Ruchill Disinfecting Station. Following the reconstruction and modernisation of the latter all the work required by this Department is now being dealt with there, Belvidere being retained on a care and maintenance basis only.

SECTION XV.

OCCUPATIONAL HEALTH.

The arrangements for the medical examination of Corporation employees for admission to the Superannuation and Sick Pay Schemes continued as in previous years. The transfer to the newly constructed clinic rooms in the basement has been a great improvement. Better facilities now exist for the medical examinations, for the testing of eyesight and for urine analysis. The proximity of the X-ray department is a further advantage.

As the number of candidates presented for examination remained at a high level, it was found necessary to increase the number of permanent clinics to four per week. Additional clinics were also arranged to prevent the waiting list for examination from becoming too large.

During the year, 2,978 persons were medically examined. The distribution of these candidates by department and scheme is shown in Table I which also shows the number examined in connection with entry to the Corporation service. Details are also given of the numbers examined for premature retirement and other special reasons.

Of the 2,978 persons examined, 433 (14·5 per cent.) were rejected as being unfit for admission to the schemes. The majority of those rejected were referred for specialist treatment and will be re-examined for entry to the appropriate schemes after their medical defects have been corrected. Of the 433 persons rejected, 292 were men and 141 were women. The clinical conditions causing rejection are shown in Table No. 2.

As in previous years, all those examined were X-rayed at 20 Cochrane Street and this has resulted in the discovery and early treatment of many unsuspected cases of tuberculosis.

Twenty-six persons were examined for premature retirement because of ill-health. Of these, 23 were accepted and three were refused. The clinical conditions leading to retirement are shown in Table 3. It is worth noting that heart disease was the reason for early retirement in over half the persons examined.

During the year 17 special examinations were carried out. These included the assessment of certain employees for fitness to resume work after some illness or disability and the assessment of certain employees to undertake special types of work.

The scheme by which B.C.G. vaccination was made available to Corporation employees under the age of 25 years was continued. During the year 12 persons were tuberculin-tested and of these six received B.C.G. The marked fall in numbers this year is due to the success of B.C.G. vaccination campaign in school children. Almost all the young people being examined had had B.C.G. vaccination before leaving school.

The Occupational Health Unit is frequently consulted for advice by Corporation Departments and other organisations. During the year several investigations were carried out of ventilation and lighting in offices in the central area of the city and many of the recommendations made were accepted by the firms concerned. The investigations into the provision and use of special protective clothing for certain out-door workers continue.

A feature of this year's work has been the provision of a vaccine against Weil's disease for sewer men. Most of the sewer men accepted the offer of the vaccine, which was prepared, according to the instructions of Professor R. D. Stuart, Alberta, by Dr. J. C. J. Ives, Bacteriologist, Glasgow Royal Infirmary. Many of the inoculations had to be carried out late at night as many sewer men work throughout the night.

A preliminary investigation was started into the health and working conditions of certain Cleansing Department employees.

TABLE NO. 1

MEDICAL EXAMINATIONS CONDUCTED AT 20 COCHRANE STREET
DURING YEAR ENDED 31ST DECEMBER, 1957.

Department	Super-annuation		Sick Pay		Entrance		Retiral		Special		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Architectural and Planning ...	26	15	1	1	3	3	1	-	-	-	31	19
Baths ...	58	19	8	3	-	-	-	2	1	-	67	24
Blind Asylum ...	6	-	-	-	-	-	-	-	1	-	7	-
Children's ...	4	12	-	-	1	3	-	-	-	-	5	15
City Analyst ...	2	-	-	-	2	1	-	-	-	-	4	1
City Assessor ...	7	11	-	-	6	13	-	-	-	-	13	24
City Chamberlain ...	16	19	-	-	2	3	-	-	-	-	18	22
City Factor ...	19	2	1	-	4	2	-	-	-	-	24	4
Cleansing ...	383	10	49	5	-	-	4	-	1	-	437	15
Curator ...	3	16	-	-	-	-	-	-	1	-	4	16
Education ...	89	322	-	291	3	11	1	5	-	-	93	629
Fuel Control ...	-	4	-	-	-	-	-	-	-	-	-	4
Halls ...	5	6	-	-	-	-	-	-	-	-	5	6
Highways ...	86	-	11	-	2	-	-	-	-	-	99	-
Housing and Works	135	10	22	13	6	2	2	-	-	-	165	25
Libraries ...	11	42	-	12	2	7	-	-	-	-	13	61
Luncheon ...	-	5	-	-	-	2	-	-	-	-	-	7
Markets ...	21	-	5	2	-	-	-	-	-	-	26	2
Museums and Art Galleries ...	13	2	4	6	1	1	-	-	-	-	18	9
Office of Public Works ...	4	-	-	-	2	1	2	-	-	-	8	1
Parks ...	135	-	15	-	-	-	1	-	-	-	151	-
Printing ...	11	10	-	-	-	-	-	2	-	-	11	12
Probation ...	8	-	-	-	2	-	-	-	-	-	10	-
Procurator-Fiscal ...	-	1	-	-	-	1	-	-	-	-	-	2
Registrar ...	-	1	-	-	-	2	-	-	-	-	-	3
Sewage ...	33	-	4	-	-	-	2	-	1	-	40	-
Town Clerk ...	2	6	-	-	-	2	-	-	-	-	2	8
Veterinary ...	1	-	-	-	-	-	-	-	-	-	1	-
Water ...	105	1	16	-	2	-	1	-	1	-	125	1
Weights & Measures	1	1	-	-	-	-	-	-	-	-	1	1
Health and Welfare	70	61	-	528	7	1	-	3	2	5	79	598
Other Authorities ...	5	3	-	-	-	-	-	-	4	-	9	3
	1,259	579	136	861	45	55	14	12	12	5	1,466	1,512

TABLE NO. 2

CLINICAL CONDITIONS EXCLUDING THE CANDIDATES FROM THE
SCHEMES.

Disease	Males	Females
Tuberculosis—Pulmonary	66	21
Do. Non-Pulmonary	—	2
Chronic Bronchitis	18	4
Other Lung Conditions	13	5
Heart Disease	21	6
Hypertension (High Blood Pressure) ...	28	30
Circulatory Disease	2	—
Advanced varicose veins	25	20
Hernia	23	2
Peptic Ulcer	19	10
Ear Conditions	18	1
Genito-Urinary Defects	16	4
Bone and Joint Disease	8	6
Poor Physique	—	3
Neurological and Psychiatric Conditions ...	6	2
Diabetes Mellitus	2	2
Glycosuria	19	4
Obesity	5	5
Anaemia	—	3
Skin disorders	—	5
Endocrine Conditions	—	3
Other Conditions	3	3
	<u>292</u>	<u>141</u>

TABLE NO. 3

RETIRAL MEDICAL EXAMINATIONS.

CLINICAL CONDITIONS CAUSING PREMATURE RETIREMENT.

Disease	Males	Females	Total
Heart Disease	6	7	13
Chronic Bronchitis	4	—	4
Arthritis	1	1	2
Lung Conditions	—	1	1
Failing Sight	1	1	2
Cerebral Haemorrhage	1	—	1
	<u>13</u>	<u>10</u>	<u>23</u>

SECTION XVI.

WELFARE SERVICES.

RESIDENTIAL ACCOMMODATION.

During the year 1957 ninety-five additional beds have been provided in the city for the accommodation of old persons by the opening of three Small Homes, namely, Robertson, Merrylee Lodge and Knowehead. In addition our first Holiday Home for aged and handicapped persons was opened in September, 1957, at Frognaal, Southwood, Troon, with accommodation for thirty residents.

At 31st December, 1957, residential accommodation was available in the following Homes in the city :—

		No. of beds
Foresthall, 657 Edgefauld Road ...	(1,287 beds, of which 640 are at the disposal of the Western Regional Hospital Board) ...	647
Crookston, 837 Crookston Road ...	Wards ... 342 Annexe ... 14 Cottages ... 136	492
<i>Small Homes—</i>		
	Opened on	
Woodburn, 10-12 Cleveden Gardens ...	16th April, 1948 ...	28
Tayford, 33 Newark Drive ...	24th October, 1950 ...	24
Stoneleigh, 48 Cleveden Drive ...	1st November, 1951 ...	24
Redhills, 42 Sherbrooke Avenue ...	18th March, 1952 ...	19
Woodmailing, 39 Sherbrooke Avenue ...	18th April, 1952 ...	20
Ailsa, 13-15 Turnberry Road ...	9th October, 1952 ...	26
Burnbank, 20-26 Burnbank Terrace ...	22nd April, 1953 ...	50
Scott House, 56 Langside Drive ...	19th May, 1953 ...	39
Extension to Scott House ...	26th April, 1955 ...	
Huntly Lodge, 33-34 Huntly Gardens ...	6th October, 1953 ...	36
Fairfield, 53-55 Sherbrooke Avenue ...	12th January, 1954 ...	22
Macarthur House, 15 St. John's Road ...	1st June, 1954 ...	14
Ravelston, 994 Great Western Road ...	17th October, 1956 ...	34
Roberton, 1 Lancaster Crescent ...	21st May, 1957 ...	17
Merrylee Lodge, 55 Muirsketh Road ...	14th November, 1957 ...	40
Knowehead, 372 Albert Drive ...	12th December, 1957 ...	38
		431
		<u>1,570</u>

Attention is drawn to the fact that 431 beds have been provided in sixteen Small Homes between April, 1948, when the first of this

smaller type of Home was opened, and December, 1957. Of the three new Homes, Robertson and Knowehead are large houses purchased by the Department and reconstructed for their new purpose. Robertson is a terrace house situated in Lancaster Crescent, Great Western Road, and is managed by the Superintendent and Matron who are resident at Ravelston nearby. There is an Assistant Matron resident at Robertson. Knowehead is a villa standing in its own grounds in the Pollokshields district and, as it is a particularly spacious property, is proving most suitable for the accommodation of aged persons. Merrylee Lodge is our first Home to be built for the accommodation of aged persons since the National Assistance Act, 1948, came into operation and it is specially designed for this purpose. Forty are accommodated in fourteen single and ten double rooms with a sick bay of two rooms, each accommodating three. The building is on two flats, is designed to trap all available sunshine, and has a lift so that the old people who find difficulty with stairs can still occupy bedrooms on the first flat. There is a modern dining room, lounge, quiet room and smoke room on the ground flat.

Frognaal, the Holiday Home opened on 5th September, is a mansion house standing in extensive grounds on the Monkton/Troon road. There are three spacious lounges and a dining room. The grounds are beautifully laid out with flower beds and large lawns surrounded by woodland. Residents from Glasgow Homes are taken to Frognaal by bus for two-week periods and even in the short time the Holiday Home has been operating the beneficial effects of change of surroundings are noticeable. The policy is that this Home will be available for holidays for registered handicapped persons as well as aged.

During 1958 a new building on the same lines as Merrylee Lodge was completed at Castlemilk Housing Scheme and two adjoining terrace houses were purchased at Kirklee Gardens for adaptation as a further Home for the aged. Sites for building additional Homes have been acquired in the Drumchapel Housing Scheme and at Langlands Road: a second site had already been earmarked at Castlemilk.

Foresthall. On 31st December, 1957, Foresthall had a population of 1,088, of whom 520 were in residential accommodation and 568 in the hospital section. Those in residential accommodation varied in age from seven under 20 to three over 90. The total number of admissions during the year was 921, discharges 699 and deaths 233. Including hospital cases the number of admissions over 60 years of age was 658, an increase of 52 over the previous year. The average age of admission

for males was 64.24 and for females 66.54. The average age of admission is higher than in the previous year when the corresponding figures were 63.15 for males and 63.58 for females. The average age at death was 75.1 for males and 78.89 for females, the figure for females being exactly the same as in 1956 but for males having risen from 74.55 to 75.1.

The policy of improving the amenities at Foresthall was actively followed and the male block was in course of reconstruction for re-opening early in 1958. This will complete the modernisation of the residential accommodation at Foresthall.

The fact that this is a joint-user establishment with both residential accommodation and wards for geriatric and chronic sick patients facilitates transfers between the two sections and during the year 223 transfers were carried out from residential accommodation to the hospital wards and 101 from the hospital wards to residential accommodation.

During the year the laundry has again dealt with all work for this large Home, the weekly turnover being approximately 26,000 articles, and the new plant installed last year has proved of great benefit.

Staff football matches continue to be popular with the ambulant residents and those who are fit are taken by bus to attend matches played away from the Home. Fortnightly concerts during the winter months were well attended and the shop has been well patronised. Additional television sets have been installed throughout the Home and are proving most popular.

Crookston. During the Mass X-ray Campaign held in March-April, 1957, approximately 300 residents in Crookston attended for X-ray and it is interesting to note that only one active case was diagnosed.

The usual social activities at Crookston have continued; the bowling green has retained its popularity and the putting green has become very popular; the Women's Guild meetings are well attended and the speakers' services much appreciated. A number of residents were entertained for a day on the city's Sludge Boat, S.S. Shieldhall, sponsored by the B.B.C., and appeared on a television programme later. This proved a most interesting experience and later in the season a further seventy residents were entertained by the Corporation on S.S. Shieldhall. Two displays of billiards during the year were well attended by the male residents. The shop and tea room continue to be very popular and the installation of a public telephone box has been greatly appreciated by the residents.

During the year 35 residents were transferred from the Cottages to the Main Home for nursing care, and of these, 24 returned to their cottages. There were 25 deaths and 34 were discharged during the year either to hospital or to the care of friends. The total number of new admissions to the Main Home for the year ending 31st December, 1957, was 111 and there were 18 admissions to the Cottages. The total number of admissions has been analysed with the following results :—

From their own homes	37
From relatives	24
From lodgings	6
From hospitals	42
From other Corporation Homes ...	20
	129
	129

The average ages of residents in the Main Home are males, 80, and females, 81, and in the Cottages, males, 76, and females, 75. There are fourteen certified blind persons resident in the Home.

For the second time in the history of Crookston a resident attained her one hundredth birthday and a special ward party was held.

Burnbank. This Home has been fully occupied during the year, catering for very frail ambulant residents and forming a useful link between the Homes and Hospital Geriatric Services.

During the year thirteen residents were transferred to hospital, two of whom were re-admitted, the others either dying or being retained as chronic sick patients. There were seventeen deaths in the Home. The total admissions during the year numbered forty-three, four of whom were admitted from their own homes, seven from the homes of relatives, two from nursing homes, nineteen from hospitals and eleven from the Department's other Homes, these residents requiring more nursing care than is available in the smaller type of Home.

Of the fifty residents, nine are chairbound and twenty-three use sticks to move about, while one is a certified blind person. After care in Burnbank for a period, three residents were able to transfer to smaller Homes and six to return to the care of friends, having recovered to such an extent that they did not require the special nursing care available in Burnbank.

Small Homes. The Small Homes have been fully occupied during the year and the following table shows an analysis of admissions and discharges during 1957 :—

Where ground is available putting greens are provided at these Homes, and while all the residents are not able to play on the greens all are interested in watching those who do. During the winter months entertainments were arranged by volunteer artistes in all Homes and the Department's thanks are extended to all who entertained, both in the Homes and at theatres, church halls, etc. Bus outings to Largs were provided by the Corporation for residents in the Small Homes in August.

The women residents are supplied with wool and undertake the knitting of socks which are available for the use of male residents who prefer handknitted hosiery. All residents are encouraged to take part in light domestic duties in the Homes and to show an interest in the running of the households. Books are supplied by the Libraries Department and daily newspapers are available.

A full-time chiropodist is employed by the Department and visits the Homes in rotation.

The total number of applications received for admission to Corporation Homes during the year was 1,253, an increase of 68 over the previous year. In addition, 27 applications for supplementary payment towards the maintenance of elderly persons in Home: under the control of Voluntary Organisations were granted and the number accommodated in such Homes is 146.

It is interesting to note that in 1952 the total accommodation in Small Homes was 105, whereas the total accommodation in 1957 was 429, excluding the Holiday Home. The total number admitted to the Small Homes in 1952 was 98 as compared with 192 during 1957.

Registration of Homes for Aged and Disabled Persons. Under the National Assistance (Registration of Homes) (Scotland) Regulations, the Local Authority is required to register and inspect Homes, the sole or main object of which is the provision of accommodation for aged persons or for the blind, crippled or deaf and dumb. During the year one application for registration was refused and the registration of one Home was altered to that of nursing home. The total number of Homes registered at 31st December, 1957, was 16.

Temporary Accommodation. The only occasion on which temporary accommodation, as a result of unforeseen circumstances, was

required was in January, 1957, when a building at 24 Rosemount Street was declared unsafe by the Dean of Guild and four families were warned to leave the property. Two families were accommodated temporarily in Foresthall, the other two finding accommodation with friends. The furniture of all four was removed and stored by the Department. When alternative housing was obtained their furniture was delivered to the new houses.

The problem of homeless families has caused no real difficulty during the year.

Persons without a settled way of living. The number of persons without a settled way of living accommodated at Foresthall on behalf of the National Assistance Board increased to an average of 15.2 per night during the year, an increase of 4.4 over the previous year's figure. This increase was again attributable to the policy of the National Assistance Board in the closure of further reception centres in other areas in Scotland and the consequent reference of casual homeless persons to this city by police in these areas. The continuance of the National Assistance Board's policy of closing other centres and the Board's failure to provide their own reception centres as required by Section 17 of the National Assistance Act has handicapped the Corporation in their efforts to upgrade Foresthall.

The average age of admission for both males and females was 42 years. Again it is noted that the heaviest age group in this casual class is between 30 and 50 years of age, as shown in the following table:—

	Males	Females	Total
Under 20 years ...	143	28	171
20-30 years ...	873	17	890
30-40 years ...	1,642	21	1,663
40-50 years ...	1,472	40	1,512
50-60 years ...	1,029	21	1,050
Over 60 years ...	239	29	268
Totals...	<u>5,398</u>	<u>156</u>	<u>5,554</u>

WELFARE SERVICES FOR THE HANDICAPPED.

The Register of Handicapped Persons, apart from the Blind, Partially-sighted and Deaf and Dumb and those on the Roll of Mental Defectives, again shows an increase, this year's total of 1,469 being 190

over the previous year's. The various categories of registration are as under :—

Amputations	24
Arthritis and Rheumatism	62
Congenital malformations and deformities	55
Diseases of digestive and genito-urinary system, heart and respiratory system (not tuberculosis) and of the skin	115
Hearing defects, total and partial deafness	355
Eye defects, other than total blindness or fractional sight	324
Injuries and disease (non-organic)	83
Psychoses and psycho-neuroses	32
Organic nervous disease, epilepsy, etc.	210
Mental deficiency	121
Tuberculosis (respiratory)	9
Tuberculosis (non-respiratory)	17
Diseases and injuries not specified above	62
	1,469

All cases were visited and those requiring special attention are visited regularly. During the year forms of assistance provided included the provision of ramps and kerb crossovers, ramping of steps leading to houses and hand rails to assist handicapped persons to negotiate outside stairs ; equipment (oils, paint brushes and canvas) for a paraplegic artist developing the use of his left hand ; invalid chairs to housebound persons ; assistance in obtaining lodging accommodation for a handicapped deaf mute ; a walking aid for a sclerotic woman whose husband was also crippled ; a radio set and deaf aid which had been donated to the Department were passed on to handicapped persons, to whom they have proved of great value.

Liaison has been maintained with the City Factor's Department ; with the Earl Haig Fund and ex-servicemen's associations for assistance to ex-service personnel ; and with Personnel, Industrial Welfare and Ministry of Labour Officers, as a result of which handicapped persons and trainees at the Department's Occupation Centres were placed in employment.

The number of homebound patients being trained in occupational therapy by the Department's Occupational Therapist has increased. Handicapped persons were notified to the Department by the National

Assistance Board and various voluntary agencies and, as a result, craft training has been made available to additional homebound cases. Arrangements have also been made for holidays for severely handicapped persons who would not normally be able to undertake such a venture.

Welfare Officers regularly attend resettlement conferences and clinics arranged by the Ministry of Labour and such conferences between the various organisations dealing with handicapped prove most beneficial, particularly to the handicapped persons.

Epileptics. The total number of epileptics registered was increased by six during the year, bringing the total to 96, in the following age groups :—

	Male	Female	Total
Aged 16-20 years	10	9	19
Aged 21-30 years	18	15	33
Aged 31-40 years	11	8	19
Aged 41-50 years	10	7	17
Over 50 years	3	5	8
	<hr/>	<hr/>	<hr/>
	52	44	96
	<hr/>	<hr/>	<hr/>

In addition, 44 epileptics were resident in Homes as under :—

	Male	Female	Total
Foresthall	3	9	12
Colony for Epileptics, Bridge of Weir	9	21	30
Colony for Epileptics, Chalfont St. Peter	1	—	1
Colony for Epileptics, Alvery Edge ...	1	—	1
	<hr/>	<hr/>	<hr/>
	14	30	44
	<hr/>	<hr/>	<hr/>

Twelve cases were discharged from the Colony at Bridge of Weir, two males and ten females. Of these, two were placed in employment. During the year three patients, a woman aged 52, a man aged 53 and a boy aged 4, were admitted to the Colony at Bridge of Weir for a month's convalescence and benefited greatly from the change.

Laurieston House. In October last the Department opened Laurieston House, 51 Carlton Place. This property was formerly Govan Parish Council Offices and in recent years has been occupied by the Parks Department. It has now been completely renovated for use as a Welfare Services Centre for Handicapped Persons.

Laurieston House is open daily as clubrooms for blind persons and, in addition, various voluntary organisations dealing with particular types of handicapped, such as the Muscular Dystrophy Group, the Scottish Epilepsy Association (Glasgow Branch), the Invalid Tricycle Association, the Association for Mentally Handicapped and the Association of Parents of Handicapped Children, are provided with accommodation and other assistance for their various activities. The Association of Parents of Handicapped Children, for instance, have the use of accommodation five days a week and run a centre for severely handicapped children, staffed by their voluntary workers. A mid-day meal is supplied by the Education Department's School Meals Service. Accommodation and transport is provided free by the Health and Welfare Department.

Partially-sighted. During the year 112 new cases registered as partially-sighted were visited and assessment made of any need which could be met by the Department. It is interesting to note that almost 76 per cent. of those registered were over 60 years of age, the age grouping being as under :—

	Male	Female	Total
Up to 15 years	5	4	9
16-20 years	—	—	—
21-30 years	—	1	1
31-40 years	—	1	1
41-50 years	6	2	8
51-60 years	3	5	8
Over 60 years	28	57	85
	<u>42</u>	<u>70</u>	<u>112</u>

Many of those under 60 years of age suffered from additional handicaps which precluded them from technical training and, indeed, in some cases, from employment.

During the year three commenced training in the Blind Workshops and three were sent to Alwyn House, Ceres, for industrial rehabilitation and one for social rehabilitation. A proportion of those in the older age group were admitted to Eventide Homes and those remaining in their own homes are under regular visitation by the welfare officers. Arrangements have also been made in co-operation with the Old People's Welfare Committee for voluntary visitors to those living alone.

During the year 26 on the Partially-sighted Register were re-examined at the Regional Blind Clinic and certified blind.

Blind Persons. The total number of blind persons registered with the Department at 31st December, 1957, was 2,180, including blind persons resident in Glasgow and employed at the Royal Glasgow Asylum for the Blind. All blind persons are visited in their own homes by the Department's home teachers.

A handicraft class is held in Laurieston House one afternoon per week for blind persons, the average attendance being 25. Braille and Moon reading and various types of handicraft, such as cane work, stool seating and rug making, are taught at home. The first issue of materials to the value of 10s. is allowed without payment and thereafter stocks of all handicraft materials are available at Head Office, delivery being made to the blind person's home on request.

The Corporation Transport Department issue passes for free travel to registered blind persons resident in the city. For those who desire to travel outwith the city, bus companies allow reduced fares and, in this connection, 1,181 privilege tickets were issued during the year.

Concerts were arranged at regular intervals throughout the city between the months of October and March, attendances ranging from 200 to 300, and tea was served. Three dances were held during the months of November, December and January, the average attendance being 300. During the summer months arrangements were made to convey blind persons by bus to Hogganfield, Rouken Glen, Linn Park and Calderpark Zoo, and between 75 and 100 blind persons attended these outings. The Discussion Group meets weekly in Laurieston House between October and March, when many well-known personalities give their services as lecturers. An average of 50 blind persons attend these meetings.

Six district clubs for men and three for women are provided in different areas of the city, so that blind people may attend locally. These clubs are open once a week and lectures and socials are arranged and inter-club competitions are run. Club facilities at Laurieston House are available daily.

The thanks of the Department are due to all artistes who have entertained the Blind at their various social functions.

There are, as already stated, twelve blind men and women in the Department's Small Homes, and as there are fourteen in Crookston and forty-four in Foresthall, the total number of blind housed in the Department's own Homes for aged persons is seventy. In addition the Department is responsible for the maintenance of fourteen aged blind men in Cairnhill Home, Airdrie, three women in Oswald House, Edinburgh, and three in the Thomas Burns Home, Edinburgh, both of which are exclusively for aged blind women.

Two hundred and eighty-two Glasgow men and fifty-five women are employed at the Royal Glasgow Asylum for the Blind, of whom ten men commenced work during the year, and three women and one man were sent to Alwyn House, Ceres, for social rehabilitation, the cost being met by the Department. Arrangements were also made for eleven men and two women to attend courses of industrial rehabilitation at Alwyn House at the instance of the Ministry of Labour.

The annual bowling match between Edinburgh and Glasgow blind bowlers was played this year at Edinburgh.

Deaf Persons. Welfare services for deaf persons in the city are provided by the Glasgow and West of Scotland Mission to the Adult Deaf and Dumb and the St. Vincent After Care Society as agents of the Corporation. The Corporation give grants to these organisations towards the cost of their services.

After Care. The work of the After Care Section, which deals mainly with former pupils of special schools and junior occupational centres, continues to increase, bringing a variety of problems.

The school leaver handicapped both physically and mentally requires special care and the results are not always satisfactory. One lad, because of very defective vision and prolonged hospital treatment due to an obscure blood condition, left school with a reading and counting age below average. At present he is having extra tuition to bring him up to standard. There has been excellent co-operation with medical, educational and recreation groups in helping this lad to overcome his disabilities but, despite these efforts, placing him in suitable employment will be difficult. Another of the lads, who suffers from epilepsy and was slow in most things, was eventually placed in employment. At the Tuberculosis Campaign an early infection was diagnosed, which again upset him badly, but after a few months in hospital he was back on the job of helping to keep the city clean. He has proved a

conscientious worker and appreciates his sympathetic employer. Both of these lads have been greatly helped by being members of voluntary youth organisations.

The club at Laurieston House for mental defectives, run by the Voluntary Association for the Welfare of Handicapped Persons, which meets on Wednesday evenings, has been greatly appreciated by the boys and their parents. The boys look forward to their club night and the parents who accompany their sons have a room for their use while the lads are enjoying the club programme.

Many in the older age groups are doing very well. One outstanding case is a girl with an I.Q. of 45 and a reading and counting age of six years who left school five years ago and has been employed by one firm. She earns on an average £4 10s. per week. Her parents appreciate the fact that she has obtained employment and have been wise in encouraging her.

There has been a large increase in marriages of handicapped persons throughout the year which gives cause for not a little concern.

Towards the end of the year there has been an increasing scarcity of employment for the handicapped. At present the outlook is bad for the severely disabled who, although willing, are not always able to hold their own with the able-bodied. However, that is where After Care plays its part.

The numbers enrolled during 1957 were 408 mentally handicapped and 116 physically handicapped. There are 2,363 current cases on the After Care Roll.

Occupational Training Centres. The numbers in attendance at the two Occupational Training Centres were as under :—

	South Portland Street (young men)	Killearn Street (young women)
On Roll at 31st December, 1956	39	33
Left for various reasons ...	12	10
Found employment	3	2
	—	—
	24	21
New admissions	12	12
	—	—
Remaining at 31st December, 1957	36	33
	—	—

During the year handicrafts taught included basketry, bead work, dress-making, embroidery, hand and machine knitting, flower-making, horn work, loom knitting of scarves, rug-making, stool seating (sea grass and leather), and woodwork. The standard of the articles produced by the trainees was well maintained.

The annual visit to the circus at the Kelvin Hall took place on 9th December and after the performance the trainees, along with other handicapped children, were entertained to tea by the Kelvin Hall Committee.

GENERAL WELFARE SERVICES.

Contributions to Old People's Organisations. Grants were made to the Glasgow Old People's Welfare Committee and the Women's Voluntary Service for the provision of recreation and meals to old people. Eighteen other Voluntary Organisations providing meals or recreation have been granted crockery, kettles, tea urns, games, etc., during the year and games have also been supplied to three clubs located in shelters for old men provided by the Parks Department in various parks and open spaces in the city.

Meals-on-Wheels. In connection with the Meals-on-Wheels Service, which is operated by the Women's Voluntary Service, it was agreed in November that a grant be made by the Health and Welfare Committee to the W.V.S. so that the charge for meals to old people might be reduced from 1s. 5d. to 1s. per meal, the balance of the cost being met by the Health and Welfare Committee. Following an accident the van which had been provided by the Department for use by the W.V.S. for delivering meals became a total loss and a new van was purchased by the Department and is made available for the Meals-on-Wheels Service.

Compulsory Removal of Persons in need of Care and Attention. Only two compulsory removals to hospital were required under Section 47 of the National Assistance Act.

Burials and Cremations. During the year 297 burials were arranged by the Department and claims in terms of Section 22 (5) of the National Insurance Act, 1946, were made against the Ministry of Pensions and National Insurance in 137 cases, 96 being granted and 41 refused.

Clothing Store.—The Clothing Store supplies the needs of residents in the Homes, boarded-out mental defectives and patients, and those granted clothing by the National Assistance Board, as well as meeting the requirements of the Children's Department. The value of clothing distributed during the year was £90,480.

Investigations. The Welfare Section undertake investigations on behalf of the Child Welfare and Domestic Help Sections of the Department, the Education Department in connection with the supply of food, clothing, etc., and the City Chamberlain's Department (Collector's Section) in connection with applications for relief of rates. It has also been the practice, at the request of the Lord Provost, to undertake investigations on his behalf. Assessment of the appropriate charges in connection with the Child Welfare cases and Domestic Help applications is also undertaken by the Welfare Section. The number of such investigations during the year totalled 12,442, an increase of 663 over the previous year.

Visitation. There are at present 375 old people on the Departmental visiting list. These old folk are kept under supervision to avoid deterioration in their living conditions, to assist with economic problems, and meet as far as possible the policy of the Government and Local Authority that old people should be helped to remain in their own homes for as long as possible. No matter how well an Old Folk's Home is managed or how contented the old people may be in such surroundings, it is the desire of most old people and of the Corporation that as long as possible they should live independent lives in family surroundings. Many of those on the visiting list have been brought to the attention of the Department by Hospital Almoners, General Practitioners, Ministers of Religion, National Assistance Board Officers, Voluntary Organisations, Health Visitors, Sanitary Inspectors, Friends and Relatives. A number of these old people, through the encouragement of the welfare officers, are now attending old people's clubs, have the services of visitors from Voluntary Organisations, and are leading much fuller and more interesting lives than when they first came to the attention of the Department. At the first visit some old folk are unwilling to accept facilities offered by the Department but most complain of loneliness and are pleased when the welfare officer suggests he might make a further friendly call. Through further visits the confidence of the old person or handicapped person is usually gained and services such as meals-on-wheels, domestic help or introduction to clubs are eventually accepted and appreciated. These services are often the means of preventing

or delaying admission to hospital or Old Folk's Home. It has also been possible, where an old person has required but has been unwilling to accept hospital treatment, for the welfare officer who has the confidence of the old person to help that old person to accept appropriate treatment or care.

The following cases dealt with during the year may be of interest.

One young man who became known to the Department as a result of the X-ray Campaign had a history of petty theft as a young boy and had been in approved schools and Borstal. He had been married less than a year before he was found to be suffering from tuberculosis and had had a leg amputated one month after his marriage as a result of thrombosis. He did not have a house of his own and was living with his mother. He was treated as an out-patient and after four months was allocated a house, his wife having given birth to a child one month after the Campaign. Owing to a poor work record he was receiving national assistance and following an approach to that authority he was given a monetary grant with which his wife obtained some second-hand furniture, dishes, pots and pans, etc. As a tuberculosis patient he was also granted a bed and bedding for his own use. Another bed was obtained on hire purchase and some second-hand furniture which was donated to the Department was delivered to the couple. He continues to attend regularly for treatment, is under close supervision by the health visitors, and his wife has expressed her gratitude for the assistance and encouragement given by the welfare officers.

Typical of some of the people who refuse to leave their homes is one old couple who have been under regular supervision by the district welfare officer since March, 1952. When they first became known to the Department he was 79 years of age and his wife 64. He had a disability pension from the time of the first world war, when he received chest wounds, and his wife, although younger, was in a very frail state of health and during the time the case was known to the Department suffered several slight shocks. Their health varied from visit to visit: sometimes the wife was in better condition and other times the husband was more fit. There were occasions when both were very frail and needed nursing care but they refused to accept transfer to hospital. There was close co-operation in this case between the authorities of Glasgow Cathedral, the District Nursing Association and the Welfare Officers and Domestic Help Section of this Department. The Church Authorities were responsible for redecorating the house and supplying new linoleum and while redecoration was being carried out the old

couple were accommodated for one night at Foresthall, the only time they could be persuaded to leave their home. Meals-on-wheels were introduced to ensure they had nutritious meals.

One very alert old lady celebrated her one hundredth birthday on 28th December, 1957, and still lives alone. She was born in Argyllshire but has been living in her present house for very many years and has been a widow for over fifty years. She first came to the notice of the Department in October, 1950, and has since been under regular visitation by the welfare officers who introduced also a voluntary visitor from the Old People's Welfare Committee and a domestic help. She was able to go out for her own messages as recently as August, 1956, being then almost 99 years old. The pattern of her life now is that she rises in the morning, makes a cup of tea, and returns to bed where she stays until after being served lunch by the home help. Her son, a widower who lives nearby, makes the evening meal for his mother and waits until she is settled in bed for the night before returning to his own home. Her one wish by way of celebration on her hundredth birthday was to have a visit from Mr. Robert Wilson, the Scots singer, and he very willingly accepted the invitation conveyed to him by the welfare officer. While the centenarian lady beat time as Mr. Wilson sang "Westering Home" to remind her of her earlier days in Islay, our home help was making a nice cup of tea.

SECTION XVII.

LEGISLATION.

The following Acts of Parliament, Regulations, etc., applicable to the Health and Welfare Services in Scotland came into operation during the year :—

Dentists' Act, 1957—Consolidates the enactments relating to dentists and other dental workers with corrections and improvements authorised under the Consolidation of Enactments (Procedure) Act, 1949.

Housing and Town Development (Scotland) Act, 1957—enables Scottish local authorities to provide housing accommodation and other development in relief of the needs of districts other than their own ; makes additional provision for the making of payments in respect of unfit houses which have been well maintained, provides for the making and keeping by local authorities of registers of maximum rents of dwellings in respect of which improvement grants have been made and for the simplifying of the procedure for the completion of the compulsory acquisition of land under certain enactments relating to housing. Amendments are also made in previous Acts.

National Insurance Act, 1957—Modifies the provisions of the National Insurance Act, 1946, under which persons are treated as having retired ; amends the conditions of entitlement to certain benefits payable out of the National Insurance Fund or the Industrial Injuries Fund ; provides for an additional description of benefit in respect of a child ; amends the provisions of that Act in respect of periods as an insured person under the age of sixteen.

National Insurance (No. 2) Act, 1957—Increases contributions and benefits, repeals Section four of the Finance Act, 1947, increases pensions under the Old Age Pensions Act, 1936, by an amount equal to the current value of tobacco tokens issued under the said section four, and amends the conditions of entitlement to benefit under the Industrial Diseases (Benefits) Acts, 1951 and 1954, payable to or in respect of a person who contracted the disease of byssinosis.

Registration of Births, Deaths and Marriages (Special Provisions) Act, 1957—Provides for the registration of births, deaths and marriages occurring out of the United Kingdom among members of the armed forces and certain other persons, or occurring on board certain ships or aircraft.

Rent Act, 1957—Amends the Rent and Mortgage Interest Restrictions Acts, 1920 to 1939, the Rent of Furnished Houses Control (Scotland) Act, 1943, the Furnished Houses (Rent Control) Act, 1946, the Housing (Repairs and Rents) (Scotland) Act, 1954, and certain other enactments relating to the control of rents and the right to retain possession of houses and provides a minimum length for notice to terminate residential lettings.

CIRCULARS, ORDERS, REGULATIONS, ETC., ISSUED IN 1957.

S.I. = Statutory Instrument. *D.H.S.* = Department of Health for Scotland

Aliens—

S.I. No. 597 of 5/4/57 Aliens Order, 1957.

S.I. No. 909 of 22/5/57 Aliens Approved Ports Order, 1957.

Atmospheric Pollution—

S.I. No. 544. Clean Air. Smoke Control Areas (Exempted Fireplaces) (Scotland) Order, 1957.

S.I. No. 1994 (S96) of 15/11/57. Clean Air (Scotland) Order, 1957.

D.H.S. Circ. No. 3 of 14/1/57. Clean Air Act, 1956.

D.H.S. Circ. No. 30 of 10/4/57. Clean Air Act, 1956.

D.H.S. Circ. No. 61 of 13/8/57. Clean Air Act, 1956.

Blind Persons—

D.H.S. Circ. No. 57 of 31/7/57. National Service Acts. Blind Persons.

Building—

D.H.S. Circ. No. 76 of 7/10/57. Committee on Building Legislation.

Cancer—

D.H.S. Circ. No. 47 of 27/6/57. Smoking and Cancer of the Lungs.

Education—

S.I. No. 224 of 13/2/57. Education (Scotland) Act, 1946. Commencement No. 3 Order.

Food—

S.I. No. 273 of 21/2/57. Food Standards. Public Analysts Regs., 1957.

S.I. No. 1123 (S62) of 26/6/57. Colouring Matter in Food (Scotland) Regs., 1957.

S.I. No. 1880 of 31/10/57. Pre-Packed Food (Weights and Measures : Marking) Regulations, 1957.

D.H.S. Circ. No. 39 of 28/5/57. Food and Drugs (Scotland) Act, 1956. Chemical Substances Used in Food Storage.

D.H.S. Circ. No. 48 of 8/7/57. Colouring Matter in Food (Scotland) Regulations, 1957.

D.H.S. Circ. No. 64 of 16/8/57. Food and Drugs (Scotland) Act, 1956. Food and Dairy Officers.

Housing—

S.I. No. 49 (S2) of 11/1/57. Owners' Rates (Form of Notice) (Scotland) Regulations, 1957.

S.I. No. 50 (S3) of 11/1/57. Notice of Reduction of Maximum Rents (Scotland) Regulations, 1957.

S.I. No. 1044 (S53) of 19/6/57. Rent Restrictions (Scotland) Regulations, 1957.

S.I. No. 1393 (S66) of 18/7/57. Payments for Well-maintained Houses (Scotland) Order, 1957.

D.H.S. Circ. No. 8 of 18/1/57. Housing (Repairs and Rents) (Scotland) Act, 1954. Part II : Return of Certificates of Disrepair.

D.H.S. Circ. No. 44 of 13/6/57. Rent Act, 1957.

D.H.S. Circ. No. 46 of 26/6/57. Housing (Repairs and Rents) (Scotland) Act, 1954. Rent Act, 1957. Regulations.

D.H.S. Circ. No. 50 of 5/7/57. Housing (Repairs and Rents) (Scotland) Act, 1954. Part II : Return of Certificates of Disrepair.

D.H.S. Circ. No. 55 of 26/7/57. Housing and Town Development (Scotland) Act, 1957 : Miscellaneous Provisions.

D.H.S. Circ. No. 73 of 1/10/57. Housing (Scotland) Act, 1950. Part VII (As amended) Housing and Town Development (Scotland) Act, 1957.

Infectious Disease—

- D.H.S. Circ. No. 9 of 18/1/57. Diphtheria Immunisation. Publicity Campaign.
 D.H.S. Circ. No. 35 of 14/4/57. Poliomyelitis Vaccine.
 D.H.S. Circ. No. 51 of 9/7/57. Immunisation against Diphtheria and Whooping Cough.
 D.H.S. Circ. No. 53 of 24/7/57. Control of Infectious Disease.
 D.H.S. Circ. No. 72 of 23/9/57. Influenza Vaccine.
 D.H.S. Circ. No. 77 of 8/10/57. Vaccination against Poliomyelitis.

Maternity and Child Welfare—

- S.I. No. 411 of 13/3/57. Welfare Foods (Great Britain) Amendment Order, 1957.
 S.I. No. 1759 of 9/10/57. Welfare Foods (Great Britain) Amendment No. 2 Order, 1957.
 D.H.S. Circ. No. 75 of 4/10/57. Welfare Foods Services. Report of the Joint Sub-Committee on Welfare Foods.

Mental Defect and Disease—

- D.H.S. Circ. No. 52 of 12/7/57. Mental Deficiency in Scotland.

Milk—

- S.I. No. 514 of 26/3/57. Milk (Great Britain) (Amendment) Order, 1957.
 D.H.S. Circ. No. 11 of 24/1/57. The Milk and Dairies (Scotland) Amendment Order, 1956.

National Assistance—

- D.H.S. Circ. No. 17 of 11/2/57. National Assistance Act, 1948 and 1951. National Health Service (Scotland) Acts. Welfare Needs of the Mentally Handicapped.
 S.I. No. 2072 of 28/11/57. National Assistance. Determination of Need Amendment Regulations, 1957.

National Health Service—

- S.I. No. 60 (S5) of 15/1/57. N.H.S. Travelling Allowances, etc. (Scotland) Amendment Regulations, 1957.
 S.I. No. 310 (S12) of 27/2/57. N.H.S. Dentists. General Dental Services (Scotland) Amendment Regulations, 1957.
 S.I. No. 506 (S26) of 25/3/57. N.H.S. Remuneration and Conditions of Service (Scotland) Amendment Regulations, 1957.
 S.I. No. 733 (S35) of 24/4/57. N.H.S. Dentists. General Dental Services (Scotland) Amendment No. 2 Regulations, 1957.
 S.I. No. 734 (S36) of 24/4/57. N.H.S. Remuneration and Conditions of Service (Scotland) Amendment No. 2. Regulations, 1957.
 S.I. No. 788 of 6/5/57. N.H.S. Superannuation (England and Scotland) (Amendment) Regulations, 1957.
 S.I. No. 1008 (S50) of 4/6/57. N.H.S. General Medical and Pharmaceutical Services (Scotland) Amendment Regulations, 1957.
 S.I. No. 1088 (S59) of 21/6/57. N.H.S. Travelling Allowances, etc. (Scotland) Amendment No. 2 Regulations, 1957.
 S.I. No. 1446 (S71) of 2/8/57. N.H.S. General Medical and Pharmaceutical Services (Scotland) Amendment No. 2 Regulations, 1957.
 S.I. No. 2011 (S97) of 15/11/57. N.H.S. Central Midwives Board for Scotland Rules, 1957. Approved Instrument.
 D.H.S. Circ. No. 23 of 28/2/57. National Health Service (Scotland) Act, 1947. Domestic Help Service.
 D.H.S. Circ. No. 56 of 29/7/57. National Health Services Refresher Course for District Nurses.

Nurses—

- S.I. No. 412 (S21) of 12/3/57. Regional Nurse-Training Committees (Scotland) Amendment Order, 1957.
- S.I. No. 1318 (S65) of 24/7/57. Regional Nurse-Training Committees (Scotland) Amendment No. 2 Order, 1957.
- D.H.S. Circ. No. 29 of 9/4/57. Whitley Council for the Health Services (Great Britain)—Nurses and Midwives Council. N.M.C. Circ. 62.
- D.H.S. Circ. No. 66 of 28/8/57. Whitley Council for the Health Services (Great Britain)—Nurses and Midwives Council. N.M.C. Circ. 65.

Registration of Deaths—

- D.H.S. Circ. No. 67 of 2/9/57. Manual of International Statistical Classification of Diseases, Injuries and Causes of Death.

School Health Service—

- D.H.S. Circ. No. 43 of 12/6/57. School Health Service. Early Ascertainment of Defects of Vision.
- D.H.S. Circ. No. 65 of 23/8/57. School Health Service.
 (a) Annual Selection of Age Groups for Routine Medical Inspection.
 (b) Annual Reports by School Medical Officers.
- D.H.S. Circ. No. 80 of 25/10/57. School Health Service. Welfare Foods for Children Under School Age.

Staff—

- D.H.S. Circ. No. 1 of 4/1/57. Refresher Course for Senior Doctors in the Public Health Service.
- D.H.S. Circ. No. 2 of 8/1/57. Pharmaceutical Whitley Council. Committee "C" Salary Scales for Pharmacists.
- D.H.S. Circ. No. 16 of 5/2/57. Scottish Milk Testing Scheme. Milk Officers—Salary Scale.
- D.H.S. Circ. No. 45 of 19/6/57. National Health Service Committee "C" on Remuneration of Medical Practitioners M.D.C. Circ. 35.

APPENDIX

TABLE I.—GLASGOW, 1957.—ESTIMATED POPULATION IN EACH MUNICIPAL WARD, ACREAGE, AND PERSONS PER ACRE.

MUNICIPAL WARDS	POPULATION				Acreage	Persons per acre (including Inst'ution and Shipping)
	Without Institutions and Shipping	Institu- tions†	Shipping*	Total		
1. Shettleston and Tollcross ...	46,974	144	—	47,118	1,167	40
2. Parkhead ...	18,762	460	—	19,222	819	23
3. Dalmarnock ...	36,095	23	—	36,118	487	74
4. Calton ...	21,848	1,162	—	23,010	404	57
5. Mile-end ...	35,366	287	—	35,653	443	80
6. Dennistoun ...	24,347	10	—	24,357	689	35
7. Provan ...	39,692	2,003	—	41,695	4,846	9
8. Cowlairs ...	23,663	1,178	—	24,841	645	39
9. Springburn ...	37,081	2,211	—	39,292	2,118	19
10. Townhead ...	28,870	1,978	—	30,848	301	102
11. Exchange ...	13,545	2,962	31	16,538	507	33
12. Anderston ...	24,752	1,336	252	26,340	530	50
13. Park ...	18,894	515	—	19,409	317	61
14. Cowcaddens ...	22,510	284	—	22,794	488	47
15. Woodside ...	22,036	571	—	22,607	170	133
16. Ruchill ...	49,332	625	—	49,957	1,962	25
17. North Kelvin	23,293	50	—	23,343	278	84
18. Maryhill ...	25,847	838	2	26,687	2,210	12
19. Kelvinside ...	18,014	1,574	—	19,588	1,160	17
20. Partick (East)	19,227	942	71	20,240	351	58
21. Partick (West)	25,011	11	—	25,022	464	54
22. Whiteinch ...	21,389	147	—	21,536	894	24
23. Yoker ...	27,685	246	52	27,983	1,213	23
24. Knightswood	40,282	115	—	40,397	1,614	25
25. Hutchesontown	27,263	24	—	27,287	387	71
26. Gorbals ...	28,667	8	—	28,675	252	114
27. Kingston ...	23,076	—	80	23,156	355	65
28. Kinning Park	24,909	101	472	25,482	402	63
29. Govan ...	30,982	127	61	31,170	489	64
30. Fairfield ...	20,782	1,287	465	22,534	1,351	17
31. Craigton ...	38,185	289	—	38,474	1,566	25
32. Pollokshields	40,436	2,373	—	42,809	3,239	13
33. Camphill ...	20,507	113	—	20,620	481	43
34. Pollokshaws ...	50,372	93	—	50,465	3,223	16
35. Govanhill ...	23,842	239	—	24,081	365	66
36. Langside ...	24,543	880	—	25,423	801	32
37. Cathcart ...	34,869	160	—	35,029	2,737	13
CITY ...	1,052,948	25,366	1,486	1,079,800	39,725	27

* 1951 Census.

† Includes squatters.

TABLE II.—GLASGOW, 1957.—INHABITED AND UNOCCUPIED HOUSES
IN EACH MUNICIPAL WARD AS AT WHITSUNDAY, 1957.

MUNICIPAL WARDS	INHABITED HOUSES				Empty Houses
	1957	1956	Decrease	Increase	
1. Shettleston and Toll- cross... ..	13,306	13,381	75	—	43
2. Parkhead	5,738	5,745	7	—	25
3. Dalmarnock	11,618	11,840	222	—	164
4. Calton... ..	6,869	6,960	91	—	95
5. Mile-end	10,829	11,046	217	—	133
6. Dennistoun	8,224	8,229	5	—	99
7. Provan	11,338	10,617	—	721	17
8. Cowlairs	7,511	7,874	363	—	84
9. Springburn	9,124	9,169	45	—	49
10. Townhead	9,360	9,491	131	—	106
11. Exchange	4,221	4,281	60	—	76
12. Anderston	7,510	7,777	267	—	82
13. Park	6,097	6,127	30	—	214
14. Cowcaddens	6,970	7,167	197	—	92
15. Woodside	7,497	7,594	97	—	140
16. Ruchill	12,620	12,636	16	—	42
17. North Kelvin	8,296	8,317	21	—	138
18. Maryhill	7,841	7,967	126	—	54
19. Kelvinside	7,122	7,051	—	71	167
20. Partick (East)	7,121	7,162	41	—	206
21. Partick (West)	8,519	8,623	104	—	105
22. Whiteinch	6,933	6,879	—	54	59
23. Yoker	7,878	7,888	10	—	36
24. Knightswood	12,667	11,624	—	1,043	1
25. Hutchesontown	9,215	9,280	65	—	131
26. Gorbals	7,976	8,278	302	—	194
27. Kingston	6,865	7,063	198	—	93
28. Kinning Park	7,980	8,061	81	—	86
29. Govan... ..	8,806	8,887	81	—	85
30. Fairfield	6,558	6,612	54	—	92
31. Craigton	10,997	10,916	—	81	64
32. Pollokshields	9,716	9,610	—	106	94
33. Camphill	7,926	7,889	—	37	109
34. Pollokshaws	11,358	11,093	—	265	45
35. Govanhill	8,517	8,384	—	133	125
36. Langside	8,854	8,680	—	174	110
37. Cathcart	14,373	11,170	—	3,203	92
CITY	324,350	321,368	—	2,982	3,547

These figures (supplied by the City Assessor) include Farmed-out Houses, houses attached to business premises and inhabitant occupiers.

TABLE III.—GLASGOW.—LININGS GRANTED BY DEAN OF GUILD COURT IN RESPECT OF HOUSES IN YEARS FROM 1919.

Year ending 31st August.	NUMBER OF APARTMENTS.						TOTAL.
	1.	2.	3.	4.	5.	6.	
1919-20 (Annual Average)	—	6	692	246	107	29	1,080
1921-25 (do.)	—	308	638	400	234	51	1,631
1926-30 (do.)	—	350	3,067	1,346	448	90	5,301
1931-35 (do.)	13	349	2,287	1,578	131	23	4,381
1936-39 (do.)	—	—	1,581	2,140	533	24	4,279
1940-43 (do.)	—	—	—	—	—	—	—
1944-48 (do.)	25	23	226	792	145	2	1,213
1949	86	—	780	1,186	13	—	2,065
1950	72	187	1,738	3,513	260	5	5,775
1951	10	174	3,497	2,881	287	—	6,849
1952	123	116	2,485	2,045	603	—	5,372
1953	163	61	3,511	1,527	280	3	5,545
1954	229	100	6,026	1,907	390	—	8,652
1955	72	154	1,493	1,000	138	1	2,858
1956	38	29	2,808	787	105	2	3,769
1957	138	192	1,656	848	190	9	3,033

TABLE IV.—ABSTRACT OF METEOROLOGICAL OBSERVATIONS TAKEN AT SPRINGBURN PUBLIC PARK.

MONTHS.	TEMPERATURE.			RAINFALL.		SUNSHINE Hours.
	Highest Temp. in Shade.	Lowest Temp. in Shade.	Mean Temp.	No. of Days.	Amount Collected in inches.	
1957.						
January ...	55	25	39.9	21	5.53	33.0
February ...	51	26	38.1	17	3.25	68.2
March ...	65	35	45.9	24	4.58	40.9
April ...	63	32	47.3	15	2.10	169.3
May ...	71	30	49.6	15	3.04	202.0
June ...	82	37	57.0	11	2.41	266.7
July ...	77	48	59.5	17	3.51	129.3
August ...	75	41	58.9	22	4.10	114.3
September ...	64	35	51.2	18	2.92	123.9
October ...	59	36	49.0	20	4.16	46.2
November ...	53	27	43.3	17	1.69	36.7
December ...	53	24	39.7	23	4.76	33.3
1948 ...	85	25	48.1	233	53.33	1,157
1949 ...	84	19	49.3	222	43.20	1,310
1950 ...	88	18	46.7	226	45.37	1,181
1951 ...	81	21	46.8	221	41.46	1,182
1952 ...	79	15	46.3	195	35.32	1,280
1953 ...	80	20	48.6	206	36.51	1,078
1954 ...	73	19	46.2	247	56.31	1,030
1955 ...	85	12	47.2	199	31.67	1,568
1956 ...	78	12	46.7	221	38.19	1,196
1957 ...	82	24	48.3	220	42.05	1,264

TABLE V.—GLASGOW.—BIRTHS AND BIRTH-RATES *per Million* IN EACH WARD, FOR THE YEAR 1957, AND NUMBER AND PERCENTAGE OF ILLEGITIMATE BIRTHS.

MUNICIPAL WARDS.	Births 1957	Birth- rate 1957	Birth- rate 1956	Illegitimate Births.	
				No.	% Total Births.
1. Shettleston and Tollcross ...	922	19,628	19,021	37	4.0
2. Parkhead ...	302	16,096	17,734	9	3.0
3. Dalmarnock ...	1,008	27,926	27,089	42	4.2
4. Calton ...	524	23,983	25,813	23	4.4
5. Mile-end... ..	950	26,862	25,737	35	3.7
6. Dennistoun ...	440	18,072	18,020	17	3.9
7. Provan ...	683	17,207	16,905	37	5.4
8. Cowlairs ...	552	23,328	23,605	21	3.8
9. Springburn ...	618	16,666	17,624	29	4.7
10. Townhead ...	835	28,923	28,373	39	4.7
11. Exchange ...	336	24,806	25,675	25	7.4
12. Anderston ...	590	23,836	23,938	19	3.2
13. Park ...	378	20,006	18,358	41	10.8
14. Cowcaddens ...	703	31,231	28,427	45	6.4
15. Woodside ...	669	30,359	29,028	49	7.3
16. Ruchill ...	816	16,541	17,048	44	5.4
17. North Kelvin ...	595	25,544	24,617	23	3.9
18. Maryhill ...	573	22,169	22,373	17	3.0
19. Kelvinside ...	259	14,378	14,248	7	2.7
20. Partick (East) ...	332	17,267	19,211	14	4.2
21. Partick (West) ...	607	24,269	22,829	25	4.1
22. Whiteinch ...	443	20,712	18,701	19	4.3
23. Yoker ...	327	11,811	11,742	15	4.6
24. Knightswood ...	861	21,374	24,695	29	3.4
25. Hutchesontown... ..	946	34,699	32,577	41	4.3
26. Gorbals ...	867	30,244	27,179	64	7.4
27. Kingston ...	675	29,251	26,987	44	6.5
28. Kinning Park ...	636	25,533	24,839	27	4.2
29. Govan ...	791	25,531	24,033	38	4.8
30. Fairfield ...	436	20,980	19,460	9	2.1
31. Craigton ...	428	11,209	10,926	11	2.6
32. Pollokshields ...	500	12,365	11,583	18	3.6
33. Camphill ...	279	13,605	12,221	13	4.7
34. Pollokshaws ...	678	13,460	14,197	30	4.4
35. Govanhill ...	524	21,978	19,204	21	4.0
36. Langside ...	316	12,875	11,421	7	2.2
37. Cathcart ...	947	27,159	22,822	23	2.4
Institutions ...	67	—	—	38	—
Harbour ...	—	—	—	—	—
CITY ...	22,413	20,757	20,198	1,045	4.7

TABLE VI.—GLASGOW.—DEATHS AND DEATH-RATES *per Million* IN EACH MUNICIPAL WARD, FOR THE YEAR 1957, AND CORRESPONDING RATES FOR 1956 AND 1955.

MUNICIPAL WARDS.	Deaths 1957	Death-rates		
		1957	1956	1955
1. Shettleston and Tollcross ...	520	11,070	9,869	10,725
2. Parkhead ...	251	13,378	12,945	11,046
3. Dalmarnock ...	419	11,608	11,970	11,605
4. Calton ...	294	13,457	14,166	12,261
5. Mile-end ...	393	11,112	10,744	11,258
6. Dennistoun ...	319	13,102	14,392	13,262
7. Provan ...	383	9,649	9,969	10,239
8. Cowlairs ...	252	10,650	11,207	12,150
9. Springburn ...	332	8,953	8,865	8,330
10. Townhead ...	332	11,500	12,682	12,653
11. Exchange ...	187	13,806	14,818	15,068
12. Anderston ...	313	12,645	12,262	12,351
13. Park ...	276	14,608	14,319	15,907
14. Cowcaddens ...	242	10,751	11,922	11,848
15. Woodside ...	304	13,796	12,195	13,667
16. Ruchill ...	517	10,480	9,485	10,520
17. North Kelvin ...	292	12,536	12,394	14,192
18. Maryhill ...	295	11,413	11,561	11,144
19. Kelvinside ...	257	14,267	15,911	15,893
20. Partick (East) ...	313	16,279	16,337	16,041
21. Partick (West) ...	291	11,635	12,449	12,210
22. Whiteinch ...	271	12,670	12,788	12,797
23. Yoker ...	329	11,884	11,742	12,005
24. Knightswood ...	360	8,937	10,292	10,240
25. Hutchesontown ...	284	10,417	12,324	11,972
26. Gorbals ...	327	11,407	10,799	11,878
27. Kingston ...	281	12,177	11,206	11,175
28. Kinning Park ...	316	12,686	11,251	12,054
29. Govan ...	356	11,491	10,493	10,795
30. Fairfield ...	287	13,810	13,145	9,747
31. Craigton ...	453	11,863	10,692	11,303
32. Pollokshields ...	369	9,126	8,650	8,243
33. Camphill ...	352	17,165	18,113	16,794
34. Pollokshaws ...	382	7,584	7,281	6,749
35. Govanhill ...	357	14,974	13,741	13,760
36. Langside ...	335	13,650	14,236	15,545
37. Cathcart ...	452	12,963	14,671	15,108
Institutions ...	878	—	—	—
Harbour ...	6	—	—	—
CITY ...	13,177	12,203	12,176	12,234

TABLE VII.—GLASGOW.—NUMBER OF OUTWARD AND INWARD TRANSFER DEATHS FOR THE YEAR 1957.

No.	CAUSE OF DEATH.	Outward Transfers.	Inward Transfers.
1	Tuberculosis of Respiratory System	28	44
2	Tubercular Meningitis	1	2
51	Abdominal Tuberculosis	—	1
52	Other Tuberculous Diseases	5	3
3	Syphilis and its Sequelae	5	3
4	Typhoid Fever	—	—
6	Dysentery, all forms	—	—
7	Scarlet Fever and Streptococcal Sore Throat	1	—
8	Diphtheria	—	—
9	Whooping Cough	—	—
10	Meningococcal Infections	2	—
12	Acute Poliomyelitis	2	—
14	Measles	2	—
16	Malaria	—	—
17	Other Infective and Parasitic Diseases	6	3
18	Malignant Neoplasms, including Neoplasms of Lymphatic and Haematopoietic Tissues	405	206
19	Benign and Unspecified Neoplasms	14	18
20	Diabetes Mellitus	19	2
21	Anaemias	7	2
22	Vascular Lesions affecting Central Nervous System	148	106
23	Non-meningococcal Meningitis	4	2
54	Other Nervous Diseases (including Mental Disorders)	32	33
24	Rheumatic Fever	2	—
25	Chronic Rheumatic Heart Disease	27	20
26	Arteriosclerotic and Degenerative Heart Disease	232	201
27	Other Diseases of Heart... ..	19	15
28	Hypertension with Heart Disease	28	13
29	Hypertension without mention of Heart	13	5
55	Other Diseases of Circulatory System	31	11
30	Influenza	11	6
31	Pneumonia (except Pneumonia of Newborn)	58	29
32	Bronchitis	37	24
53	Other Respiratory Diseases	9	6
33	Ulcer of Stomach and Duodenum	32	6
34	Appendicitis	11	—
35	Intestinal Obstruction and Hernia	39	2
36	Gastritis and Duodenitis	—	—
36	Enteritis } Under 2 years (except Diarrhoea of Newborn)... ..	4	—
36	& Colitis } 2 years and over	12	2
37	Cirrhosis of Liver	15	2
56	Other Digestive Diseases	30	2
38	Nephritis and Nephrosis	26	5
39	Hyperplasia of Prostate	15	5
40	Complications of Pregnancy, Childbirth and the Puerperium	—	1
41	Congenital Malformations	52	7
42	Birth Injuries, Post-natal Asphyxia and Atelectasis	35	7
43	Infections of the Newborn—Pneumonia	1	—
43	“ “ Diarrhoea	—	—
43	“ “ Others	2	—
44	Other Diseases peculiar to early infancy and Immaturity	—	—
44	Unqualified	19	5
45	Senility without mention of Psychosis, Ill-defined and Unknown Causes	9	14
46	All Other Diseases	44	9
47/50	Suicide, Road Traffic Accidents and Other Violent Causes	120	86
	TOTAL	1,614	908

TABLE VIII.—GLASGOW.—DEATHS AND DEATH-RATES *per Million* FROM DIFFERENT CAUSES, FOR THE YEAR 1957, AND CORRESPONDING RATE FOR 1956 AND 1955.

No.	CAUSE.	Deaths 1957	Annual Death Rate per Million.		
			1957	1956	1955
1	Tuberculosis of Respiratory System	361	334	340	340
2	Tubercular Meningitis	6	6	7	10
51	Abdominal Tuberculosis	3	3	2	3
52	Other Tuberculous Diseases	13	12	16	18
3	Syphilis and its Sequelae	30	28	38	25
4	Typhoid Fever	—	—	1	1
6	Dysentery, all forms	3	3	3	4
7	Scarlet Fever and Streptococcal Sore Throat	1	1	3	—
8	Diphtheria	—	—	—	—
9	Whooping Cough	5	5	2	—
10	Meningococcal Infections	9	8	7	12
12	Acute Poliomyelitis	—	—	2	5
14	Measles	3	3	—	5
17	Other Infective and Parasitic Diseases	27	25	24	33
18	Malignant Neoplasms, including Neoplasms of Lymphatic and Haematopoietic Tissues	2,360	2,186	2,151	2,139
19	Benign and Unspecified Neoplasms	88	81	73	76
20	Diabetes Mellitus	87	81	91	76
21	Anaemias	47	43	47	45
22	Vascular Lesions affecting Central Nervous System	1,784	1,652	1,792	1,754
23	Non-meningococcal Meningitis	13	12	10	11
54	Other Nervous Diseases	314	291	221	229
24	Rheumatic Fever	4	4	9	11
25	Chronic Rheumatic Heart Disease	245	227	200	205
26	Arteriosclerotic and Degenerative Heart Disease	3,400	3,149	3,118	3,115
27	Other Diseases of Heart	160	148	134	153
28	Hypertension with Heart Disease	230	213	219	226
29	Hypertension without mention of Heart	108	100	138	105
55	Other Diseases of Circulatory System	272	252	243	256
30	Influenza	161	149	46	37
31	Pneumonia (except Pneumonia of Newborn)	575	533	534	502
32	Bronchitis	588	545	605	645
53	Other Respiratory Diseases	90	83	97	100
33	Ulcer of Stomach and Duodenum	108	100	107	112
34	Appendicitis	25	23	16	17
35	Intestinal Obstruction and Hernia	79	73	85	71
36	Gastritis and Duodenitis	4	4	4	3
	Enteritis and Colitis—				
	Under 2 years (excluding Diarrhoea of Newborn)	13	12	20	34
	2 years and over	50	46	45	43
37	Cirrhosis of Liver	65	60	37	31
56	Other Digestive Diseases	90	83	90	69
38	Nephritis and Nephrosis	112	104	113	96
39	Hyperplasia of Prostate	60	56	54	65
40	Complications of Pregnancy, Childbirth and the Puerperium	13	12	14	6
41	Congenital Malformations	178	165	139	148
42	Birth Injuries, Post-natal Asphyxia and Atelectasis	229	212	200	187
43	Infections of the Newborn—Pneumonia	25	23	17	25
	Do. do. Diarrhoea	10	9	2	1
	Do. do. Others	10	9	5	1
44	Other Diseases peculiar to early infancy and Immaturity Unqualified	139	129	115	159
45	Senility without mention of Psychosis, Ill-defined and Unknown Causes	139	129	160	197
46	All Other Diseases	226	207	230	246
47/50	Suicide, Road Traffic Accidents and Other Violent Causes	615	570	551	582
13	Smallpox	—	—	—	—
	Total	13,177	12,203	12,177	12,234

TABLE IX.—GLASGOW, 1957.—DEATHS FROM DIFFERENT CAUSES
IN SEXES AND AT SEVERAL AGE PERIODS (MALES).

No.	CAUSE	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	-75	75+	Total Males
1	Tuberculosis of Respiratory System ...	—	—	1	—	—	—	4	19	28	54	65	54	21	246
2	Tubercular Meningitis ...	1	—	—	2	—	—	—	1	—	—	—	—	—	4
51	Abdominal Tuberculosis ...	—	—	—	—	—	—	—	—	—	—	1	—	1	2
52	Other Tuberculous Diseases	—	—	—	—	—	1	—	—	1	1	4	—	—	7
3	Syphilis and its Sequelae	—	—	—	—	—	—	—	—	2	2	8	9	1	22
4	Typhoid Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	Dysentery, all forms	—	—	—	—	—	—	1	—	—	—	—	—	—	1
7	Scarlet Fever and Streptococcal Sore Throat ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	Diphtheria ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	Whooping Cough ...	3	—	—	—	—	—	—	—	—	—	—	—	—	—
10	Meningococcal Infections ...	2	2	1	—	—	—	—	—	—	—	—	—	—	3
12	Acute Poliomyelitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	5
14	Measles ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
17	Other Infective and Parasitic Diseases ...	1	—	2	1	—	—	—	1	4	2	1	2	—	14
18	Malignant Neoplasms, including Neoplasms of Lymphatic and Haematopoietic Tissues ...	1	5	4	4	2	5	6	15	50	207	365	368	260	1,292
19	Benign and Unspecified Neoplasms ...	—	—	—	1	1	—	—	1	3	12	15	10	3	46
20	Diabetes Mellitus ...	1	—	—	—	—	—	—	1	1	2	2	8	9	24
21	Anaemias ...	—	—	—	—	—	—	1	—	—	1	1	6	7	16
22	Vascular Lesions affecting Central Nervous System	—	—	—	—	2	2	1	2	14	39	111	235	353	759
23	Non-meningococcal Meningitis ...	4	—	—	—	—	—	—	—	—	—	3	—	—	7
24	Rheumatic Fever ...	—	—	—	—	—	—	—	—	—	1	—	—	—	1
25	Chronic Rheumatic Heart Disease ...	—	—	—	1	2	—	12	6	21	16	9	6	6	73
26	Arteriosclerotic and Degenerative Heart Disease ...	—	—	—	—	—	—	—	14	46	218	435	548	593	1,854
27	Other Diseases of Heart ...	1	—	—	—	—	—	—	4	6	16	16	26	24	77
28	Hypertension with Heart Disease ...	—	—	—	—	—	—	—	1	3	7	19	31	42	103
29	Hypertension without mention of Heart ...	—	—	—	—	—	—	—	1	4	12	18	14	14	49
30	Influenza ...	1	1	2	1	—	3	2	4	6	8	14	21	8	71
31	Pneumonia (except Pneumonia of Newborn) ...	41	4	3	—	—	2	2	—	10	25	56	102	96	341
32	Bronchitis ...	5	—	1	2	—	—	—	2	4	49	128	130	99	420
53	Other Respiratory Diseases	8	—	1	—	—	—	—	1	2	10	8	10	16	56
33	Ulcer of Stomach and Duodenum ...	—	—	—	—	—	—	—	2	5	12	31	20	13	83
34	Appendicitis ...	—	—	2	4	—	—	1	2	1	1	1	5	2	19
35	Intestinal Obstruction and Hernia ...	2	—	—	—	—	—	—	—	—	—	—	—	—	—
	Gastritis and Duodenitis ...	—	—	—	—	—	—	—	1	—	2	4	18	7	34
	Enteritis and Colitis—	—	—	—	—	—	—	—	—	—	1	—	2	—	3
36	Under 2 years (excluding Diarrhoea of Newborn) 2 years and over ...	4	—	—	—	—	—	—	—	—	—	—	—	—	4
37	Cirrhosis of Liver ...	—	—	1	—	—	—	—	3	3	7	7	2	3	26
38	Nephritis and Nephrosis ...	—	1	—	—	—	—	—	1	5	5	7	7	7	32
39	Hyperplasia of Prostate ...	—	—	—	—	—	—	2	2	7	7	6	14	12	51
40	Complications of Pregnancy, Childbirth and the Puerperium ...	—	—	—	—	—	—	—	—	—	1	2	13	44	60
41	Congenital Malformations	77	6	—	2	1	2	—	2	1	3	2	2	—	98
42	Birth Injuries, Post-natal Asphyxia and Atelectasis	141	—	—	—	—	—	—	—	—	—	—	—	—	141
43	Infections of the Newborn—														
	Pneumonia ...	17	—	—	—	—	—	—	—	—	—	—	—	—	17
	Diarrhoea ...	3	—	—	—	—	—	—	—	—	—	—	—	—	3
	Others ...	4	—	—	—	—	—	—	—	—	—	—	—	—	4
44	Other Diseases peculiar to early infancy and Immaturity Unqualified ...	84	—	—	—	—	—	—	—	—	—	—	—	—	84
45	Senility without mention of Psychosis, Ill-defined and Unknown Causes ...	14	1	—	—	1	—	—	2	2	11	10	10	32	83
46	All other Diseases ...	5	—	—	1	1	2	1	2	4	16	21	18	20	91
50	Suicide, Road Traffic Accidents and other Violent Causes ...	22	2	13	18	8	11	18	46	36	51	59	60	57	401
4	Other Nervous Diseases ...	5	3	6	2	2	1	—	4	10	13	19	31	33	129
5	Other Diseases of Circulatory System ...	—	—	—	—	—	—	—	1	3	6	12	29	82	133
6	Other Digestive Diseases ...	4	—	1	—	—	—	—	—	4	3	5	8	3	28
	Total ...	451	25	38	38	19	31	39	143	265	808	1,466	1,826	1,868	7,017

TABLE IX.—GLASGOW, 1957.—DEATHS FROM DIFFERENT CAUSES IN SEXES AND AT SEVERAL AGE PERIODS (FEMALES).

No.	CAUSE	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	-75	75+	Total Females.	Total Both Sexes.
1	Tuberculosis of Respiratory System ...	1	1	—	—	—	—	2	20	33	20	9	15	14	115	361
2	Tubercular Meningitis ...	—	—	—	1	—	—	1	—	—	—	—	—	—	2	6
51	Abdominal Tuberculosis ...	—	—	—	—	—	1	—	—	—	—	—	—	—	1	3
52	Other Tuberculous Diseases	—	—	—	—	—	1	1	2	—	—	1	1	—	6	18
3	Syphilis and its Sequelae	—	—	—	—	—	—	—	—	1	—	4	2	1	8	30
4	Typhoid Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	Dysentery, all forms ...	—	—	1	—	—	—	—	—	—	—	1	—	—	2	3
7	Scarlet Fever and Streptococcal Sore Throat ...	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1
8	Diphtheria ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	Whooping Cough ...	1	—	1	—	—	—	—	—	—	—	—	—	—	2	5
10	Meningococcal Infections ...	1	3	—	—	—	—	—	—	—	—	—	—	—	4	9
12	Acute Poliomyelitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14	Measles ...	—	1	—	2	—	—	—	—	—	—	—	—	—	3	3
17	Other Infective and Parasitic Diseases ...	1	—	—	—	—	—	—	—	2	4	4	—	2	13	27
18	Malignant Neoplasms, including Neoplasms of Lymphatic and Haematopoietic Tissues ...	1	—	6	2	2	1	2	18	65	149	259	316	247	1,068	2,360
19	Benign and Unspecified Neoplasms ...	1	—	1	1	1	—	—	—	2	9	13	8	6	42	88
20	Diabetes Mellitus ...	—	—	—	—	—	—	—	1	—	4	13	25	20	63	87
21	Anaemias ...	—	—	—	—	—	—	—	—	—	4	2	11	14	31	47
22	Vascular Lesions affecting Central Nervous System	—	—	—	—	2	—	—	7	11	60	144	275	526	1,025	1,784
23	Non-meningococcal Meningitis ...	3	—	—	—	—	1	—	—	1	1	—	—	—	6	13
24	Rheumatic Fever ...	—	—	—	—	—	—	—	—	—	1	—	—	2	3	4
25	Chronic Rheumatic Heart Disease ...	—	—	—	—	—	4	3	11	27	44	43	29	11	172	245
26	Arterio sclerotic and degenerative Heart Disease ...	—	—	—	—	—	—	—	—	13	57	204	505	767	1,546	3,400
27	Other Diseases of Heart ...	—	—	—	—	—	1	—	—	1	7	14	29	31	83	160
28	Hypertension with Heart Disease ...	—	—	—	—	—	—	—	—	1	5	14	55	52	127	230
29	Hypertension without mention of Heart ...	—	—	—	—	—	—	—	—	2	4	11	25	17	59	108
30	Influenza ...	3	—	1	1	3	—	2	4	6	7	20	23	20	90	161
31	Pneumonia (except Pneumonia of Newborn) ...	21	3	1	—	—	—	1	2	3	15	33	50	105	234	575
32	Bronchitis ...	6	—	—	—	—	—	—	1	3	12	29	56	61	168	588
53	Other Respiratory Diseases	4	—	1	—	—	—	—	3	—	2	3	8	13	34	90
33	Ulcer of Stomach and Duodenum ...	—	—	—	—	—	—	1	1	2	3	5	5	8	25	108
34	Appendicitis ...	—	—	—	—	1	—	—	—	1	—	1	1	2	6	25
35	Intestinal Obstruction and Hernia ...	1	—	—	—	—	—	—	—	1	4	6	11	22	45	79
	Gastritis and Duodenitis ...	—	—	—	—	—	—	—	—	—	—	—	—	1	1	4
	Enteritis and Colitis—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
36	Under 2 years (excluding Diarrhoea of Newborn)	9	—	—	—	—	—	—	—	—	—	—	—	—	9	13
	2 years and over ...	—	—	1	—	—	—	2	2	—	4	4	3	8	24	50
37	Cirrhosis of Liver ...	—	—	—	—	—	—	1	—	—	2	9	14	7	33	65
38	Nephritis and Nephrosis ...	1	1	—	—	1	4	3	4	4	8	13	15	7	61	112
39	Hyperplasia of Prostate ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60
40	Complications of Pregnancy, Childbirth and the Puerperium ...	—	—	—	—	—	—	8	2	3	—	—	—	—	13	13
41	Congenital Malformations	63	3	—	1	1	3	1	2	3	1	1	—	1	80	178
42	Birth Injuries, Post-natal Asphyxia and Atelectasis	88	—	—	—	—	—	—	—	—	—	—	—	—	88	229
43	Infections of the Newborn—															
	Pneumonia ...	8	—	—	—	—	—	—	—	—	—	—	—	—	8	25
	Diarrhoea ...	7	—	—	—	—	—	—	—	—	—	—	—	—	7	10
	Others ...	6	—	—	—	—	—	—	—	—	—	—	—	—	6	10
44	Other Diseases peculiar to early infancy and Immaturity Unqualified ...	55	—	—	—	—	—	—	—	—	—	—	—	—	55	139
45	Senility without mention of Psychosis, Ill-defined and Unknown Causes ...	7	1	—	—	—	—	—	1	—	—	1	7	39	56	139
46	All other Diseases ...	1	—	—	1	1	—	2	5	9	11	33	43	29	135	226
47	Suicide, Road Traffic Accidents and other Violent Causes ...	25	2	5	4	2	2	1	10	12	20	25	35	71	214	615
54	Other Nervous Diseases ...	3	—	3	2	3	3	—	9	13	13	35	34	67	185	314
55	Other Diseases of Circulatory System ...	—	—	—	—	—	—	—	—	—	5	13	18	103	139	272
56	Other Digestive Diseases ...	6	—	1	—	—	—	—	—	1	4	7	17	26	62	90
	Total ...	323	15	22	15	17	21	31	105	220	480	974	1,637	2,300	6,160	13,177

TABLE X.—GLASGOW.—STILLBIRTHS, DEATHS UNDER 1 YEAR AND DEATH-RATES PER 1,000 BIRTHS IN EACH MUNICIPAL WARD, FOR THE YEARS 1957 AND 1956

MUNICIPAL WARDS	Still- births 1957	Rate per 1,000 Births* 1957	Rate per 1,000 Births* 1956	Deaths —1 year 1957	Death Rate per 1,000 Births† 1957	Death Rate per 1,000 Births† 1956
1. Shettleston and Tollcross ...	35	37	24	35	38	21
2. Parkhead ...	12	38	17	9	30	30
3. Dalmarnock ...	35	34	23	37	37	39
4. Calton ...	15	28	27	19	36	52
5. Mile-end ...	23	24	26	44	46	35
6. Dennistoun ...	14	31	24	6	14	29
7. Provan ...	19	27	31	21	31	29
8. Cowlairs ...	12	21	19	22	40	37
9. Springburn ...	11	17	25	13	21	27
10. Townhead ...	26	30	26	29	35	39
11. Exchange ...	5	15	17	9	27	17
12. Anderston ...	19	31	43	18	31	41
13. Park ...	6	16	27	20	53	28
14. Cowcaddens ...	19	26	30	31	44	43
15. Woodside ...	16	23	19	22	33	32
16. Ruchill ...	22	26	24	31	38	36
17. North Kelvin ...	17	28	22	18	30	16
18. Maryhill ...	12	21	22	24	42	41
19. Kelvinside ...	4	15	23	3	12	19
20. Partick (East)	11	32	28	8	24	52
21. Partick (West)	11	18	16	18	30	36
22. Whiteinch ...	7	16	29	9	20	39
23. Yoker ...	7	21	18	10	31	33
24. Knightswood ...	23	26	29	39	45	23
25. Hutchesontown	24	25	18	42	44	41
26. Gorbals ...	21	24	26	34	39	39
27. Kingston ...	19	27	20	35	52	47
28. Kinning Park	15	23	31	18	28	29
29. Govan ...	24	29	37	27	34	35
30. Fairfield ...	12	27	30	9	21	38
31. Craigton ...	13	29	25	14	33	12
32. Pollokshields ...	16	31	31	9	18	21
33. Camphill ...	4	14	35	11	39	24
34. Pollokshaws ...	19	27	18	28	41	19
35. Govanhill ...	16	30	44	16	31	28
36. Langside ...	8	25	31	5	16	32
37. Cathcart ...	27	28	17	28	30	17
Institutions ...	1	—	—	3	—	—
Harbour ...	—	—	—	—	—	—
CITY ...	600	26	26	774	35	33

* Live and Stillbirths.

† Live Births.

TABLE XII.—GLASGOW, 1955-1957.—ABSTRACT OF NOTIFICATIONS UNDER NOTIFICATION OF BIRTHS ACT, 1907, AND RESULTS OF VISITS.

	1957	1956	1955
Total Number of Notifications	23,271	22,594	21,853
Doctor at Home	7,211	6,753	6,445
Doctor in Nursing Home	814	871	1,005
Doctor in Institution	13,012	12,371	12,208
Maternity Hospital (Outdoor) Nurse ...	616	870	965
Midwife in Nursing Home	790	707	497
Certified Midwife	4	4	2
Municipal Midwife	820	1,017	724
Others	4	1	7
Total Cards issued	23,271	22,594	21,853
Total Cards returned	23,187	22,684	21,813
Full Information	22,906	22,458	21,575
Others	281	226	238

TABLE XIII.—GLASGOW, 1955-1957.—BIRTHS NOTIFIED SHOWING MEDICALLY AND NOT MEDICALLY ATTENDED.

	1957	1956	1955
Notifications Received— <i>less Duplicates</i> —			
Total	23,271	22,594	21,853
Live-births	22,671	22,015	21,282
Still-births	600	579	571
Per cent. Still-births to Total	2.6	2.6	2.6
Medically attended—			
Births at Home	7,211	6,753	6,445
Births in Nursing Home	814	871	1,005
In Institutions	13,012	12,371	12,208
Total	21,037	19,995	19,658
Per cent.	90	89	90
Still-births at Home	88	82	94
Still-births in Nursing Home	16	23	10
Still-births in Institutions	470	444	448
Not Medically attended—			
Maternity Hospital, Outdoor Nurse ...	616	870	965
Certified Midwives in Nursing Home ...	790	707	497
Certified Midwives in Private Practice ...	4	4	2
Municipal Midwives	820	1,017	724
Others	4	1	7
Total	2,234	2,599	2,195
Per cent.	10	11	10
Still-births	26	30	19

TABLE XIV.—GLASGOW, 1957 and 1956.—CASES OF INFECTIOUS DISEASES REGISTERED AND NUMBERS OF THESE TREATED IN FEVER HOSPITALS, &C.

	1957				1956			
	Fever Hosp.	Other Institutions	Home	Total	Fever Hosp.	Other Institutions	Home	Total
A.—Notifiable—								
Enteric Fever	6	—	—	6	1	—	—	1
Paratyphoid B	11	—	5	16	17	—	1	18
Continued and Undefined Fever	17	5	1	23	17	3	—	20
Puerperal Fever	†94	6	2	102	†76	3	—	79
Puerperal Pyrexia	†88	62	3	153	†72	10	3	85
Smallpox	—	—	—	—	—	—	—	—
Scarlet Fever	544	11	416	971	595	16	380	991
Diphtheria and Membranous Croup	—	—	—	—	1	—	—	1
Erysipelas	46	—	69	115	92	1	120	213
Cerebro-spinal Fever	51	3	3	57	61	2	3	66
Ophthalmia Neonatorum	—	12	25	37	16	—	30	46
Trachoma	—	—	1	1	—	—	—	—
Acute Encephalitis Lethargica	—	—	—	—	—	3	—	3
Acute Polio-Encephalitis	—	—	—	—	—	1	—	1
Acute Poliomyelitis	27	1	—	28	54	—	—	54
Acute Primary Pneumonia	3,157	1,430	860	5,447	2,663	1,113	696	4,472
Acute Influenzal-Pneumonia	17	163	268	448	2	14	37	53
Malaria	13	—	3	16	4	1	3	8
Dysentery	1,995	377	1,545	3,917	2,134	362	2,132	4,628
Infective Jaundice	1	—	—	1	5	—	—	5
Anthrax	—	—	—	—	1	—	—	1
Pulmonary Tuberculosis	1,806	—	2,119	3,925	1,250	—	774	2,024
Other Forms of Tuberculosis	96	—	76	172	115	—	78	193
Whooping-cough	229	5	2,680	2,914	318	12	3,354	3,684
Leprosy	1	—	—	1	2	—	—	2
Food Poisoning	109	1	137	247	157	10	191	358
B.—Not Notifiable—								
Measles	416	8	5,259	5,683	398	6	4,199	4,603
German Measles	35	—	345	380	50	—	640	690
Chickenpox	149	1	4,186	4,336	121	2	5,778	5,901
Mumps	41	—	13	54	20	—	2	22
Pemphigus Neonatorum	—	8	—	8	24	—	—	24
Totals	8,949	2,093	18,016	29,058	8,266	1,559	18,421	28,246
Notified, but diagnosis altered to Non-Infected Diseases	3,090	—	27	3,117	2,921	—	96	3,017
Total Registered	12,039	2,093	18,043	32,175	11,187	1,559	18,517	31,263

Where patients suffer from two or more diseases, each disease is reckoned as a case.

Apart from cases of pneumonia admitted to Corporation General Hospitals and Voluntary Institutions in times of pressure; cases of puerperal fever, puerperal pyrexia, and ophthalmia neonatorum occurring in other than Fever Hospitals and allowed to remain; and cases of trachoma treated in Stobhill Hospital; the cases shown under the headings "Other Institutions" are, for the most part, accidental.

† Includes cases treated in Robroyston Hospital.

	MONTH.												YEAR.	
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Hosp.	Home
Enteric, including Paratyphoid Fever	—	2	3	5	3	1	—	1	1	1	2	3	17	5
Continued and Undefined Fever ...	3	2	2	2	4	1	1	3	4	1	—	—	22	1
Puerperal Fever ...	5	6	9	7	15	4	4	18	11	5	8	10	100	2
Puerperal Pyrexia ...	5	7	8	10	18	1	7	21	15	6	11	54	150	3
Smallpox ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever ...	116	80	94	96	88	77	51	55	62	69	86	97	555	416
Diphtheria and Membranous Croup	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas ...	9	8	11	10	11	11	7	8	9	10	7	14	46	69
Cerebro-spinal Fever ...	4	4	8	4	5	5	2	4	2	10	4	5	54	3
Ophthalmia Neonatorum ...	1	5	8	2	5	—	3	3	4	2	3	1	12	25
Trachoma ...	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Acute and Chronic Encephalitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lethargica ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis ...	—	2	1	—	3	1	4	8	5	2	2	—	28	—
Acute Primary Pneumonia	709	371	461	315	273	249	168	167	545	1,042	362	785	4,587	860
Acute Influenzal Pneumonia	6	3	1	1	1	—	—	—	46	358	21	11	180	268
Malaria ...	—	1	1	2	—	1	2	5	2	—	1	1	13	3
Dysentery ...	336	482	407	475	437	441	246	239	198	161	234	261	2,372	1,545
Pulmonary Tuberculosis ...	182	137	246	994	1,150	300	204	158	140	144	168	102	1,806	2,119
Other Forms of Tuberculosis	13	12	19	12	18	20	17	14	14	6	17	10	96	76
Measles ...	1,845	1,392	1,224	591	406	159	6	19	17	8	10	6	424	5,259
German Measles ...	36	30	82	77	64	44	6	3	17	3	10	8	35	345
Whooping Cough ...	579	393	435	429	458	209	57	111	110	28	52	53	234	2,680
Chickenpox ...	383	407	750	597	749	614	31	65	130	126	223	261	150	4,186
Food Poisoning ...	17	5	11	44	37	22	18	23	17	17	10	26	110	137
Total ...	4,250	3,349	3,781	3,673	3,735	2,160	834	925	1,349	1,999	1,231	1,708	28,994	—
Hospital ...	1,202	938	962	1,299	1,162	734	490	550	847	1,142	647	1,018	10,991	—
Home ...	3,048	2,411	2,819	2,374	2,573	1,426	344	375	502	857	584	690	—	18,003

* Infective Jaundice 1; Leprosy 1; Mumps 54.
 Pemphigus Neonatorum 8;
 Add Others *
 Altered Diagnosis.

TABLE XVI.
OPERATIONS OF SANITARY SECTION.

1. (a) General	Central	North- ern	Eastern	South- Eastern	South- Western	City	
						1957	1956
INSPECTIONS made—							
Nuisances	66,328	72,051	106,424	49,381	102,827	397,011	409,373
Bug Disinfestation	405	898	1,011	488	669	3,471	3,324
Water Storage Cisterns	127	818	41	3	63	1,052	1,496
Limewashings	4,541	8,748	5,772	1,214	4,607	24,882	26,176
Stair Cleaning	1,096	3,248	1,853	1,542	1,888	9,620	10,676
Drain Testing	2,150	1,159	3,672	5,486	1,177	13,644	13,882
Rats and Mice Destruction Acts	4,168	3,845	5,277	2,506	1,102	16,898	18,496
Total	78,815	90,767	124,050	60,620	112,333	466,585	483,417
Nuisances and defects removed or remedied	7,455	15,745	11,336	5,342	11,625	51,503	55,242
Consisting of—							
Apartments, Lobbies, or W.C.'s, with insufficient light or venti- lation, or otherwise defective in construction	1	5	—	—	—	6	6
Defective Chimneys causing nuis- ance	112	171	67	108	83	541	427
Disrepair or dampness in Dwelling- houses	1,016	1,958	1,075	664	1,578	6,291	7,097
Offensive smells from Drains, or other reasonable grounds— smoke test	1	—	—	—	—	1	—
Drains, Conductors, Soil-pipes, or Rones choked or defective	3,336	7,461	4,860	2,745	5,114	23,516	24,961
Sanitary Fittings choked or defective	466	729	437	409	776	2,817	3,702
Dirty Houses and Bedding and Children	17	33	1,143	—	8	1,201	987
Dirty Closets, Stairs, etc. (daily and bi-weekly cleaning)	93	274	49	55	66	537	722
Houses overcrowded	—	1,154	1,300	—	689	3,143	2,749
Common passages, stairs or stair- cases not in a cleanly state (limewashing or painting)	638	1,115	815	359	1,270	4,197	3,329
Animals or Poultry kept so as to be a nuisance	2	3	—	—	—	5	8
Accumulation of Garbage or Rubbish	84	113	25	57	35	314	313
Smells from Decaying Animal Matter or other cause	3	2	3	4	11	25	31
Stagnant Water	—	2	4	3	10	19	38
Premises infested with Rats or other vermin	926	913	776	693	498	3,806	4,061
Sink accommodation and Water Supply required	—	—	—	—	—	—	2
Water-Closet accommodation re- quired	—	—	—	2	—	2	2
Water Storage Cisterns dirty, uncovered, or unventilated	35	240	—	—	2	277	1,036
Water Supply Pipes defective— tenants without water	131	89	40	43	573	876	1,482

TABLE XVI—Continued.

OPERATIONS OF SANITARY SECTION—Continued.

	Central	North- ern	Eastern	South- Eastern	South- Western	City	
						1957	1956
Other Irregularities	—	2	—	2	—	4	1
Reports to Gas Manager	1	1	—	—	1	3	5
" Master of Works	197	830	180	76	574	1,777	1,975
" Superintendent of Cleansing	3	19	6	1	2	31	36
" Water Engineer	393	631	556	121	335	2,036	2,322
Prosecutions—Sheriff Court	34	37	15	62	10	158	119
" Police Court	13	3	—	1	3	20	6
Number Successful	47	35	15	56	13	166	107
Amount of Fines and/or ex- penses	£106 1 0	£92 8 0	£28 7 0	£53 11 0	£50 5 0	£330 12	£218 9 0
Number of Rotation Cards for Cleansing of Common Stairs, Lobbies, and W.C.'s served on Tenants	442	418	22	121	181	1,184	3,478
2. Drain Testing.							
Number of Applications for satisfaction of Dean of Guild Court	572	101	683	872	251	2,479	3,157
Number of first Applications to old Tenements or Systems	5	2	5	22	—	34	20
3. Common Lodging Houses.							
Number measured and registered	—	—	—	—	—	—	—
Total number now on register	6	3	5	—	1	15	16
With accommodation for	1,177	1,076	2,096	—	141	4,490	4,744½
Number of inspections by day	50	71	100	—	23	244	370
Number of inspections by night	—	—	—	—	—	—	—
Number of irregularities	43	22	5	—	—	70	89
Number of prosecutions	—	—	—	—	—	—	—
Amount of Fine	—	—	—	—	—	—	—
4. Boarding Houses for Emigrants and Seamen.							
Number measured and registered	—	—	—	—	—	—	—
Total number now on register	2	—	—	—	—	2	2
With accommodation for	168	—	—	—	—	168	168
Number of inspections by day	—	—	—	—	—	—	2
Number of inspections by night	—	—	—	—	—	—	—
Number of irregularities	—	—	—	—	—	—	—
Number of prosecutions	—	—	—	—	—	—	—

TABLE XVI—Continued.

OPERATIONS OF SANITARY SECTION—Continued.

	Central	North- ern	Eastern	South- Eastern	South- Western	City	
						1957	1956
5. Houses-Let-in-Lodgings.							
Number measured and registered	—	—	—	—	—	—	—
Total number now on register ...	—	—	—	—	—	—	—
Number of inspections by day ...	37	6	—	—	2	45	618
Number of inspections by night	—	—	—	—	—	—	—
Number of irregularities ...	—	—	—	—	—	—	—
Number of prosecutions ...	—	—	—	—	—	—	—
Amount of Fines	—	—	—	—	—	—	—
6. Farmed-out Houses.							
Number measured and registered	—	—	—	—	—	—	—
Total number now on register ...	26	—	98	—	—	124	124
Number of inspections by day ...	10	—	90	—	—	100	571
Number of inspections by night	—	—	—	—	—	—	—
Number of irregularities ...	—	—	—	—	—	—	2
Number of prosecutions ...	—	—	—	—	—	—	—
Amount of Fine	—	—	—	—	—	—	—
7. Tents and Vans.							
Number of inspections	33	134	31	25	4	227	241
Number of irregularities ...	—	—	—	—	—	—	16
Number of prosecutions ...	—	—	—	—	—	—	—
8. Mech. Bakehouses.							
Number measured and registered	—	1	2	9	3	15	7
Total number now on register ...	64	54	64	68	31	281	287
Number of inspections	214	583	83	120	47	1,047	867
Number dirty	21	21	15	23	6	86	76
Number overcrowded	—	—	—	—	—	—	—
Number defective in light or ventilation	—	1	4	5	1	11	—
Number with sanitary convenience required	—	—	1	—	—	1	1
Number with sanitary fittings choked or defective	2	1	2	2	—	7	7
Number of other nuisances ...	4	3	15	8	2	32	6
Number of prosecutions	—	—	—	—	—	—	—

TABLE XVI—Continued.

OPERATIONS OF SANITARY SECTION—Continued.

	Central	North- ern	Eastern	South- Eastern	South- Western	City	
						1957	1956
9. Non. Mech. Bakehouses.							
Number measured and registered	—	—	—	2	1	3	5
Total number now on register ...	16	26	9	16	9	76	81
Number of inspections ...	18	100	33	37	54	242	184
Number dirty ...	2	1	1	—	—	4	10
Number overcrowded ...	—	—	—	—	—	—	—
Number defective in light or ventilation ...	—	—	—	—	—	—	—
Number with sanitary conveniences required ...	—	—	—	—	—	—	—
Number with sanitary fittings choked or defective ...	—	—	—	—	—	—	—
Number of other nuisances ...	—	—	—	—	—	—	—
Number of prosecutions ...	—	—	—	—	—	—	—
10. Mech. Factories.							
Number registered ...	71	24	73	105	32	305	193
Total number now on register ...	1,442	659	936	579	620	4,236	4,079
Number of inspections ...	1,659	907	1,105	979	1,368	6,018	5,196
Number with sanitary conven- iences dirty ...	98	57	71	131	88	445	296
Number defective in light or ventilation ...	47	11	24	71	34	187	114
Number with sanitary conven- iences required ...	3	5	2	12	1	23	22
Number with sanitary fittings choked or defective ...	59	29	35	15	77	215	184
Number of other nuisances ...	70	60	46	97	81	354	237
Number of prosecutions ...	—	—	—	—	—	—	—
Amount of Fine ...	—	—	—	—	—	—	—
Other parts of factory—							
Number of other nuisances ...	1	16	7	35	14	73	44
11. Non-Mech. Factories.							
Number measured and registered	8	1	5	17	1	32	34
Total number now on register ...	144	29	94	89	72	428	467
Number of inspections ...	165	157	159	478	200	1,159	820
Number dirty ...	12	7	7	15	2	43	18
Number overcrowded ...	—	—	—	—	—	—	—
Number defective in light or ventilation ...	—	2	2	7	3	14	7
Number with sanitary conven- iences required ...	—	—	1	1	—	2	1
Number with sanitary fittings choked or defective ...	2	2	5	1	3	13	4
Number of other nuisances ...	4	1	6	12	—	23	19
Number of prosecutions ...	—	—	—	—	—	—	—

TABLE XVI—Continued.

OPERATIONS OF SANITARY SECTION—Continued

	Central	North- ern	Eastern	South- Eastern	South- Western	City	
						1957	1956
12. Shops.							
Number of inspections	43	2,683	373	4,820	446	8,365	2,645
Number dirty	—	4	—	195	5	204	9
Number defective in ventilation, temperature or lighting	1	3	—	56	2	62	1
Number with sanitary conven- iences required	7	—	—	18	1	26	6
Number with washing facilities required	—	—	—	3	—	3	—
Number with sanitary fittings choked or defective	7	16	1	26	9	59	77
Number of other nuisances	1	18	4	39	4	66	52
13. Fish Restaurants.							
Number of inspections	—	1,117	116	48	28	1,309	1,229
Number dirty	—	—	—	—	2	2	10
Number defective in light or ventilation	—	1	—	—	—	1	—
Number requiring sanitary con- veniences	—	—	—	—	—	—	—
Number with sanitary fittings choked, etc.	—	1	—	2	1	4	3
Number of other nuisances	—	1	—	—	1	2	3
14. Offices.							
Number of inspections	36	20	4	80	—	140	180
Number dirty	—	—	—	5	—	5	3
Number defective in light or ventilation	—	—	—	1	—	1	—
Number with sanitary conven- iences required	—	—	—	—	—	—	—
Number with washing facilities required	—	—	—	—	—	—	—
Number with sanitary fittings choked or defective	—	—	—	—	—	—	1
Number of other nuisances	—	—	—	1	—	1	4
15. Homeworkers' Dwellings.							
Total number now on register	27	41	41	23	24	156	131
Number of inspections	29	49	7	—	85	170	211
Number found dirty	—	—	—	—	—	—	—
16. Bothies, Chaumers.							
Number of inspections	—	19	—	—	—	19	—
Number dirty	—	—	—	—	—	—	—
Number of other nuisances	—	4	—	—	—	4	—

TABLE XVI—Continued.

OPERATIONS OF SANITARY SECTION—Continued

	Central	North- ern	Eastern	South- Eastern	South- Western	City	
						1957	1956
17. Workplaces.							
Number of inspections	—	—	—	—	5	5	—
Number dirty	—	2	1	55	—	58	3
Number defective in light and ventilation	—	—	—	16	—	16	—
Number of sanitary conveniences choked, etc.	—	3	—	6	—	9	5
Number of other nuisances ...	1	2	—	8	—	11	—
18. Piggeries.							
Total number now on register ...	6	18	19	4	2	49	51
Number of inspections	4	127	42	10	10	193	353
Number found dirty	—	3	—	—	—	3	18
Number of other nuisances	—	5	1	—	—	6	11
Number of prosecutions	—	—	—	—	—	—	—
19. Offensive Trades.							
Total number now on register ...	—	5	41	—	3	58	48
Number of inspections	1	77	40	1	4	123	346
Number of irregularities	—	4	—	—	1	5	51
Number of prosecutions	—	—	—	—	—	—	—
20. Rag Flock.							
Total number now on register ...	22	13	20	15	14	84	84
Number licensed	3	1	3	4	—	11	10
Total number of visits	53	83	12	12	33	193	198
Samples submitted for analysis ...	1	—	—	—	—	1	1
Certified not to conform to standard	—	—	—	—	—	—	—
Number of prosecutions	—	—	—	—	—	—	—
21. Broker's Premises.							
Total number of visits	21	120	60	37	11	249	223
Number dirty	1	—	1	—	—	2	4
Number of other nuisances	—	—	—	—	—	—	3
22. Cemeteries.							
Total number of visits	1	7	2	—	—	10	5

TABLE XVI—Continued.

OPERATIONS OF SANITARY SECTION—Continued.

	Central	North- ern	Eastern	South- Eastern	South- Western	City	
						1957	1956
23. Civil Defence Property.							
Number of inspections	—	—	—	—	—	—	—
Number dirty	—	—	—	—	—	—	—
Number defective in light or ventilation	—	—	—	—	—	—	—
Number with sanitary conven- iences choked, etc.	—	—	—	—	—	—	—
Number of other nuisances ...	8	3	—	—	6	17	34
24. Catering Premises.							
Number of inspections	50	878	34	60	8	1,030	710
Number dirty	2	12	—	8	—	22	15
Number defective in light or ventilation	—	—	—	2	—	2	1
Number of sanitary conveniences choked, etc.	—	—	—	1	1	2	1
Number of other nuisances ...	3	1	—	2	—	6	4
Number with washing facilities required	—	—	—	—	—	—	—
Number with sanitary convenience required	—	—	—	—	—	—	1
25. Infectious Diseases.							
Infectious Diseases, visits ...	8,391	15,892	17,071	10,940	8,129	60,423	61,424
26. Housing Acts.							
Total number of visits	1,226	6,271	3,590	3,351	1,938	16,376	30,466
Total number of pre-rehousing visits*	13	3,761	5,134	2,742	2,086	13,736	11,339
27. Squatter's Premises.							
Total number of visits	—	—	—	—	—	—	33
Number of irregularities ...	—	—	—	—	—	—	—
28. Miscellaneous Visits.							
Institutional census	—	—	—	—	40	40	55
Care of Old People	103	145	46	1,463	1,764	3,521	2,829
Licensed betting premises ...	5	7	30	—	3	45	207
Other	370	806	69	299	10	1,554	104

* Visits by Housing Nurses, hitherto included, are now shown separately in 30 (b).

TABLE XVI—Continued.

OPERATIONS OF SANITARY SECTION—Continued.

	Central	North- ern	Eastern	South- Eastern	South- Western	City	
						1957	1956
229. Work of Female Inspectors.							
Under the Glasgow Corporation (Police) Order, 1904—							
(a) Verminous Children.							
Number of visits to schools ...	154	299	451	87	74	1,065	1,117
Number of children submitted for inspection ...	11,280	31,798	37,340	8,279	7,418	96,115	100,264
Number of children found infested ...	3	8	181	86	—	278	250
Number of children found infected ...	3,445	6,301	4,358	1,078	558	15,740	15,731
Number of children found with fleas ...	—	16	43	10	7	76	134
Number of children found dirty	29	405	944	139	82	1,599	1,526
Number of written notices ...	—	22	164	11	1	198	183
Number of children cleaned by guardians ...	1,045	1,685	3,941	250	576	7,497	7,072
Number of children cleaned by officers ...	—	—	—	1	—	1	10
Number of special visits ...	—	—	—	—	—	—	—
Number of children examined	—	—	—	—	—	—	—
Number of children re-inspected	5,875	7,011	12,622	1,964	1,707	29,179	27,731
Number of infectious diseases	—	—	—	—	—	—	—
(b) Homes of Verminous Children.							
Number of houses inspected ...	1,333	601	1,643	160	269	4,006	3,555
Number of houses found dirty	—	—	24	—	—	24	24
Number of houses with dirty bedding ...	—	—	20	—	—	20	17
Number of written notices ...	—	—	38	—	—	38	40
Number of re-inspections ...	11	6	204	116	—	337	327
Number of houses cleaned ...	—	—	25	—	—	25	16
Number of bedding cleaned ...	—	—	18	—	—	18	14
230. Work of Housing Health Visitors.							
(a) House-to-House Visitation.							
Number of houses visited first time ...	9,112	77	10,855	503	27	20,574	5,826
Number of houses found dirty	1	2	245	—	—	248	14
Number of houses with dirty bedding ...	—	—	13	—	—	13	7
Number of houses—Written notices ...	—	—	193	—	—	193	8
Number of houses—Re-visits ...	388	5	551	412	1	1,357	1,135
Number of houses found cleaned	1	—	274	—	—	275	8
Number of houses—Bedding found cleaned ...	—	1	7	—	—	8	5

TABLE XVI—Continued.

OPERATIONS OF SANITARY SECTION—Continued.

	Central	North- ern	Eastern	South- Eastern	South- Western	City	
						1957	1956
(b) Pre-rehousing.							
Number of houses visited ...	2,535	586	21	1	2	3,145	2,872
Number of revisits ...	—	—	—	—	—	—	—
(c) Re-housing Scheme Visitation.							
Number of houses visited first time ...	2,256	29,017	39,646	9,081	9,611	89,611	95,366
Number of houses found clean	1,786	16,406	18,269	8,214	8,106	52,781	54,425
Number of houses found fair ...	469	12,517	20,474	859	1,441	35,760	40,006
Number of houses found dirty	1	94	903	8	64	1,070	935
Number of houses with dirty bedding ...	—	1	85	—	—	86	86
Number of written notices ...	—	3	520	—	—	523	597
Number of re-visits ...	280	192	1,244	5,273	2	6,991	4,186
Number of houses found cleaned	5	23	632	151	1	812	712
Number of bedding found cleaned ...	—	3	107	—	—	110	93
(d) Intermediate Housing Scheme Visitation.							
Number of houses visited ...	1,678	3,213	5,731	636	2	11,260	3,312
Number of houses found clean	1,273	2,573	4,823	569	2	9,240	2,666
Number of houses found fair ...	405	634	792	66	—	1,897	634
Number of houses dirty ...	—	6	116	1	—	123	12
Number of houses with dirty bedding ...	—	—	28	—	—	28	2
Number of written notices ...	—	—	129	—	—	129	6
Number of re-visits ...	386	193	131	15	—	725	92
Number of houses found cleaned	25	50	67	—	—	142	23
Number of bedding found cleaned ...	—	5	15	—	—	20	1

TABLE XVII.—GLASGOW.—POPULATION; BIRTHS AND DEATHS; BIRTH-RATES AND DEATH-RATES PER 1,000; ALSO DEATHS UNDER 1 YEAR, AND DEATH-RATES PER 1,000 BIRTHS SINCE 1901.

Year	Population	Births	Deaths	Birth-rate per 1,000	Death-rate per 1,000	Deaths under 1 Year	
						Number	Rate per 1,000 Births
1901	761,925	24,206	16,197	31·8	21·2	3,607	149
1911	784,680	21,755	13,899	27·7	17·7	3,016	139
1912	785,600	22,044	13,797	28·1	17·6	2,740	124
1913†	1,021,789*	28,688	17,693	28·1	17·3	3,706	129
1914	1,028,440	29,462	17,522	28·6	17·0	3,913	133
1915	1,035,091	27,943	20,159	27·0	19·5	4,007	143
1916	1,041,742	27,094	16,601	26·0	15·9	2,996	111
1917	1,048,393	24,030	16,691	22·9	15·9	3,089	129
1918	1,055,044	23,524	18,362	22·3	17·4	2,660	113
1919	1,061,695	25,835	18,237	24·3	17·2	2,937	114
1920	1,068,346	32,626	16,765	31·5	15·7	3,477	107
1921	1,075,000	29,712	15,625	27·6	14·5	3,138	106
1922	1,074,607	28,298	17,850	26·3	16·6	3,401	120
1923	1,074,215	26,710	14,875	24·9	13·8	2,388	89
1924	1,073,822	25,330	16,868	23·6	15·7	3,005	119
1925	1,073,429	25,416	15,336	23·7	14·3	2,591	102
1926	1,090,380*	24,541	15,731	22·7	14·6	2,548	104
1927	1,089,988	23,578	15,439	21·6	14·2	2,527	107
1928	1,089,595	23,649	15,701	21·7	14·4	2,525	107
1929	1,089,202	22,799	17,760	20·9	16·3	2,438	107
1930	1,088,810	23,322	15,455	21·4	14·2	2,355	101
1931	1,088,461	22,926	15,505	21·1	14·2	2,397	105
1932	1,088,215†	22,732	16,071	20·9	14·8	2,542	112
1933	1,087,969	21,361	14,747	19·6	13·6	2,061	96
1934	1,087,723	21,822	15,234	20·1	14·0	2,140	98
1935	1,087,476	22,102	15,537	20·3	14·3	2,169	98
1936	1,087,230	22,273	16,406	20·5	15·1	2,429	109
1937	1,086,984	22,176	16,379	20·4	15·1	2,313	104
1938	1,092,968*	21,979	15,016	20·1	13·7	1,919	87
1939	1,092,722	21,682	15,010	19·8	13·7	1,737	80
1940	1,092,476	20,965	17,603	19·2	16·1	1,983	95
1941	1,092,229	20,365	16,301	18·6	14·9	2,267	111
1942	1,091,983	20,615	14,679	18·9	13·4	1,863	90
1943	1,091,737	22,363	14,824	20·5	13·6	1,825	82
1944	1,091,491	22,203	14,603	20·3	13·4	2,108	95
1945	1,091,245	20,294	13,941	18·6	12·8	1,379	68
1946	1,090,998	23,560	14,502	21·6	13·3	1,588	67
1947	1,090,752	25,829	15,266	23·7	14·0	1,989	77
1948	1,090,506	22,292	13,620	20·4	12·5	1,241	56
1949	1,090,260	20,923	14,203	19·2	13·0	1,033	49
1950	1,090,013	20,031	14,090	18·4	12·9	879	44
1951	1,089,767	20,091	14,312	18·4	13·1	922	46
1952	1,086,800	20,337	13,841	18·7	12·7	831	41
1953	1,085,000	20,232	12,827	18·6	11·8	723	36
1954	1,084,700	20,977	12,750	19·3	11·8	736	35
1955	1,085,100	21,023	13,275	19·4	12·2	765	36
1956	1,083,500	21,885	13,194	20·2	12·2	720	33
1957	1,079,800	22,413	13,177	20·8	12·2	774	35

* Extended City.

† Births and Deaths from 1913 are corrected for transfers.

† Intercensal populations and rates in the years 1932 to 1950 inclusive were revised in 1951.

APPENDIX B.

WORK OF THE
GLASGOW INFECTIOUS DISEASES
HOSPITALS

1957

FEVER HOSPITALS—STATEMENT OF CASES TREATED ACCORDING TO SEX, ETC., BASED ON DISMISSALS AND DEATHS
FOR YEAR 1957.

	Admitted		Dismissed		Died		Mortality Per cent.	Average Residence		Altered Diagnosis	Ruchill		Belvidere		Knightswood		Total Days' Residence		
	Males	Females	Males	Females	Males	Females		Dis- missals	Deaths		Dis- missals	Deaths	Dis- missals	Deaths	Dis- missals	Deaths	Dis- missals	Deaths	Dis- missals
Typhus Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paratyphoid Fever	4	3	3	2	—	—	—	37	2	—	3	—	—	—	—	—	—	186	—
Continued and Undefined Fever	8	4	8	5	—	—	—	37	—	8	7	—	—	—	—	—	—	477	—
Puerperal Fever	9	11	9	10	—	—	—	19	—	183	14	—	—	—	—	—	—	355	—
Ophthalmia Neonatorum	—	—	—	—	—	—	—	25	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	231	252	228	257	—	—	—	11	—	57	189	193	103	—	—	—	—	5,198	—
Diphtheria and Membranous Croup	—	—	—	—	—	—	—	—	—	108	—	—	—	—	—	—	—	—	—
Erysipelas	18	28	20	28	—	—	—	26	—	18	41	3	—	—	—	—	—	1,242	—
Cerebro-spinal Fever	35	27	34	26	3	—	4.8	21	1	325	52	7	1	—	—	—	—	1,267	3
Trachoma	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis	33	12	31	11	1	—	4.4	24	3	62	24	18	2	—	—	—	—	992	6
Acute Primary Pneumonia	1,766	1,141	1,551	980	165	91	8.8	22	12	1,568	910	1,242	379	51	—	—	—	56,338	2,991
Acute Influenzal Pneumonia	8	8	3	6	5	2	43.8	21	1	105	9	—	—	—	—	—	—	190	9
Malaria	13	—	13	—	—	—	—	8	—	—	12	—	—	—	—	—	—	104	—
Dysentery	851	858	849	860	—	—	0.1	14	4	606	752	610	347	—	—	—	—	23,382	7
Pulmonary Tuberculosis	75	52	72	48	7	4	8.7	54	22	—	—	54	15	1	—	—	—	5,971	239
Other Forms of Tuberculosis	18	18	15	22	4	3	19.4	170	29	—	25	12	4	—	—	—	—	6,301	200
Measles	209	201	234	223	2	4	1.5	17	6	57	228	151	78	2	—	—	—	7,587	33
German Measles	14	19	14	19	—	—	—	7	—	3	23	5	—	—	—	—	—	226	—
Whooping Cough	115	109	126	126	2	2	1.8	30	18	77	136	86	30	—	—	—	—	7,631	71
Chickenpox	68	64	67	64	—	—	—	20	—	21	28	92	11	—	—	—	—	2,619	—
Mumps	35	27	34	26	—	—	—	11	—	6	39	19	2	—	—	—	—	677	—
Veneral Diseases	125	29	122	28	2	—	—	24	10	—	29	121	2	—	—	—	—	3,537	19
Influenza	89	41	86	40	2	1	2.3	7	1	13	78	24	1	—	—	—	—	919	3
Leprosy	2	—	2	—	—	—	—	39	—	—	2	—	—	—	—	—	—	178	—
Anthrax	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Infective Jaundice	1	—	1	—	—	—	—	34	—	10	—	—	—	—	—	—	—	34	—
Gastro Enteritis	150	120	147	122	2	1	1.1	30	2	468	80	77	112	—	—	—	—	8,057	7
Food Poisoning	55	53	54	55	—	—	—	24	—	45	65	31	13	—	—	—	—	2,600	—
Babies with Mothers	—	—	—	—	—	—	—	2	—	—	10	1	—	—	—	—	—	136	—
Unclassified (Staff)	—	—	—	—	—	—	—	21	—	—	10	2	—	—	—	—	—	277	—
No Apparent Disease	61	55	60	55	—	—	—	7	—	—	80	27	8	—	—	—	—	816	—
Others	1,911	1,446	1,830	1,408	81	76	4.7	14	18	—	1,733	1,331	174	14	—	—	—	44,835	2,767
Impetigo	1	1	2	2	—	—	—	25	—	—	1	1	2	—	—	—	—	101	—
Total	5,914	4,595	5,624	4,439	276	187	4.4	18	14	3,742	4,632	4,120	1,311	194	70	—	—	182,258	6,355
Pthiasis	1,169	691	1,119	705	101	38	7.5	86	57	—	1,219	427	178	32	9	—	—	156,613	7,938

APPENDIX B.—TABLE II.

FEVER HOSPITALS. DEATHS FROM CERTAIN CAUSES, ACCORDING TO SEX AND AGE, FOR THE YEAR 1957.

Diseases	MALES										FEMALES																
	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	65+	Total	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	65+	Total	
Cerebro-spinal Fever	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Influenzal Pneumonia	1	—	—	—	—	—	—	2	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	2
Acute Poliomyelitis ...	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Acute Primary Pneumonia	27	1	5	—	—	1	2	2	4	12	33	78	165	11	—	2	—	1	—	—	2	3	10	14	48	91	
Enteric Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	2
Pulmonary Tuberculosis	—	—	1	—	—	—	—	—	1	1	1	3	7	—	—	—	—	—	—	—	1	—	1	—	—	—	4
Other Forms of Tuberculosis	—	—	—	—	—	—	1	1	1	1	—	—	4	1	1	—	—	—	—	—	—	—	—	—	—	—	3
Measles ...	—	—	—	1	—	—	—	1	—	—	—	—	2	—	1	—	3	—	—	—	—	—	—	—	—	—	4
Whooping Cough	2	—	—	—	—	—	—	—	—	—	—	—	2	1	—	1	—	—	—	—	—	—	—	—	—	—	2
Scarlet Fever...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Influenza ...	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Veneral Diseases	—	—	—	—	—	—	—	—	1	—	—	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Others ...	7	—	2	2	2	1	1	—	7	8	16	35	81	7	1	—	1	4	1	1	1	5	7	8	40	76	
Gastro-Enteritis	1	—	—	—	—	—	—	—	1	—	—	—	2	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Food Poisoning	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mumps ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	40	2	9	3	2	3	5	6	16	22	50	118	276	22	3	4	4	5	1	1	7	8	18	23	91	187	
Phthisis ...	—	—	—	—	—	—	3	9	8	22	38	20	101	—	—	—	—	—	—	—	11	12	6	1	7	38	

FEVER HOSPITALS. DISMISSALS AND DEATHS ACCORDING TO SEX AND AGE, FOR THE YEAR 1957.

	MALES										FEMALES															
	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	65+	Total	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	65+	Total
Enteric Fever	1												3													2
Paratyphoid Fever													8													5
Continued and Undefined Fever													9													10
Puerperal Pyrexia																										1
Ophthalmia Neon																										257
Scarlet Fever		23	89	83	21	6	3	2					228		26	96	90	34	2	2		1				
Diphtheria and Membranous Croup																										
Erysipelas	2		1	1		1		3	2	6	4		20		1	1		1					8	2	10	28
Cerebro-spinal Fever	15	9	9	3					1				37		5	3	5		1	1	1					26
Trachoma																										
Encephalitis Lethargica																										
Acute Poliomyelitis																										12
Acute Encephalitis																										
Acute Poliomyelitis																										
Acute Primary																										
Pneumonia	327	151	149	68	31	45	35	84	98	183	280	1,716	235	86	108	41	12	24	24	22	60	71	84	127	201	1,071
Acute Influenzal																										
Pneumonia	1		1																							8
Malaria	171	183	285	93	21	9	12	24	9	13	16	849	121	148	254	106	24	39	39	32	42	17	20	19	40	862
Dysentery																										
Pulmonary Tuberculosis																										
Other Forms of Tuberculosis	1		1	5		2	5	2	1	2		19	1	4	2	2	3	3	3	4	4		1		1	25
Measles	47	53	95	31	2	3	2	2	1	1		236	31	53	92	30	1	7	8	8	4	1				227
German Measles																										
Whooping Cough	67	18	29	11	2	1	3					128	55	27	33	11	1	1	4	4	2					19
Chickenpox	10	11	21	12	4	1	3	4			1	67	1	12	19	21	3	3	3	4	1					128
Mumps																										
Veneral Diseases	1																									
Influenza	5	1	5	2	5	22	17	14	6	5	4	88	1	1	2	3	1	11	11	6	8	4	1	3		41
Leprosy																										
Anthrax																										
Infective Jaundice																										
Gastro Enteritis	140	5	2								1	149	122		1											123
Food Poisoning	11	5	8	7	4	4	1	2	4	2	2	54	6	9	15	5	6	1	1	1	5	2			5	
Babies with Mothers	9											9	2													2
Unclassified (Staff)																										
No Apparent Disease	24	7	17	6	3	1						60	18	4	6	5	1	1	7	2	2	2	3	3	1	13
Others	471	165	239	136	74	44	31	86	73	152	205	1,911	366	101	159	91	54	52	60	60	83	70	110	128	210	1,484
Impetigo	1		1									2														2
Total	1,304	636	985	496	177	150	144	266	239	401	532	5,900	982	480	809	433	155	175	161	244	185	227	303	472	4,626	
Phtthisis	1	8	13	19	24	65	99	171	200	264	257	1,220	1	1	15	21	28	68	110	210	130	88	46	25	743	

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