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REPORT

ON THE HEALTH OF THE

CITY OF LIVERPOOL

FOR THE

YEAR

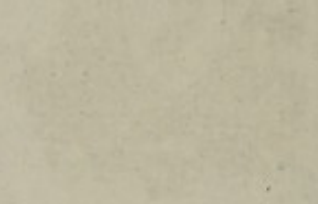
1961

BY

ANDREW B. SEMPLE, V.R.D., M.D., D.P.H.,

Medical Officer of Health

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REPORT

OF THE

CITY OF LIVERPOOL

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PREFACE

MY LORD MAYOR, LADIES AND GENTLEMEN,

The work of the Health Department in 1961 was dominated by the extensive and highly successful mass immunisation drive against poliomyelitis. Nevertheless, it has been a year of steady progress in many other fields of the department's activities, particularly in the development of the new mental health services. I have tried throughout the report to give a full description of the advances in the services which have taken place, as new developments are so quickly absorbed into the general routine of work in a large public health department.

During 1961 the birth rate rose again to 22.1 compared with 21.1 in the previous year. It is encouraging to report a further fall in the stillbirth rate to 25.2. **Vital Statistics**

The infant mortality rate was very similar to the figure of the previous year, being 28.3, but there was a slight reduction in the perinatal mortality rate to 28.9. Once again an increase in the number of deaths from carcinoma of the lung was reported, the figure rising to 525 compared with 457 in the previous year. This is the largest figure ever recorded in Liverpool and emphasises the great problem of this cause of death.

During 1961 the total number of domiciliary midwifery cases undertaken in the city fell to 4,936, a reduction of exactly 100 from the previous year. The hospital confinements increased to 12,268 in 1961 from 11,471 in 1960. The percentage of domiciliary births in the city in 1961 was 28.7 per cent compared with hospital births of 71.3 per cent. There was a marked tendency during the year for the number of patients discharged from hospital before the tenth day to increase. In 1961, 2,787 patients were discharged before the tenth day compared with 1,046 in the previous year. The problems which have been created by this great increase in early discharge have been solved by arranging for the domiciliary midwives to look after the very early discharges, and the later ones to be cared for by health visitors. **Midwifery Section**

Staff

The midwifery staff has increased in number during the year and at the end of the year consisted of the non-medical supervisor, two assistant supervisors and 50 full-time midwives, two of whom cared for premature babies. In addition there are seven part-time midwives who help the full-time staff on busy districts, care for patients who are discharged early from hospitals and help in the investigation of home conditions for suitability for home confinements.

The introduction in 1960 of furnished accommodation for midwives has helped considerably in the recruitment of young unmarried midwives, and at present there are seven such midwives occupying flats or houses furnished by the Health Committee.

Recruitment has also been assisted by the continued use of the rota system of off-duty and night calls which has proved a great success. This system, which has now been in operation for eighteen months, allows a midwife to be off duty from 6.0 p.m., except on the night when her partner has her day off. The emergency calls received between 6.0 p.m. and 6.0 a.m., go to the ambulance control officer who has a list of the midwives on duty for each area.

**Disposable
Masks**

During 1961 an innovation has been the introduction of disposable face masks which are used for domiciliary analgesia. These have proved to be much more satisfactory and have cut down the risk of infection, because each mask is only worn once and is then burned or otherwise disposed of.

**Haemoglobin
Estimation**

A change has been made in the arrangements for carrying out haemoglobin estimation for expectant mothers. The blood is still taken by the assistant medical officer at the ante-natal clinic, but the specimens are sent to one of three hospitals, Walton, Sefton or Broadgreen, and tested there in the pathological laboratory. This arrangement has resulted in more accurate results. The new arrangements are working extremely well and the local authority is indebted to the regional hospital board for their co-operation in achieving this improvement.

**Premature
Babies**

During 1961, although 241 premature babies were born at home, a greater number than last year were transferred to hospital requiring a premature baby unit. Ninety-two were able to remain at home for nursing under the care of the premature baby team. In addition to this, 627 babies either born in hospital or born at home and transferred to hospital, were later discharged to the care of the premature baby nurses. The majority of these

had reached the weight of 4 lb. 6 oz. before discharge but one weighed 3 lb. 14 oz. and the premature baby team then continued to visit this child until he had gained weight and was over 6 lb. The arrangement whereby three midwives make up this special premature baby team has continued to be most valuable throughout 1961.

The text of the annual report gives very fully the work undertaken by the health visitors during 1961. This has become more diverse and included considerable work in relation to the poliomyelitis immunisation campaign, as well as the surveillance of contacts of the poliomyelitis cases in the small epidemic which occurred in the summer.

**Work of the
Health
Visitors**

It is particularly interesting to note that there has been a very marked increase in the work undertaken by the health visitor with the aged. Altogether 4,484 visits were paid to elderly persons compared with 3,000 in 1960. This is the second year that there has been a marked increase in the amount of work undertaken for the aged and shows that the health visitor is really becoming the visitor for the whole family, as envisaged by the National Health Service Act, 1946. The arrangement whereby a very close contact is maintained between the geriatricians at Newsham General Hospital and the health visitors in relation to home reports for such cases has continued satisfactorily.

Full details of a number of very interesting case histories in connection with the aged persons helped are given in the report and show the difficult problems which were faced by this section during the year.

The closer liaison between the maternity hospitals in the city and the health visitors, which was established in 1960, has continued to develop in 1961. Many more visits have been paid to expectant mothers to explain to them the importance of carrying out the instructions given to them by the hospital and to give advice and help where it was needed. Altogether 3,609 visits have been made to ante-natal cases. There has also been an increase in the number of expectant mothers who are receiving their ante-natal care from hospitals but who come to the health visitors' clinics for mother-craft classes. This is a very important aspect of ante-natal care, and one, which experience has shown, is difficult to deal with adequately in hospital because of the pressure of work and shortage of space.

**Liaison
between
maternity
hospitals and
health
visitors**

The work in connection with epileptic children at Alder Hey Hospital and epileptic adults at the Royal Southern and Walton Hospitals has

continued throughout the year and developed. There has also been a development in the rehabilitation advice given by the health visitors' section this year.

Primary visits and after-care visits to children under five have continued and during the year, 158,075 visits were made in this way, and the visits of a special nature rose to 15,580, an increase of 4,310.

**Diabetic
after care**

Details are given once again of the special duties which the health visitors' section has undertaken in connection with diabetes. Full details are given of the value of this work which takes place at the Northern Hospital, and to a lesser extent, at other general hospitals throughout the City. It has been noticed, too, that this, and other aspects of the health visitors' activities, has resulted in a greater degree of co-operation with general practitioners, and that there is a steady and increasing flow of contact between them and the health visitors' section. Details of such co-operation and co-ordination are given in four interesting case reports.

**Accidents
in the
Home**

The result of an interesting survey into accidents in the home is given in the annual report. During 1961, 891 accidents occurred at home in which the 999 emergency telephone call for an ambulance was used. Many more cases, of course, occurred and were taken to hospital by other means of transport, but the investigation deals only with those where an emergency call was received. This does not give any indication of the severity of the accident as many minor accidents are dealt with by emergency calls whilst some of the more severe injuries are seen by a general practitioner, who may then arrange direct admission to hospital.

The analysis, however, is of very great interest as it concerns a substantial number of accidents. The accidents are divided into six groups as follows:—

Falls	Poisonings
Burns	Cuts
Scalds	Miscellaneous

The incidence of these accidents are further sub-divided into eight groups.

The commonest accident in all age groups was a fall, and represented just over half (50·3 per cent) of all cases under review. The second largest group was that which included all accidents not included in other groups, but this accounted for only 10·7 per cent of the total. The largest number of fatal accidents was due to falls, from which fifteen people died, all over

the age of 30. Although only 9.7 per cent of all accidents were due to burns or scalds, six deaths occurred in this group which has the second largest number of fatalities. This is a clear indication of the severity of injuries sustained in almost all burning accidents. It is of concern to report that the age group most commonly affected by accidents of all types was that containing children from birth to six years of age, where falls again were the commonest type of accident.

Although it was not possible in this survey to determine the cause of every accident, many of them were obviously preventable. The information received already suggests that further and even more detailed surveys should be carried out, and arrangements have been made to carry on in a more detailed way a review of all accidents occurring in the home during the next twelve months.

The home nursing service has continued to develop satisfactorily during the year. Two new centres have been opened, one at Formosa Drive and another at 202, Grove Street, off Upper Parliament Street, which will act in future as the main central clinic headquarters of the home nursing service in the City. The introduction of both new centres has helped considerably in the efficiency of this service as they have replaced smaller, inconvenient centres. The Formosa Drive Centre has incorporated two smaller units which formerly were working from the East Lancashire Road and Manica Crescent, and the Grove Street centre took over the clinic duties from the premises at 3, Maynard Street.

There has been an increase in the demand for the services of district nurses during the year and a total of 345,756 nursing visits were made to 14,949 patients. This represents an increase of 3,629 cases visited and 15,326 visits. On the other hand, the injections given by nurses dropped markedly during the year to 48.82 per cent of the cases attended against 75 per cent in 1957.

There has been an increase in the number of late night visits paid between the hours of 8.0 p.m. and 10.30 p.m., mainly to very ill patients. This represents an increase of 1,382 treatments.

This new service, introduced in February, 1961, has proved to be a most valuable and helpful addition to the home nursing service in the City. It has allowed many very severely chronically ill patients to be nursed at home who would otherwise have had to be admitted to hospital. Laundering

Home
Nursing

Incontinent
Laundry
Service

of the soiled linen is carried out by Corporation wash-houses and collection and deliveries were made whenever required, varying from daily to once weekly collections. Altogether, during the year, 116 patients received this service, mostly two or three times a week. The needs of the patients varied but three interesting case histories are given illustrating the extreme value of this service. It will be seen that this service has not only enabled patients to remain at home who would otherwise have had to be admitted to hospital, but has made it possible for patients to be looked after in much better circumstances. In particular, many harassed relatives trying to look after their old folk ill at home have found this to be a great boon. There is no doubt that it represents a very great step forward in the medical services of the City.

**Home
Nursing
Equipment**

Once again during the year there was a marked demand for the supply of home nursing equipment and altogether loans amounted to 4,279 instances in the year compared with 3,712 in 1960 and 2,278 in 1957. It will be seen, therefore, that during the last five years the amount of nursing equipment loaned out has almost doubled. A considerable quantity of new equipment has been obtained including specialised equipment which has been purchased for the few severely crippled patients receiving help and advice from the occupational therapy team.

**Welfare
Foods**

There has been a reduction in the amount of welfare foods taken up by the public during the year. Full figures are given in the text of the annual report.

**Chiropody
Service**

Developments in this new service have been satisfactory during the year. In particular, new clinics have been opened at Townsend Avenue, Norris Green, and at the League of Welldoers Club, Scotland Road. All have been well attended. Additional clinic sessions are still required, the main difficulty being the availability of trained staff. In December, 1961, the first full-time chiropodist was appointed and it is planned that he will spend part of his time at various chiropody clinics, and on the remaining days of his week carry out domiciliary visits. This officer, who has been provided with a car allowance, will undoubtedly make it possible to extend this very vital part of the chiropody service.

**Day
Nurseries**

At present there are eleven nurseries and child minders registered with the local authority under the Child Minders Regulations Act, 1948. All these nurseries are visited regularly by one of the assistant medical officers

of health for the purpose of giving necessary help and advice regarding the welfare of children. In addition, there are twelve local authority day nurseries with places for 670 children. These day nurseries have been full throughout the year and it is satisfactory to report that there has been an improvement in the staff position during 1961, which allowed for an improved standard of care for the children and the training of student nursery nurses.

Although 1961 had been planned to see an extension of the home help service, and this indeed took place in the first three months, a cut of £10,000 in the estimated cost of the service was imposed in April which meant a severe limitation of the home help service throughout the year. In February the staff had risen to 275, but reductions were made leaving it at 234 by the 31st December. As a result of this, fewer persons could be assisted at home and details are given of how this restriction worked in practice. It will be seen that primarily the restrictions were placed on the chronic sick and aged persons rather than those who are ill, and there was a reduction in the number of chronic sick and aged assisted in this way from 2,037 in 1960 to 1,859 in 1961. In addition there was an even more severe reduction in the amount of hours worked for each applicant.

The year 1961 was characterised by the worst poliomyelitis outbreak in the City since 1950. The other characteristic was the interesting number of outbreaks of food-poisoning which are reported in detail in the text.

Sixty-two confirmed cases of poliomyelitis were diagnosed during 1961, 47 being paralytic and fifteen non-paralytic cases. Full details of the types of cases are given in the main report and also a comparison between the 1961 epidemic and the 1949 epidemic which was very similar in size. The real difference between the two epidemics was the way in which the 1961 epidemic threatened to be a much larger epidemic as cases were occurring in unusually large numbers by the end of April and the beginning of May, but fortunately the epidemic did not reach the expected peak in September. This was almost certainly due to the very successful poliomyelitis immunisation campaign carried out in May and June.

In the years 1949 and 1950, which were epidemic years for poliomyelitis in Liverpool, with 135 cases occurring in 1950 and 66 cases in 1949, the number of cases which occurred by the end of June in both years represented a fifteenth of the total years' figures. In 1961 there had been 29

confirmed cases by the end of June and yet the total at the end of the year was only 62. With a disease whose seasonal incidence is so marked as poliomyelitis, it is likely that the total number of cases which would have occurred in Liverpool in 1961, but for the advent of the large-scale poliomyelitis immunisation campaign in May and June, would have been very much higher. It is obviously impossible to tell how many cases there would have been, but it is unlikely that there would have been much less than 300 to 400.

**Paratyphoid
Fever**

During 1961 four clinical cases of paratyphoid fever were notified, which is a welcome decrease from the nineteen in 1960. Details are given of a family outbreak with paratyphoid beccles variant 4 type, which was caused by eating a wafer biscuit decorated with a desiccated coconut layer. Full details of this case and its relationship with desiccated coconut are given in the text of the report.

**Whooping
Cough**

There was a marked reduction in the number of cases of whooping cough occurring in Liverpool in 1961, when 341 instances of this disease were confirmed compared with 1,440 in 1960. There were no deaths from this disease during the year.

Measles

There was likewise a marked reduction in the number of cases of measles reported during the year.

**Food
Poisoning**

Full details of many interesting outbreaks of food poisonings are given in the text of the report. Food poisoning outbreaks were caused by various salmonella organisms, *Clostridium welchii* toxin poisoning and Staphylococcal toxin food poisoning.

Particularly interesting was the milkborne outbreak of *Salmonella typhimurium* food poisoning traced to the drinking of non-pasteurised tuberculin tested milk from a local dairy in which one of the cows had died from what is presumed to be typhimurium infection. This outbreak emphasises the constant necessity to insist on efficient heat treatment of milk in addition to clean handling, and also that any illness in cows should be reported immediately.

The staphylococcal toxin food poisoning outbreak occurred in a Liverpool hospital, involved 27 members of the staff and was shown to be due to contamination of Brussels sprouts which had been left over from the day before and used subsequently. This experience has been repeated many

times with different types of food and it cannot be too strongly emphasised that there is a very serious danger in the storage, in unrefrigerated conditions, of prepared food which is to be used the following day.

Throughout 1961 there continued a vigorous investigation into the degree of salmonella infection in imported desiccated coconut coming into Liverpool. During the year a total of 10,285 samples of this product were taken and of these, 391 or 3·8 per cent were subsequently found to be infected with salmonella organisms. These included, in 4·8 per cent of the isolations, the finding of paratyphoid B. A full table, given in the annual report, of the isolations found shows a very wide variety of contamination. It is satisfactory to report that, consequent upon the City Council's vigorous action in sending a deputation to the Ministry of Health and in raising the whole question of the danger of desiccated coconut, the Ceylon government has introduced emergency regulations in the handling of this product and it is hoped that standards will be consequently raised.

**Salmonella
Infection
due to
Desiccated
Coconut**

It is most encouraging to report a further reduction in the number of cases of dysentery to 335 compared with 515 in 1960.

Dysentery

There were eight small outbreaks of Sonne dysentery occurring in five day nurseries making a total of 69 cases. This is also a decrease of 55 compared with the number of cases occurring in 1960, and the fact that none of these outbreaks was large, is probably due to the very strict control measures which are enforced in all day nurseries. These include the bacteriological stooling of every case of diarrhoea, however mild, and also the stooling of all new-comers to day nurseries to prevent an unknown symptomless or convalescent carrier being admitted.

Influenza A reached epidemic proportions in Liverpool between the 3rd January and the 28th February, 1961. The peak of the epidemic was reached in the week ending 31st January when 10,457 new national insurance sickness claims were made. This is the third occasion in the last ten years that influenza has reached epidemic proportions in Liverpool. Comparisons are made between the epidemics of 1951, 1957 and 1961 in the text of the annual report.

Influenza

The epidemic of 1951 was by far the greatest and most serious, but the epidemic of 1961 was a little more serious than that of 1957. This is shown by the total number of deaths from influenza in the epidemic weeks, being 469 in 1951, 81 in 1957 and 94 in 1961.

Ornithosis

Details are given of an interesting case of ornithosis which occurred in a binman employed by the City Engineer and Surveyor's department. It was felt that this employee may well have picked up this infection as a result of the work which he was engaged upon, for it was known that he handled a dead pigeon about ten days before his illness.

A survey was carried out from 127 binmen to find the level of infection and it was discovered that the overall percentage of positive titre in the blood of such workers was 4.8 per cent. It seems clear that this examination did not reveal any information of statistical significance, but it is important to know that sporadic cases can occur amongst persons exposed to pigeon excreta and those in intimate contact with these birds, and that such persons should be made aware of the possible risk.

**Immunisation
and
Vaccination

Poliomyelitis
Immunisation
Campaign**

The highlight of the year in immunisation and vaccination was undoubtedly the very large-scale and successful poliomyelitis immunisation campaign which took place in May and June, 1961. This campaign, which had originally been planned, following an analysis of the protection levels in the wards of the city, to concentrate on the ten wards with particularly low percentages of persons immunised, developed into a much larger and more widescale campaign as a result of the impending epidemic. Following the publicity on early cases of poliomyelitis occurring at the end of April 1961, there was a quite unprecedented demand for immunisation against poliomyelitis, and during the two weeks of 29th April to 13th May, no fewer than 411,269 persons received the first immunisation against poliomyelitis. The second stage of the campaign, which took place from the 29th May to 17th June, was extended for three weeks to make the demand more even and in this part of the campaign 390,429 persons attended for immunisation. This remarkable response to Salk vaccination, which has probably never been seen anywhere else in the world in such a concentrated manner, has since been further consolidated by a third campaign held in March, 1962 using oral Sabin vaccine, in which 365,591 persons attended for their third immunisation.

The success of this campaign in preventing disease must, of course, lie in the future, but the lack of development of a threatened epidemic in 1961 was most encouraging. It is hoped that this mass immunisation campaign will lead to a long standing protection for Liverpool against poliomyelitis.

The story of the campaign makes interesting reading. It is the story of an all-out effort not only by the entire staff of the health department, but by 350 general practitioners and their assistants working within the city. General practitioners carried out roughly 25 per cent of these immunisations and this, on top of their normal work, was a very large effort. On the local authority side, all available medical personnel were recruited including the whole staff of the school health service, plus a large number of part-time doctors, some of whom helped in their spare time from their hospital appointments. In the same way the nursing staff of the city was mobilised to help and so were the clerical staff of the health and school health departments. Industry was organised by public health inspectors and 46,000 inoculations were carried out there.

Thanks are due not only to all the staff who helped, but also to the general population who responded so satisfactorily to make the effort made by the city so worthwhile, and particularly to the Press, B.B.C. and I.T.V., who, with their considerable cover assisted so much to keep the idea and the urgency of immunisation in front of the public. It is probably true to say that this campaign has laid the basis for future freedom from poliomyelitis for the City of Liverpool. It is now, of course, absolutely essential that this is consolidated by continuing immunisation against poliomyelitis for the young child. If this can be achieved, then there is little doubt that Liverpool should have little to fear from poliomyelitis in the future.

The reduction remarked in diphtheria immunisation was due entirely to the suspension, from June to September, of diphtheria immunisations, because of the risk of provocative poliomyelitis. Since their reintroduction, diphtheria immunisations have gone ahead at a faster rate and it is hoped that the arrears will be caught up very quickly.

**Diphtheria
Immunisation**

1961 was a most encouraging year in the city for tuberculosis. As all the chest physicians have pointed out, many cities have reported that in the second year after a large-scale mass radiography campaign, there has been a definite increase in the amount of tuberculosis reported. This has been explained by a tendency for the clear chest X-ray to give a feeling of security to patients for many months and then, even in the presence of symptoms there is an understandable delay in reporting, and therefore a consequent delay in diagnosing, tuberculosis.

Tuberculosis

Liverpool, however, in 1961, the second full year after the very successful radiography campaign of 1959, saw a further slight but definite decrease in the number of cases of tuberculosis. In 1961 there were 410 cases of pulmonary tuberculosis notified compared with 424 in 1960. In addition, there were 54 non-respiratory cases, making a total figure for 1961 of 464 compared with a total figure for 1960 of 489.

During the year there was a slight increase in the proportion of cases discovered as a result of clinical illness, but there was a marked decrease in the number found by mass radiography, in 1961 48 cases were found as a result of mass miniature radiography compared with 82 in 1960. Thirty cases were discovered as a result of contact examination.

**Age and Sex
distribution**

Once again it was noticed that the biggest problem in Liverpool, as in many parts of the country, was the middle-aged and elderly male patient. In particular it was interesting to note the reference which Dr. Osborne Hughes, from East Chest Clinic, makes in his report, which emphasises the increased problem which the elderly male now presents. It is, of course, important to realise that not only is the incidence of tuberculosis greater in men, but that the disease is usually more extensive and, therefore, usually more infectious.

**Tuberculosis
Rehousing**

1961 saw a great step forward in the rehousing of tuberculosis patients, for in this year, for the first time, the City Council decided to allocate 6 per cent of the total available tenancies in the city to the Medical Officer of Health for rehousing of tuberculosis patients only. The arrangements were designed to ensure the quickest possible rehousing of tuberculosis patients, and during the year more patients were rehoused than ever before. Out of this system has come a new system whereby a block of 180 allocations will be available for the Medical Officer of Health for both tuberculosis and general medical cases in the following year.

**The
unco-
operative
tuberculosis
patient**

Reference has been made in past annual reports to the problem of the unco-operative tuberculosis patient, and Section 172 of the Public Health Act, 1936 has been successfully invoked to enforce admissions to hospital of such patients in the past few years. A full report is given of the work which has been undertaken during the year by the department in respect of 156 patients who were found to be unco-operative. Widescale attempts have been made to persuade all these patients to attend the clinics without success. These efforts include a minimum of twelve written invitations for

clinic appointments, all of which were ignored, and many personal visits by the tuberculosis visitor, and at least one home visit by the tuberculosis officer or chest physician. As all these cases were considered to be active, they contained many for whom Section 172 of the Public Health Act, 1936, could have been enforced. As a result of a special effort made during the year, satisfactory arrangements were made for 149 of these cases and their co-operation ensured. This was arranged following a personal visit by the assistant medical officer of health in charge of this work. Of the seven outstanding cases, five have certainly left the city, but all efforts to trace them have so far failed. The other two cases are likely to be failures, and Section 172 is probably going to be invoked early in 1962. The success of this work is self-apparent.

Full details are given in the annual report of the very important new work which has been undertaken in Liverpool in 1961 in regard to investigating the treatment of patients at home by using the drug Para-aminosalicylic Acid (P.A.S.). This work, which was designed to check the efficiency with which patients were taking their home treatments, has been most valuable for it has highlighted that there is a serious situation within the domiciliary treatment in this respect, for no fewer than between 50 and 60 per cent of the patients are inadequately taking their drugs. This not only means that they will fail to get the benefit from the treatment which they should obtain by taking full and correct dosage, but they run a much greater risk of developing drug resistance. This work, which was started in the central clinic, has been introduced now into the east and north chest clinics and has already played a significant part in pointing out a serious situation in relation to this disease. Investigations are still proceeding and a preliminary report is given in the annual report.

**Work
undertaken
to avoid
drug
resistance**

Once again it is disappointing to report a further increase in the number of acute cases of male and female gonorrhoea in 1961 compared with 1960. The number of male cases rose to 1,274 compared with 1,013 in 1960 and 940 in 1959, and 364 female cases occurred in 1961 compared with 301 in 1960 and 231 in 1959. The incidence in females, up to and including the age of 17 years, has also increased from 17 in 1960 to 32 in 1961. There has been a considerable amount of discussion in the national press about this problem and further investigations are taking place in Liverpool to see whether more details of the causes are available.

**Venereal
Diseases**

Details are given of the increased amount of after-care and care work undertaken in the field of venereal disease control including contact tracing.

**Mental
Health
Service**

The report of the mental health service development in 1961 probably represents one of the most important parts of my annual report this year. 1961 was the first full year when the Mental Health Act came into operation. A very full report is given in the text regarding the effect of this new Mental Health Act. The report is mainly divided into the following sections:—

- (a) Community care;
- (b) Employment;
- (c) Training;
- (d) Hostels and Mental Health Centre, and
- (e) Hospital admissions.

**Community
Care**

Community care has developed most satisfactorily during the year. Although there was a considerable amount of community care present in Liverpool before the Act came into operation, the emphasis in the past was primarily on the mentally sub-normal, whereas at present the Act has given an impetus to more balanced development, for now all forms of mental disorder are catered for. A large amount of home visiting continued during the year and during 1961 a total of 17,577 visits were carried out. This is a small reduction from the 19,011 which took place in 1960, but there are particular reasons for this, as during the year there was considerable dislocation of the normal services during May and June at the height of the poliomyelitis immunisation campaign. The character of home visiting has likewise changed for now there is very little formal or statutory visiting carried out, and much more purposeful, useful visiting is undertaken. In the place of the usual dramatic case histories there is only one history given, of a case which represents many of the difficult and in some ways unsatisfactory cases which are dealt with. Considerable improvement has been effected in this person but it is important to realise that in many of these cases the move towards rehabilitation is a 'very gradual one and must always take place against a family background whose influence can be far from suitable or satisfactory for the patient. So long as improvement is maintained, however, there is no doubt of the value of this service.

Staff

A change in the recruiting policy of the Health Committee has been made in 1961, as it is felt that dependence on mental hospitals for recruiting staff was no longer producing the best results, and it was consequently

decided to appoint trainee welfare officers who would, in due course, take the National Social Welfare Workers Course. Two officers have been seconded on full pay to the first two-year course arranged in Liverpool as a result of the Younghusband report and it is hoped that this, the first of many courses, will go a long way eventually to help solve the staffing problems. There has been an increase in the visiting carried out to the mentally ill and with the mentally sub-normal during the year and this, of course, is part of the general policy which was introduced by the new legislation. Changes have been made in the method by which the parents of a mentally sub-normal child are informed that the child is not suitable for normal schooling and is, indeed, ineducable. The mental welfare officer now delivers the official statutory letter personally and at the same time explains what it means and tells the patients what facilities for training are available under the health department.

During 1961, there was a further improvement in the number of con- **Employment**
valescent mentally disordered patients found employment. Eighty-one such patients were found employment compared with the figure of 61 last year and is the largest figure since the service started. It is equally encouraging to report that only seventeen persons subsequently lost the employment found for them. There seems to be no doubt at all that the passing of the Mental Health Act and the publicity which has gone with it has made employers in Liverpool much more aware of the problem and much more sympathetic, and it is a pleasure in this report to be able to thank many of them for their help and courtesy in this most important work of rehabilitation.

1961 saw a very important step forward in the training facilities in **Training**
Liverpool with the complete opening of six new training centres at New Hall. The official opening was performed by the Minister of Health, Rt. Hon. J. Enoch Powell, on the 3rd November, and with their opening the facilities for training in the city have at last been raised to the total of 550 places for mentally sub-normal persons compared with the previous rather overcrowded total of 350. This provision means that now, for the first time, there is adequate provision for such training within the city. Equally important are the steps being taken in the field of industrial training. Full details are given in the annual report of the facilities available at New Hall centres where there are three adult centres and three junior centres. It is planned to move to New Hall eventually all the adults in

training, leaving Princes Road, Dovecot and Garston to act as junior training centres. Difficulties attendant upon the off centre position of Fazakerley have risen during the year, but fortunately they did not appear to be any greater than was anticipated for it is quite possible to get a good working day for all mentally sub-normal persons attending even though some live in the south-end of the city. Some difficulties in regard to transport have been met and the changing of the actual itinerary of the 'buses led to difficulties for some children. It is, however, hoped that these will soon be sorted out. However, it is quite obvious that it will not be possible to open the special care unit fully until special transport is available.

**Industrial
Sub-
contracted
Work**

This work, which has progressed even faster than was anticipated, is given a very full description in the annual report and represents a very great step forward. It is concerned solely with simple tasks involving materials supplied by outside firms and the mentally sub-normal adults and persons attending the centre are employed in putting together these items. The whole of the money received for this work is divided amongst the workers on a points system which takes all kinds of factors into consideration to ensure that every backward, physically handicapped person receives due award as well as those who are quicker and fitter. As many people as possible have been given an opportunity of taking part and the best earnings have risen to 30s. a week. It is most satisfactory and encouraging to report the tremendous enthusiasm of both parents and sub-normal persons for this scheme.

**Residential
Training**

A new development in 1962 was an agreement to accept financial responsibility for the cost of maintaining two blind mentally sub-normal children in residential homes.

Hostels

Planning arrangements for hostels at New Hall, Fazakerley, were completed in 1961 and it is hoped that good progress will be made during 1962 in their conversion. It is planned that accommodation will be provided in twelve villas at New Hall to provide hostels for 150 residents, together with other amenities such as a social club, shop and tea room, an occupational therapy unit, swimming baths, gardens, bowling and putting greens. The development of the scattered homes which is the final stage of the Committee's plan will take place after construction of the hostels at New Hall which had to be given priority.

The mental health centre in Johnson Street was opened in December, 1961 and already has proved to be a valuable centre for social and training facilities for the mentally handicapped. A start was made modestly with two weekly sessions of occupational therapy and an evening club once a week, but it is expected to increase this to daily sessions and two full-time fully trained occupational therapists have been employed. By December, 1961, only a fortnight after opening, twenty patients were attending regularly, all of them having been referred by mental welfare officers.

**Mental
Health
Centre**

The progress of short-term care has continued throughout the year due to the assistance given by the Regional Hospital Board and the voluntary association which runs Orchard Dene. Altogether short-term care was provided by Regional Hospital Board for 69 persons and voluntary homes for 95, of which 75 were accommodated at Orchard Dene.

**Short
term
care**

In this section of the annual report, for the first time, there is constructive criticism in regard to the effect of introducing the Mental Health Act. It is a sobering thought that since the introduction of the Mental Health Act there has been an increase in the number of compulsory admissions to hospital. Also discussed in detail is the disturbing finding that a much larger proportion of elderly people were admitted to mental hospitals in this way in 1961 than in any recent year.

**Hospital
Admission
Procedure**

During 1961 the ambulance service carried an even larger number of patients than ever before—240,855. This compares with the figure of 230,010 in 1960. The arrangement whereby ambulance transport officers have been introduced into the main hospitals, with the exception of Alder Hey Hospital, has continued to work most satisfactorily during the year, and has resulted in the uncovering of many difficulties which have caused delay and irritation to all people using the service. It is expected that the efficiency of the service will greatly increase as a result of this arrangement.

**Ambulance
Service**

A start was made during the year with the replacement of the radio-telephony apparatus by more modern sets, which will be necessary in all ambulance vehicles by the middle of 1962, as a result of a decision by the Postmaster-General to change the wavelength on which they can operate.

The occupational therapy service has continued to develop during 1961, although at times it has experienced difficulty due to a shortage of staff. With the opening of the new training centres at Fazakerley, the number of mentally subnormal cases treated has been reduced, but the number of

**Occupational
Therapy**

psychiatric patients has been greatly increased. The aim of occupational therapy for such patients is invariably resocialisation as many of them find it very difficult to mix and communicate with others, and this can best be done in groups away from home. But many months of domiciliary therapy may be required before a patient gains enough confidence even to travel to the centre on his own.

In December, 1961, the new mental health centre in Johnson Street was opened for mentally ill patients, and two therapists have been engaged to work in the centre. At the start, the centre was opened on two afternoons a week only, and run by the head occupational therapist and a therapist from the rehabilitation unit.

**The
Occupational
Therapy and
Rehabilita-
tion Unit**

The occupational therapy and rehabilitation unit, Rumney Road, has proved a great success during the year and 103 patients have attended either daily or twice or three times a week. Their ages have varied from eleven to eighty, and mental and physical patients are treated side by side. Self-help is one of the main aims of this unit and many of the patients who first come convinced that they cannot themselves do anything, soon find out that, with the right facilities and when taught to do things in a new way, there are many things they can manage. In addition, an outing was organised in June and the patients attending the unit were taken by coach to North Wales where they had a trip around Prestatyn. Two ambulance attendants accompanied the party to lift the severely handicapped in and out of the coach and their assistance was invaluable. Many of these patients had not been further than home or hospital for many years and all thoroughly enjoyed the outing.

In the same way at Christmas a party was held in the Unit and after tea patients joined in the games, in some of which even the most disabled could join.

Aids for the disabled have been constantly in demand and bath seats are proving especially useful both for the handicapped and elderly who find it very difficult to get in and out of the average bath. A number of handrails and bathrails have been supplied. Eating, toilet and dressing aids are amongst the most important which have been supplied.

**Assistance
with
Housing for
Handicapped
Persons**

Consultation with the City Architect and Director of Housing has resulted in the plans of three houses and a flat being adapted for the needs of wheelchair patients. The houses are still under construction, but a patient has moved into the flat. Another was made available in April and

it is interesting to note that, although this patient's wife died in August, he has since managed to live quite satisfactorily on his own in this adapted flat. Most encouraging details of cases assisted are given in the text of the report and include severely crippled people who have been in bed for many years, and at least one patient, who, described as hopelessly crippled, had improved sufficiently to be able to walk about the house with a walking frame. It is impossible to over-emphasise the value of such work to severely handicapped people. There is no doubt that the pioneer work which Liverpool is doing in this respect is gaining great interest throughout the country, and many visitors from other districts visited the centres during the year.

Provision of residential accommodation for elderly persons needing care and attention has still remained the major problem confronting the welfare service during the year. At the beginning of the year the number of persons on the waiting list for admission to accommodation was 248, but it is pleasant to record that by the end of the year this figure had fallen to 214.

**Welfare
Service.
Provision of
Residential
Accommoda-
tion**

Planning for the future includes the building of three new hostels, one in the West Derby area which was commenced during the year, and one in each of the grounds of Westminster House and Croxteth Lodge. Towards the end of the year a large house known as "Beechways" in Southport was purchased which had previously been used as a nursing home. This will accommodate between 50 and 60 residents and will be used primarily to provide holiday accommodation for residents from various homes in Liverpool. It was decided that, in future, this home will be called "Westdene".

The City Council's policy of upgrading Westminster House has continued during the year with the modernisation of House No. 8. In addition, the complete overhaul of the kitchen arrangements at Westminster House has taken place.

The experiment which was reported last year and which was a success in 1960, whereby a small number of residents in the City Council's homes were provided with a week's holiday in Llandudno was repeated in 1961, and this year 246 residents had a holiday during the quieter periods of the season between April and October. This was a very successful venture and all residents greatly enjoyed the change.

At Christmas the experiment which had been tried previously with success was repeated, whereby a number of elderly persons living on their own were invited to come into the residential establishments to spend Christmas Day with the residents. In addition, a number of gifts were received from members of the public which were distributed to needy persons living in their own homes, especially those living alone. These arrangements were greatly appreciated by lonely old folk and did a great deal to make Christmas much happier for them.

**Temporary
Accommo-
dation**

The problem of temporary accommodation has continued unchanged during 1961. 907 persons were admitted and 889 discharged during the year. The maximum number of people accommodated at any one time was 110, and the minimum number 43. The daily average accommodated throughout the year was 71. The average length of stay of all persons was fifteen days, whilst the longest period was 40 weeks.

**Domiciliary
Welfare
Service**

Details are given in the text of the annual report of eight interesting cases which are representative of the sort of case which the welfare visitors dealt with during the year. It will be seen that they include most difficult problems, and not in every case was it possible to arrange a successful outcome.

**Removal
to suitable
premises of
persons in
need of care
and
attention**

During the year it was necessary to remove compulsorily from their homes fifteen persons under the provisions of the National Assistance Acts, 1948 and 1951. This is a reduction from the figure of seventeen persons who were removed in this way in the previous year.

**Mobile
Meals**

The number of mobile meals provided once again rose to the highest figure ever recorded in the City and an average of 1,180 meals were delivered weekly to about 410 old persons, each old person usually getting three such meals a week. The department has continued to have the exceedingly helpful assistance of the Women's Voluntary Service whose members act as servers of the meals.

**Rest Centres
for elderly
persons**

The three rest centres now in being for elderly persons all had a most successful year. These centres are situated at River View, Pier Head, Paradise Street, and Sheil Park, and were as popular as ever. Arrangements were made with the Liverpool Old People's Welfare Council to establish a rest centre and club for old people in the Woolton area. A suitable site was secured by the City Council who also agreed to provide the necessary site works for the prefabricated building. Grants have been promised

towards the cost of the building itself from the King George VI Foundation, and voluntary organisations in the district. It is expected that work on the actual site will begin during the spring of 1962.

Details are given of the centres which have been established for handicapped persons welfare in Garston, Mill Street, Knotty Ash and Walton Village, and the year saw a steady increase in the use being made of these centres.

**Welfare of
Handicapped
Persons**

In addition, four organisations, the Infantile Paralysis Fellowship, the Liverpool Hard of Hearing Club, the Liverpool Spastic Fellowship, and the Invalid Tricycle Association, all made very good use of the premises at 100, Walton Village for social and recreational purposes. Improvements were carried out at these premises during the year including the laying of thermoplastic tiling on the floor of the main room and the provision of electric heaters.

There has been little change in the statistics regarding blind welfare during the year, there being a very slight reduction to 228 from 234 in the number of persons examined for blindness. The number of persons employed in the workshops fell to 76 from 78 but the number employed in open industry rose to 111 from 110.

**Blind
Welfare
Statistics**

It is once again most encouraging to report that there has been a substantial increase in the number of severely handicapped persons who are employed in these workshops. By the end of the year this figure rose to the all-time record one of 66 from 59 in the previous year. Most of these workers are employed in the trade of book-binding but eight are working in the printing department and ten in the section dealing with the renovation of Christmas Cards. The City Council has continued to grant-aid the excellent work done by these workshops.

**Sir Robert
Jones
Workshops**

The deaf and dumb welfare in the City of Liverpool has continued to be carried out most satisfactorily by the Liverpool Adult Deaf and Dumb Benevolent Society, and the Catholic Deaf and Dumb Society of St. Vincent de Paul. Financial aid has continued to be afforded by the City Council to an approximate amount of £3,920 per year.

**Deaf and
Dumb
Welfare**

At present there are 79 epileptics who are receiving residential care at a cost to the local authority. The club, run by the Liverpool Merseyside Epileptic Association, continued to do excellent work and has received the active support of the staff of the health department during the year.

Epileptics

**Parking of
Vehicles**

During the year the attention of drivers of invalid vehicles was drawn, by press notice and other ways, to the issue of a badge for display on vehicles, and which would help the Police to assist the drivers in parking, and to exercise discretion in their favour wherever possible. By the end of the year such badges had been issued to 114 persons.

**Problem
Families**

There has been, once again, an increase in the amount of work undertaken by the welfare service in relation to problem families, and details are given of the work carried out.

**Medical
Examinations**

During the year arrangements continued for medical examinations of Corporation employees to be carried out by the assistant medical officers in the health department, the final assessment in each case being made by a principal medical officer. During the year there was an increase of 13 per cent to 2,942 cases examined compared with the previous figure of 2,603 in 1960. Full details of the results of these examinations are given in the text of the report.

**Environ-
mental
Health
Control**

It is most satisfactory to report that the training scheme has continued to develop very successfully during the year and has played a very vital part in supplying qualified inspectors for appointment within the department. During the year, eleven assistant inspectors obtained the full qualification of the Certificate of the Public Health Inspectors Education Board and nine qualified inspectors obtained the Meat and Other Foods Certificate of the Royal Society of Health.

**Work in
default**

The amount of work carried out in default of owners continued on a similar scale as in previous years and represented roughly about £3,000 worth of work.

**Common
Lodging
Houses**

Considerable details are given regarding the applications received during the year for registration of common lodging houses. Following investigation in one of these instances, the institution of legal proceedings against the owner for keeping a common lodging house without being registered, resulted in the necessary improvements and repairs being adequately carried out. The application was then approved, and the premises registered. Details are given in the text of the annual report regarding the various inspections undertaken of common lodging houses and seamen's lodging houses.

During the year it has been very noticeable that the vast majority of houses that are at present being represented as unfit for human habitation are the older type of terraced house, and although completely lacking in modern amenities, include many well maintained properties. No longer under the term "slum clearance" are houses being dealt with of the older, more unsatisfactory type of dark, dingy, court or back-to-back house. The effect of this change has to some extent been reflected at the public enquiries held during the year, by a number of owners objecting to the inclusion of their properties in compulsory purchase orders as unfit for human habitation. During the year, 2,110 houses were surveyed for unsuitability and for representation as unfit for human habitation and of these, 744 were represented in nine clearance areas. Full details of the work undertaken in slum clearance and in dealing with individual unfit houses is given in the text of the annual report.

The enforcement of the Shops Act, 1950, and the Young Persons' (Employment) Act, 1938, has continued to be carried out by officers of the health department. This work includes inspection of shop premises, and these are inspected during the routine inspection of all premises on each district, infringements being carefully considered by the senior inspectors and subsequently dealt with either by informal action or formal notice.

Reference has been made in previous annual reports to the difficulties of enforcement of the shops law and this has continued during 1961.

Attention has also been given to street trading and mobile shops but only limited action has been possible during the year owing to the insufficient powers affecting the hours of trading by mobile shops.

Reference is made to the work carried out during the year in connection with the provisions of Section 42 of the Local Corporation Act, 1955, and the Byelaws made thereunder. In respect of hairdressers, 40 new registrations and 21 transfers of ownerships were dealt with and the total number of hairdressers and barbers on the register at the end of the year was 694. A total of 1,243 inspections were made and 159 infringements dealt with by warning letters.

Although the administration of the major part of the Factories Act is the responsibility of H.M. Inspectors of Factories, certain duties are allocated to the City Council. In the case of factories where food is

prepared, additional responsibilities are laid down upon the City Council under the Food and Drugs Act, 1955, and the Food Hygiene (General Regulations) Act, 1960, with the object of preventing contamination of the commodities which are being handled. During the year close co-operation has been maintained between the health department and H.M. Inspectors and it is a pleasure to record the co-operation which has been received in this way.

Many systematic visits have been made to various factories throughout the City during the year to check whether the various parts of the Acts referred to are being complied with.

**Food
Factory**

Special supervision has continued to be carried out on food factories as these have been found to be specially liable to lead to trouble if food hygiene standards are not kept at the highest.

**Industrial
Nuisances**

Complaints in regard to industrial nuisances have included such nuisances as effluvia, dust, noise and excessive steam. In most instances it has been possible to trace the source of the nuisance in relation to effluvia and usually it is attributable to careless use or mishandling of plant, although the nuisance can be greatly increased by certain weather conditions.

Noise

Once again particular attention has been directed towards excessive and unreasonable noise. During the year sources of noise which have caused complaint have included factory machinery, circular saws, dance bands, milk delivery vans, dogs barking, high-speed fans, motor milling and electric sirens summoning employees to work. The abatement of these noises has mainly been achieved by the co-operation of the persons concerned and it has been noticed that there is a genuine desire on the part of managements to comply with the text and spirit of the Noise Abatement Act, 1960.

**Offices and
Work Places**

Considerable reference has been made in my previous annual reports to the problems of workers in offices and factories and it was disappointing to find that, during the year, although the Offices Act is on the Statute Book, the purposes of the Act have not been achieved as regulations have not yet been made. Although it has been stated that it is the intention of the Government to supersede the Offices Act by introducing a measure of a comprehensive nature on the lines of the Factories Act, at the end of the year no such measure had been tabled in the House.

Details are given of the work undertaken during the year on super-
visory visits paid to such premises and the steps taken to improve the
standards of hygiene, particularly in regard to drinking utensils.

Licensed
Premises

The Clean Air Campaign in the City was given a further sharp impetus
this year by the decision of the Minister of Housing and Local Government
to approve the policy of the City Council in confirming the No. 10 Smoke
Control Order 1960. This is an extremely large area covering 7,292 acres
in the south-end of the City. With the present nine earlier smoke control
areas confirmed this means that there will be a total of 42,879 premises
within the first ten smoke control areas in the City.

Atmospheric
Pollution

Improvements have been constantly noted in the industrial premises
within the City and also in the hospital premises. It is particularly
pleasant to record that during the year the new boiler installation sited at
the Liverpool Maternity Hospital was opened. This is a district system
of heating and the steam supply will cover the four adjacent hospitals and
remove what has been a black spot in atmospheric pollution in the centre
of the City in the past.

The Clarence Dock Power Station has still presented a problem during
the year but adaptations have brought about some improvement. New
techniques which were found successful last year have been applied to a
further number of boilers and close co-operation between the public health
inspectors and the engineers at the station is showing some results. How-
ever, the complete solution of the problem, particularly at peak generating
periods, is almost impossible, having regard to the need for large-scale
renewal of boiler plant.

Clarence
Dock Power
Station

Once again it is satisfactory to report that there is less evidence of
rodent infestations throughout the City. In addition, there is evidence that
the general public are availing themselves more of the services of the
department in eradicating small infestations of rats and mice. It cannot
be over-emphasised that the most effective way to treat small infestations
is to seek the advice of the department, which is readily and freely given
to householders, for this not only ensures a complete and skilful destruction
of these pests in the house concerned, but also allows a more general
observation to be made in the area of the infestation and for some form of
block control to be carried out.

Rodent
Control

**Adulteration
of Food
Supplies**

The routine sampling work, into all types of food supplies in the City, has continued throughout the year. It is most satisfactory to report that out of 3,939 samples, only 151, or 3·8 per cent were found not to be genuine or otherwise irregular. This is a marked reduction from the 5·2 per cent unsatisfactory results obtained last year, and is most encouraging.

**Milk
Supplies**

The supervision and inspection of milk supplies continued throughout the year by the public health inspectorial staff, who carried out an increased number of visits, 632 in number, to pasteurising plants for the purpose of sampling and other inspection purposes. Special attention is always paid to temperature and the functioning of the indicating and recording instruments of such pasteurising plants and the holding times.

**Supervision
of Food
Supply**

Full details are given of the diverse work carried out during the year by the inspectorial staff in relation to the supervision of food supplies within the City. Daily visits are made to the wholesale fruit and vegetable markets at Cazneau Street, the wholesale fish market at Great Charlotte Street and the St. John's retail market, in addition to wholesale warehouses situated throughout the City. Investigations into food complaints received from members of the public have been carried out with regard to fitness for human consumption and questions of the nature, quality and substance of the food. During the year there was a marked increase in the quantity of vegetables rejected on inspection and this, in particular, relates to imported onions and foreign potatoes. During the months of April and May it was found that imported potatoes entering the City were often in a sloughy and soft condition rendering them unfit for consumption. The reasons for this were found to be unsatisfactory storage conditions on board ship and delay whilst in transit.

During the year it was found necessary to inspect and carefully examine the entire contents of four retail food premises where damage had been caused by either flooding or fire. All rejected foods were destroyed and the salvaged items placed in the custody of the insurance assessors concerned.

There were 339 complaints received from members of the general public during the past year involving a diversity of foodstuffs. The complaints notified included such reasons as infestation, suspected vermin contamination, mould formations, damage, and extraneous matter within their substance. In many instances investigations involved inspection of two or three premises in regard to foodstuffs, methods of storage, and compliance with the requirements of the Food Hygiene (General) Regulations, 1960. In all cases a satisfactory conclusion was reached and the complainant notified of the action taken by the department. It is interesting to note that during the year, the total weight of foodstuffs rejected, with the exception of meat, has increased to 616 tons.

1961 saw the largest number of animals ever slaughtered in one year in **Meat**
Liverpool—561,662. It is most satisfactory to report that 100 per cent **Inspection**
meat inspection was carried out on all carcasses at the time of slaughter and
dressing. As there were only six days in the year when slaughtering did
not take place either at Stanley Abattoir or at the private abattoir at
Woolton, this, of course, produced problems for the staff, but with the
extra number of qualified inspectors now available it has been possible to
meet this demand even at peak periods. Full details are given in the
text of the conditions found in these examinations.

An interesting section in the Annual Report discusses the implementation
of the New Slaughterhouse Hygiene Regulations and the various problems
which arose, particularly with the lighting, of the abattoir. Much experi-
ment and research had to take place before a satisfactory artificial light was
found in which it was possible to work and recognise colours reliably.

In accordance with the instructions of the Health Committee special **Food**
detailed attention was given during the latter half of the year to the **Hygiene**
conditions in food premises and particularly in the distributive food trade
and street trading.

The result of this intensive action confirms that there is a need for
constant supervision of a considerable number of these establishments, stalls
and vehicles. The work already put into the enforcement of the Food
Hygiene Regulations and the court proceedings and action taken by the
department have not yet ensured that the correct standards of hygiene are
always maintained. The main problems discovered affected both the
proprietors and the personnel working in such establishments. Even where
shops have been modernised by the installation of new equipment, including
floor coverings and more satisfactory wall surfaces, it has been found in a
number of instances that the deterioration in personal hygiene arrangements,
day to day cleaning and the general standard of clean food handling was
entirely due to the staff.

During the year, 27,657 visits were made to retail food shops, cafes,
bakehouses, licensed premises, food factories and street traders, and 8,972
infringements dealt with in respect of these visits.

Arising out of the action taken in respect of the food trade a total of 76
informations were laid and as a result of the prosecutions, fines totalling
£261 and £62 costs were imposed.

This section once again has been concerned with very many different **Disinfection**
functions throughout the department, particularly those connected with **and**
supply and demand. During the year there was considerable increase in **Disinfestation**

the number of meals on wheels provided and 61,832 visits were made in 1961 compared with the previous highest total in 1960 of 47,793. At present six vans are used for this purpose daily. Another service which this section undertook throughout the year was the delivery of vaccine supplies and syringes to all the units in the poliomyelitis immunisation campaign in May and June.

Cremations

The arrangement continued during the year whereby the Medical Officer of Health assisted by the deputy medical officer and one of the principal medical officers acted as medical referee and deputy medical referees for the Liverpool crematorium. The number of cremations carried out in this way at the Liverpool crematorium, each entailing a certification by the medical referee, rose once again to the all-time high figure of 3,410, which is an increase of 296 over the number undertaken in the previous year.

Once again this report is an account of the work of every member of the Health Department staff, particularly in the poliomyelitis campaign. If the staff had not been prepared to work as a team the results could not have been achieved, but this happens almost without exception in every aspect of our endeavours. I wish to thank all the members of the staff very particularly on this occasion for their enthusiasm and loyalty during the year and for the long hours they put in as a result of the poliomyelitis campaign. My thanks are also due to other Corporation Departments for their assistance when required. I wish to make special reference to my Deputy, Dr. J. B. M. Davies, who had to carry on single-handed for a long period during the year, first of all owing to illness on my part and later when I was on special leave.

I wish to acknowledge the help given during the year by Alderman Alex. Griffin, who was Chairman for the first part of the year, and Alderman Gordon F. Catlin, who took over in May 1961, and also the Deputy-Chairmen, Alderman M. J. Reppion and Alderman J. E. Thompson, all of whom have devoted much time and energy to the work of the department. Finally, I am pleased to acknowledge the assistance given by the members of the Health Committee, particularly the Chairmen of the Sub-Committees, and for the kindness and courtesy with which they have considered the reports and recommendations made to them during the year.

I am,

Your obedient servant,

Andrew B. Semple

Medical Officer of Health.

CITY OF LIVERPOOL

SUMMARY

OF

VITAL STATISTICS FOR 1961

Area (land and inland water)	27,818 Acres
Population (Estimated by Registrar-General)	745,810
Deaths (all causes)	9,262
Death rate per 1,000 population	12.4
Live Births	16,492
Live Birth rate per 1,000 population	22.1
Percentage of illegitimate live births	5.7
Stillbirths	380
Stillbirth rate per 1,000 total (live and still) births	22.52
Total Births	16,872
Infant Deaths (under one year)	467
Infant Mortality rate per 1,000 live births	28.3
" " " " 1,000 legitimate births	28.1
" " " " 1,000 illegitimate births	31.7
Neo-natal Mortality rate (First four weeks) per 1,000 related live births	18.98
Early Neo-natal Mortality rate (First week) per 1,000 related live births	16.1
Perinatal Mortality rate (stillbirths + deaths during first week) per 1,000 total live and stillbirths	38.29
Maternal Deaths	2
Maternal Mortality rate per 1,000 total births	0.12
Deaths from:—Pulmonary Tuberculosis	80
Death rate	0.107
Non-pulmonary Tuberculosis	6
Death rate	0.008
Respiratory Diseases	1,888
Death rate	2.5
Cancer (all forms)	1,708
Death rate	2.29

VITAL STATISTICS.

Statistical Appendix

The majority of the lengthy statistical tables are included in a special appendix at the back of this report. A list of these tables is given on pages v-vi of the preface.

Births.

Birth Rate

During the year, 16,492 live births were registered within the City which represents a birth rate of 22.1 per 1,000 of the estimated mid-year population. 8,518 of these births were male and 7,974 were female. 5.7 per cent of the total live births (946 births) were illegitimate live births. These figures show a slight increase in the birth rate for the year compared with 1960. There has also been a small increase in the percentage of illegitimate births. The birth rate within the City continued to be considerably higher than the average for England and Wales, which, for the year, was 17.4 per 1,000. The variation in births and stillbirths from 1938 to 1961 inclusive is given in the graph on the page facing.

Stillbirths.

Stillbirth Rate

There were 380 stillbirths registered in the City during the year, representing a stillbirth rate of 22.5 per 1,000. This is a slight reduction on the figure of 23.1 for the preceding year. The stillbirth rate among legitimate babies was 22.6 per 1,000 and among illegitimate babies was 21.7 per 1,000.

Mortality.

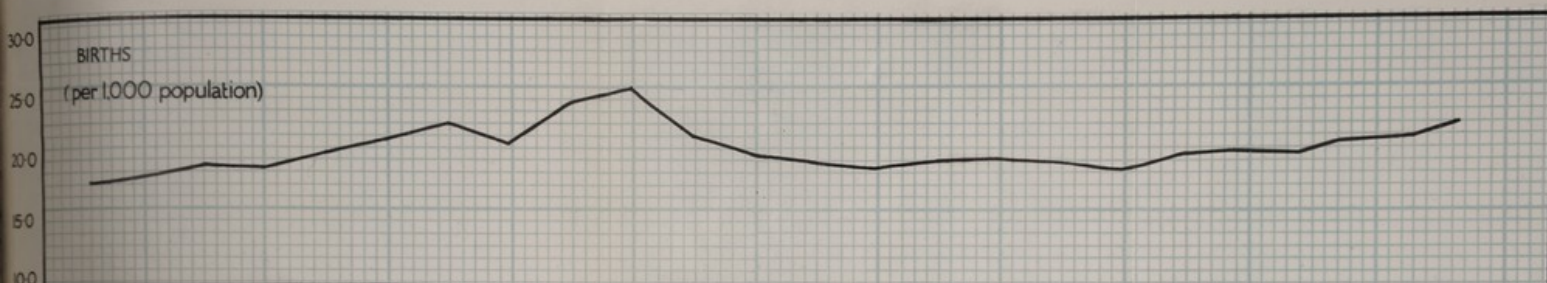
General Death Rate

There were 9,262 deaths registered within the City during the year, 4,761 males and 4,501 females. This gives a general death rate of 12.4 per 1,000 as compared with a death rate of 11.8 for the preceding year. The number of deaths from cancer of the lung was 525. Deaths from tuberculosis during the year were 86 as compared with 84 in the previous year.

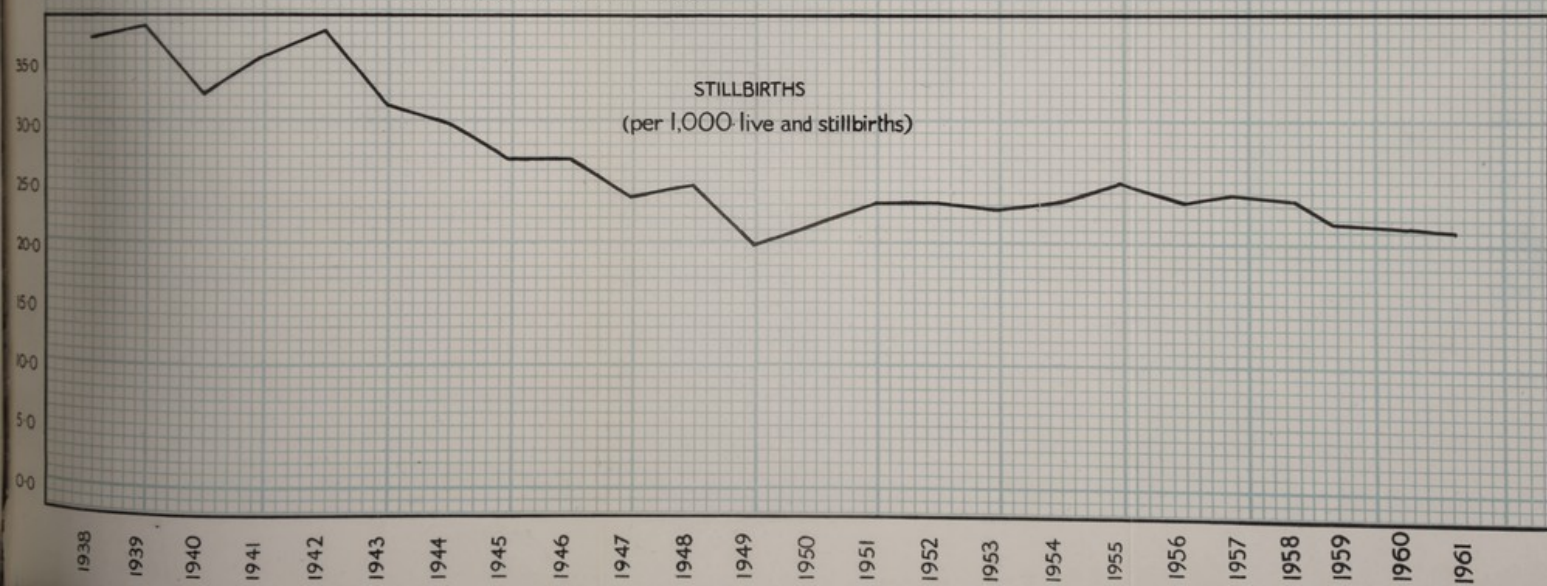
The trend of mortality of all causes and certain specified diseases have been prepared and are produced on the accompanying graphs. The full details of the causes of mortality are given in the statistical appendix.

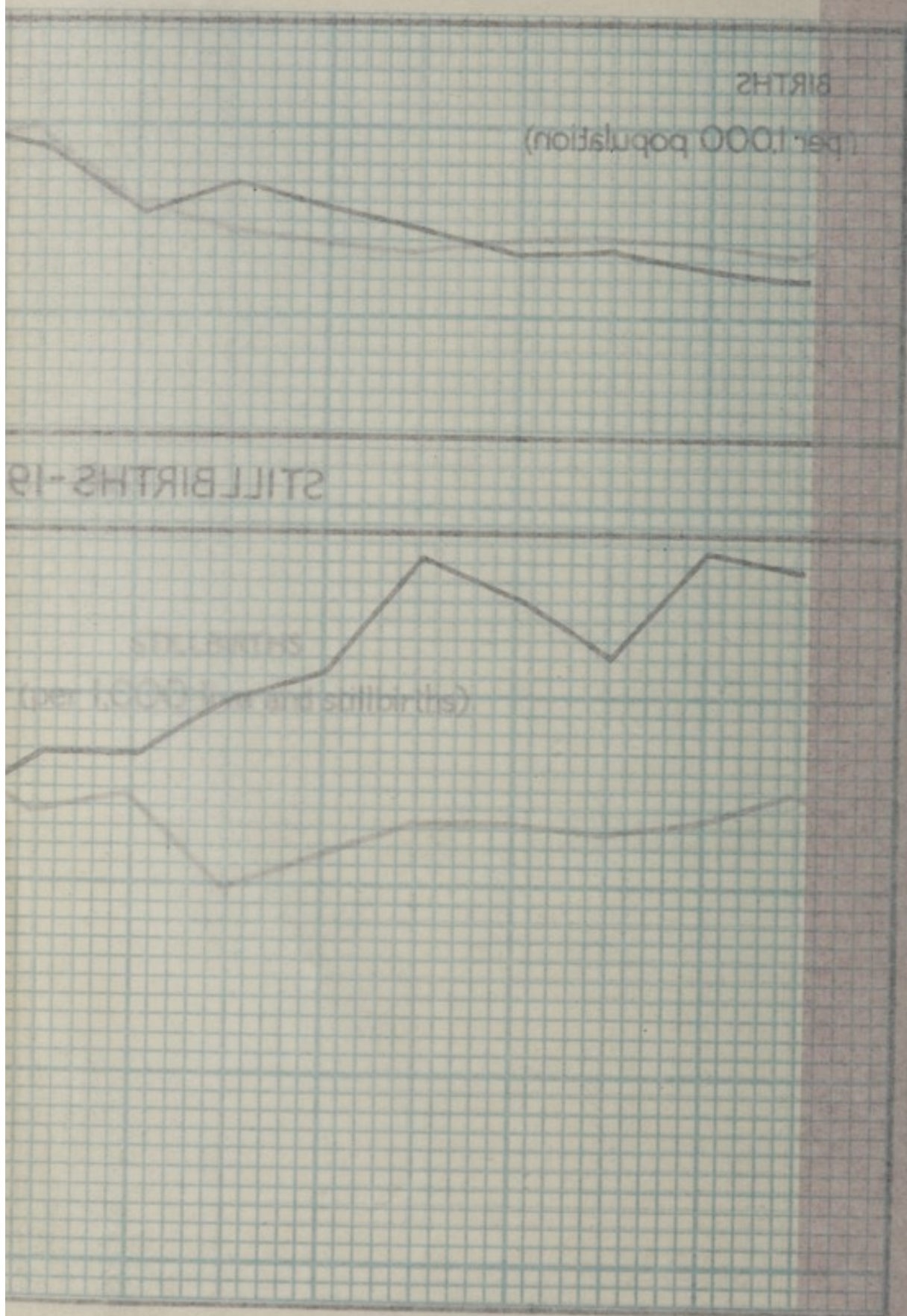
CITY OF LIVERPOOL

BIRTHS - 1938 - 1961



STILLBIRTHS - 1938 - 1961

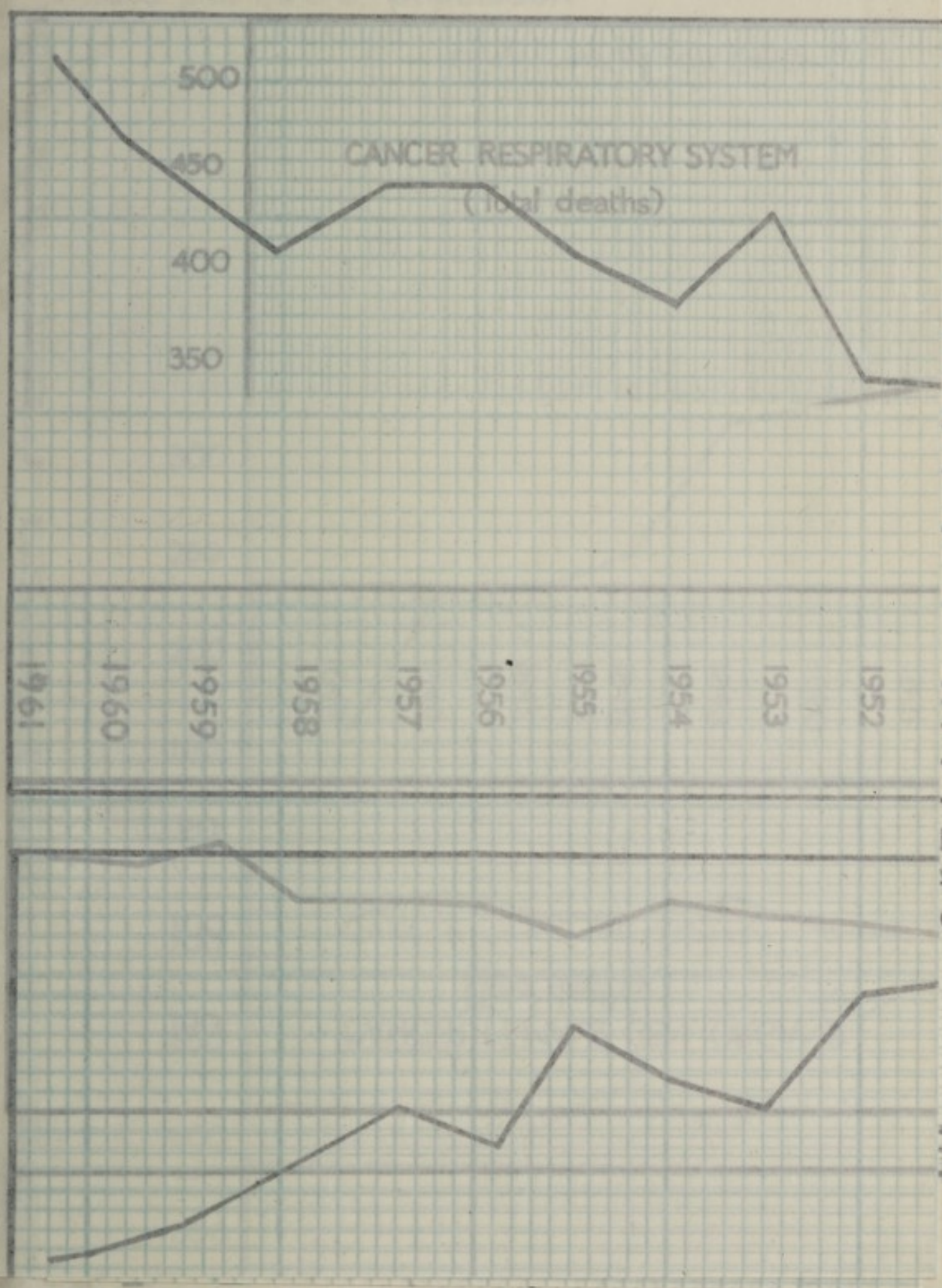




1947 1948 1949 1950 1951 1952 1953 1954 1955 1956

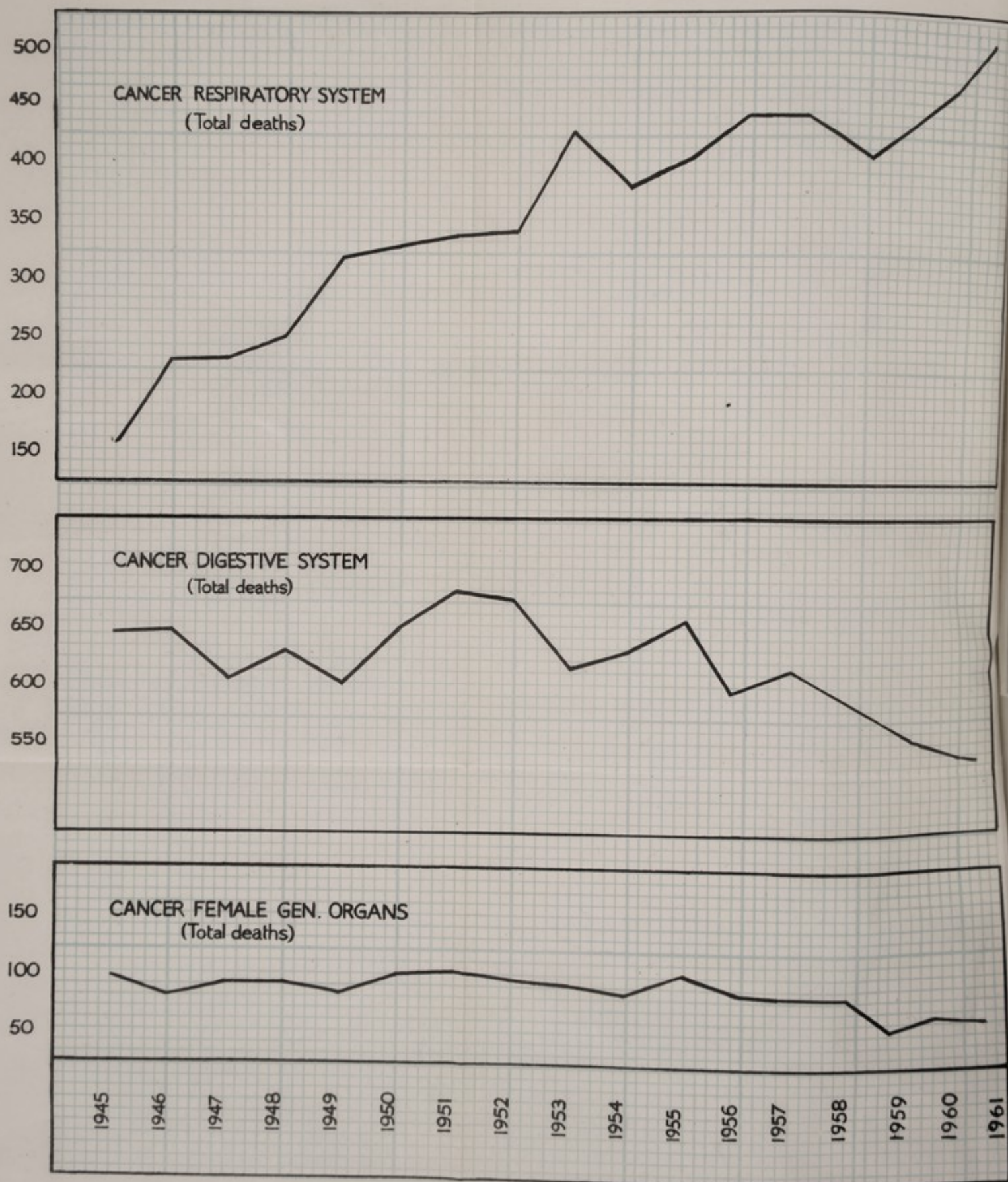
LIVERPOOL - MORTALITY TRENDS

1945-1961



TRENDS OF MORTALITY-LIVERPOOL

1945 - 1961

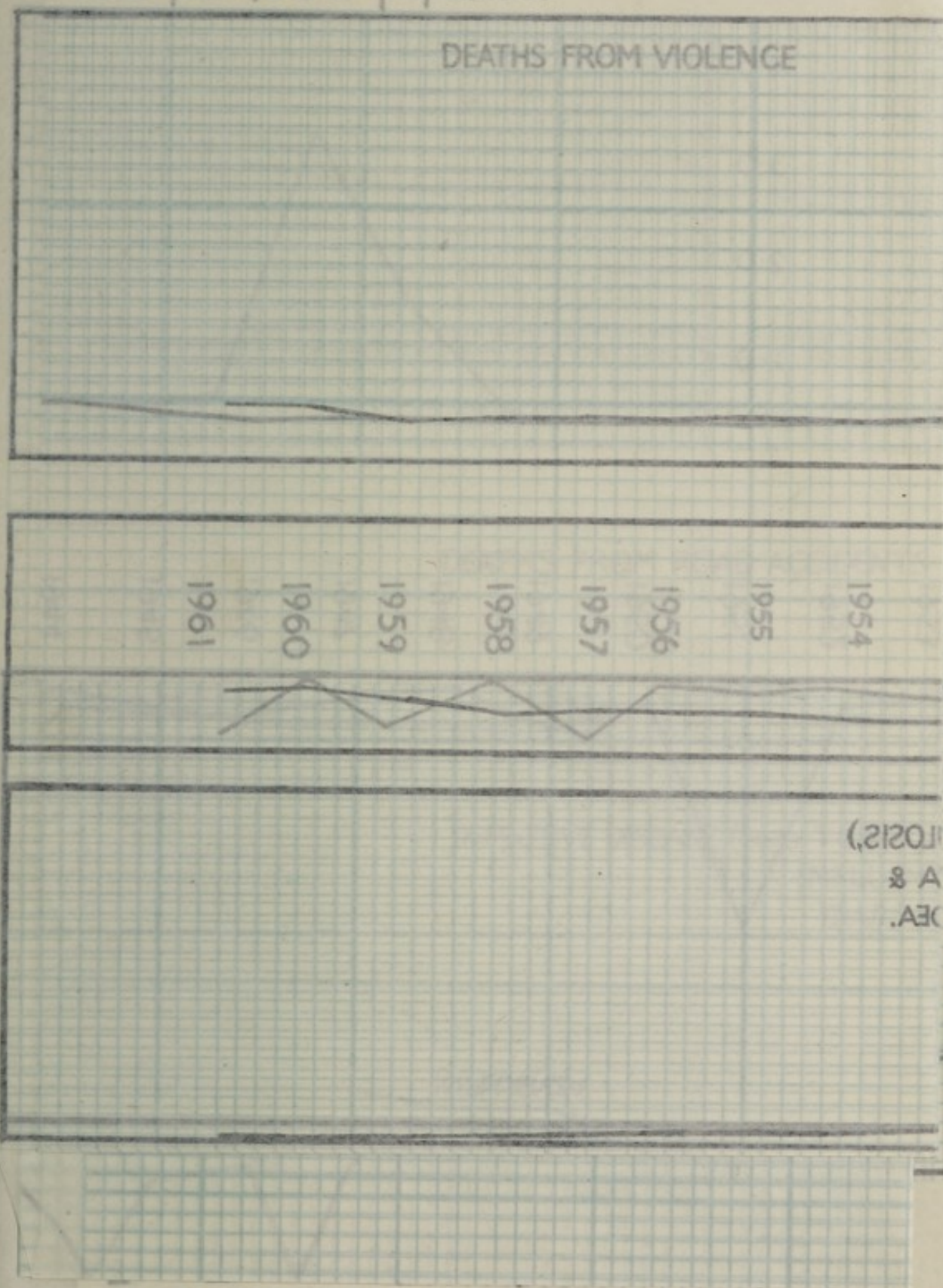


OF MORTALITY—LIVERPOOL

1938 — 1961

rate per 1,000 population

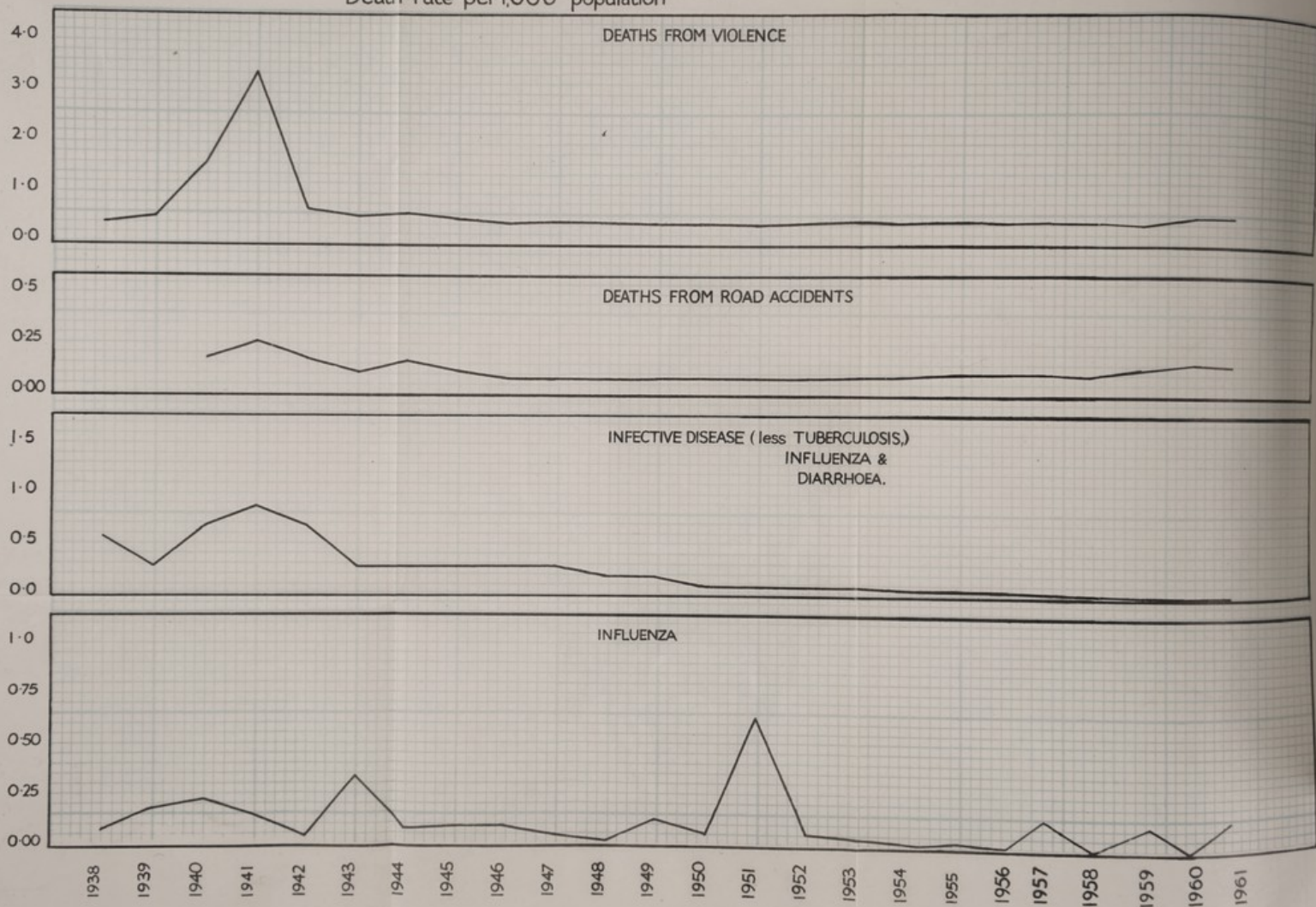
DEATHS FROM VIOLENCE



TRENDS OF MORTALITY—LIVERPOOL

1938 — 1961

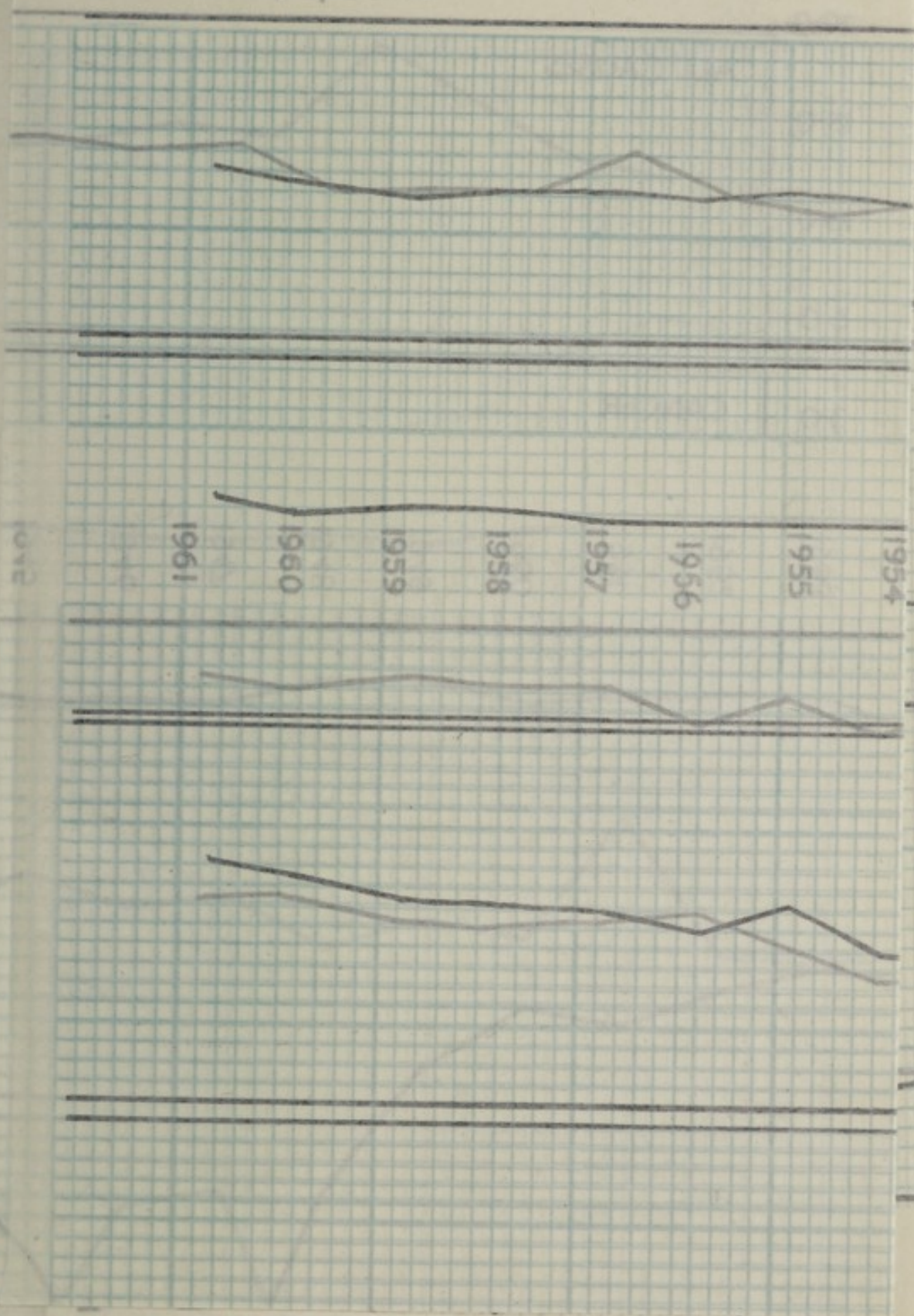
Death rate per 1,000 population



MORTALITY - LIVERPOOL

38 — 1961

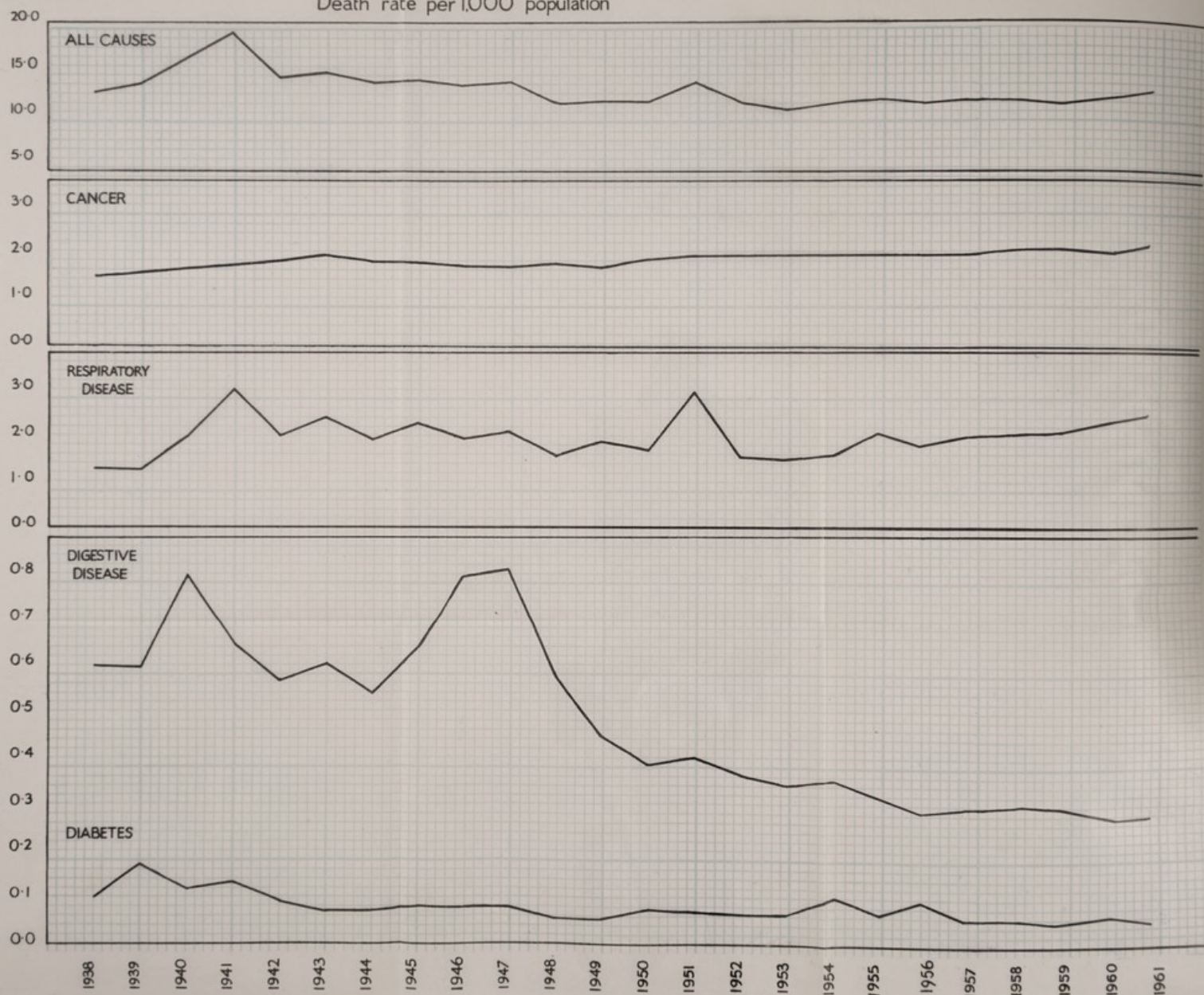
per 1,000 population



TRENDS OF MORTALITY - LIVERPOOL

1938 - 1961

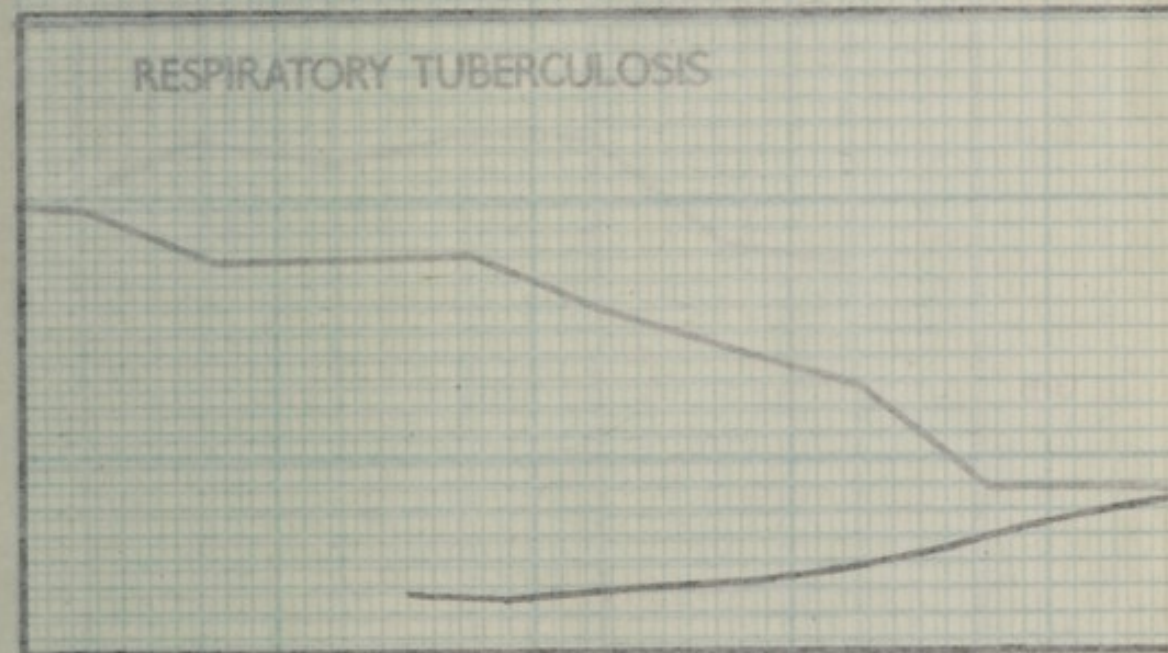
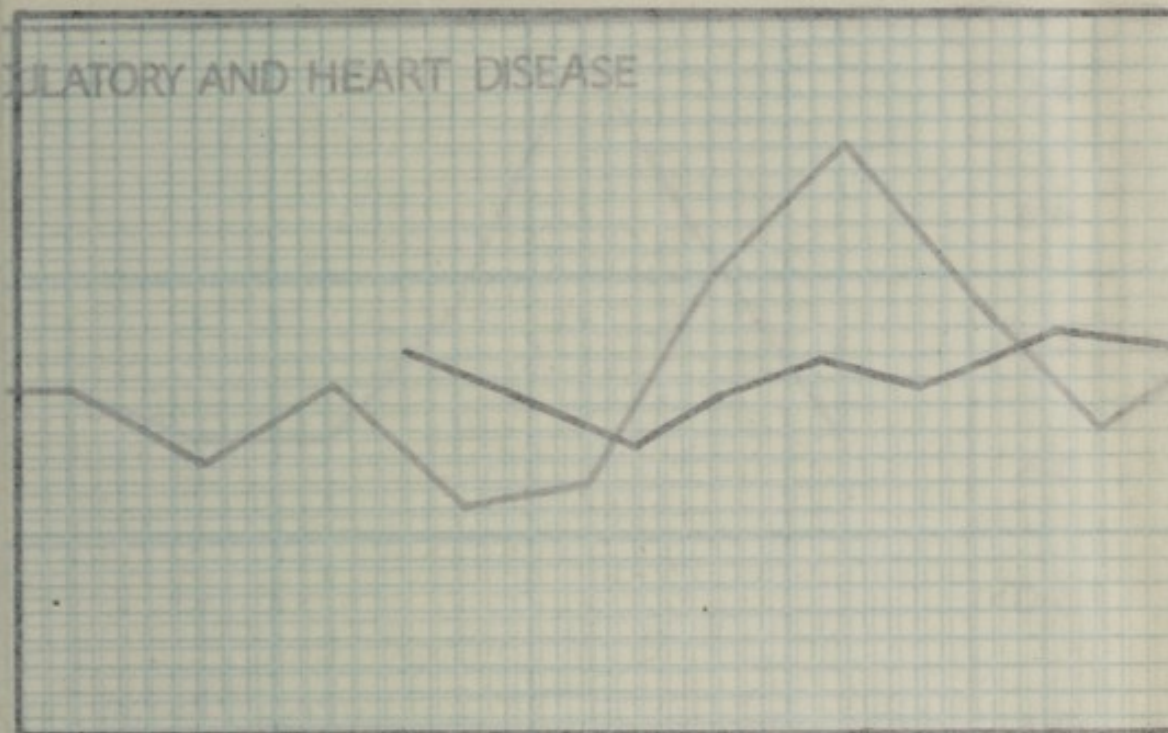
Death rate per 1,000 population



MORTALITY - LIVERPOOL

1938 - 1961

rate per 1,000 population

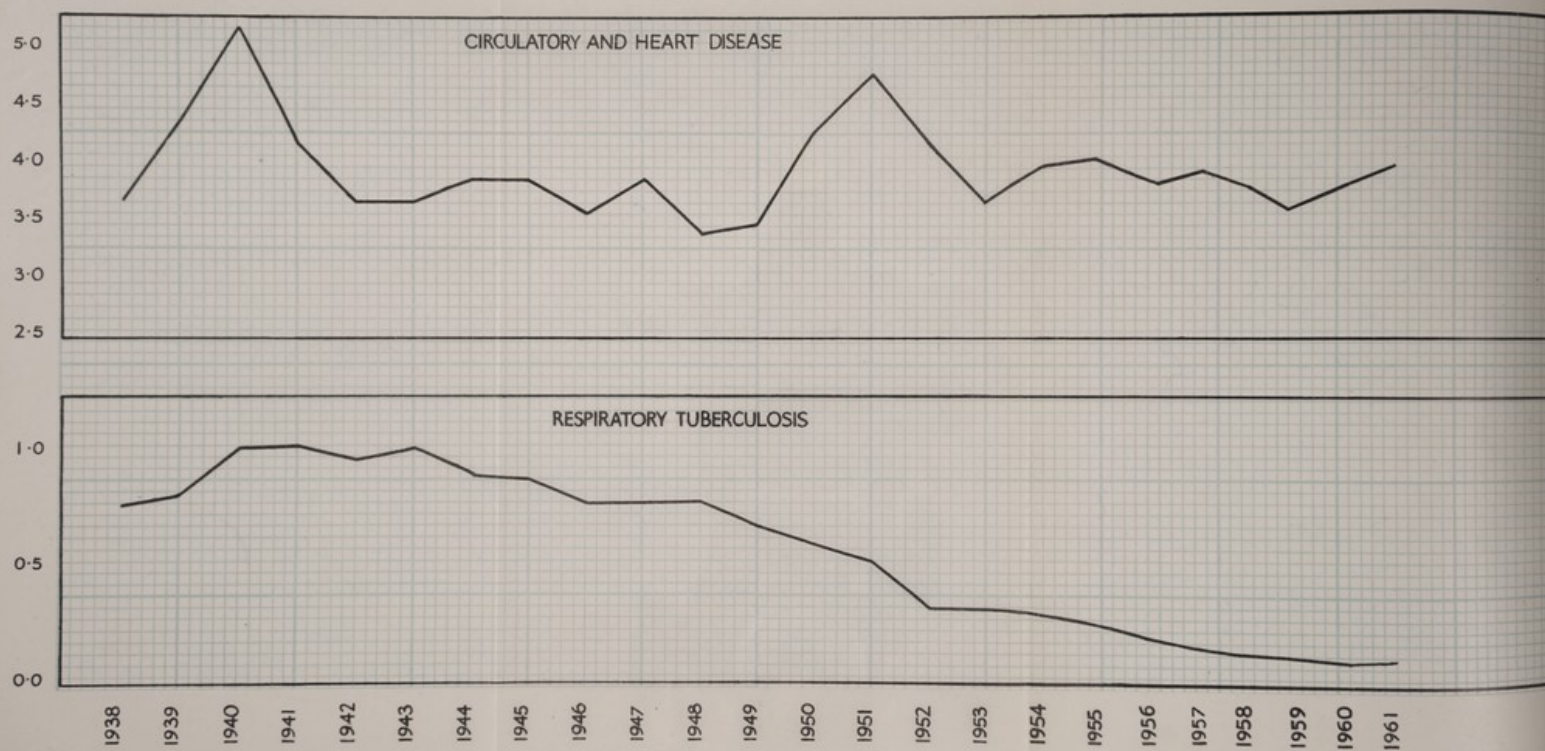


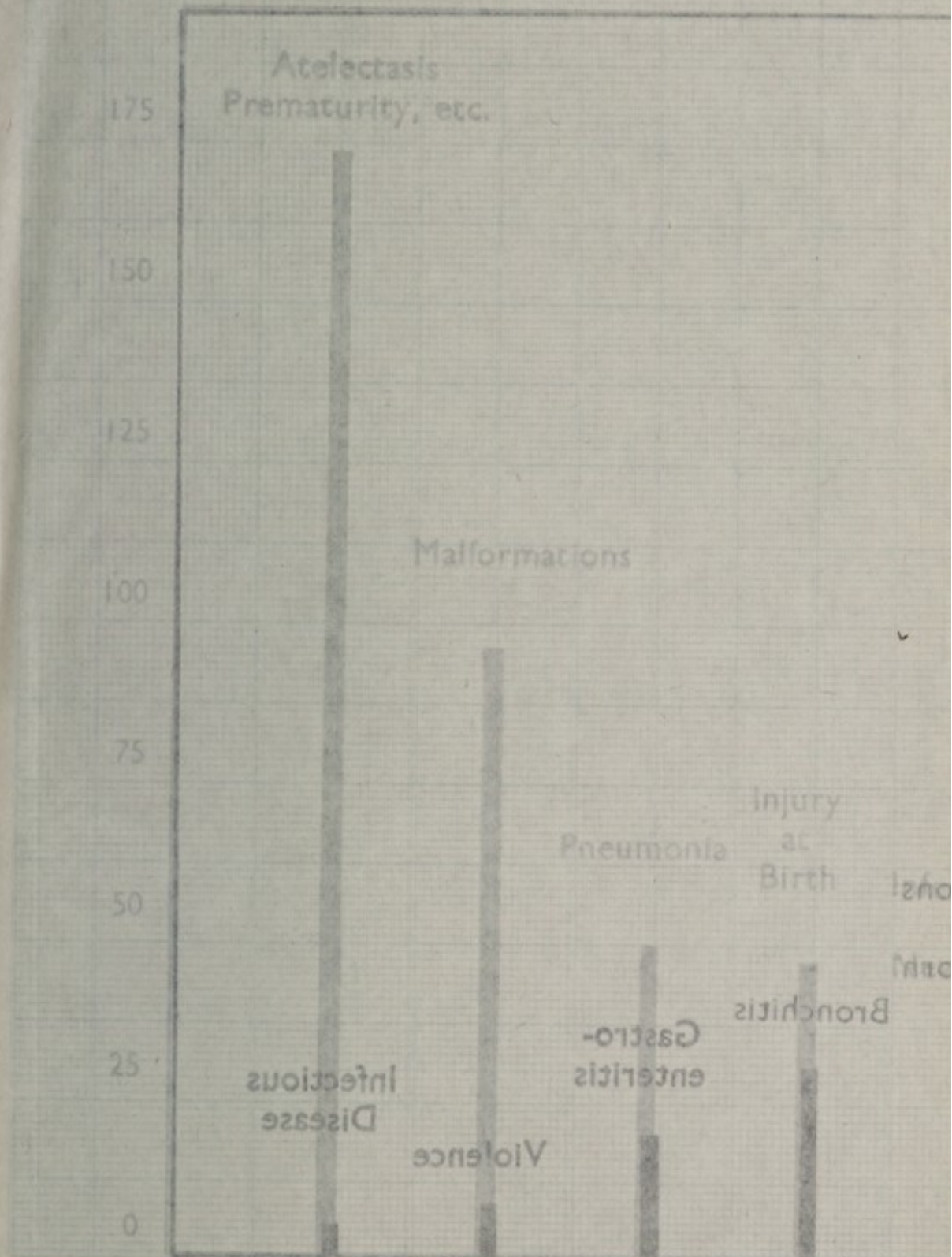
1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961

TRENDS OF MORTALITY-LIVERPOOL

1938 - 1961

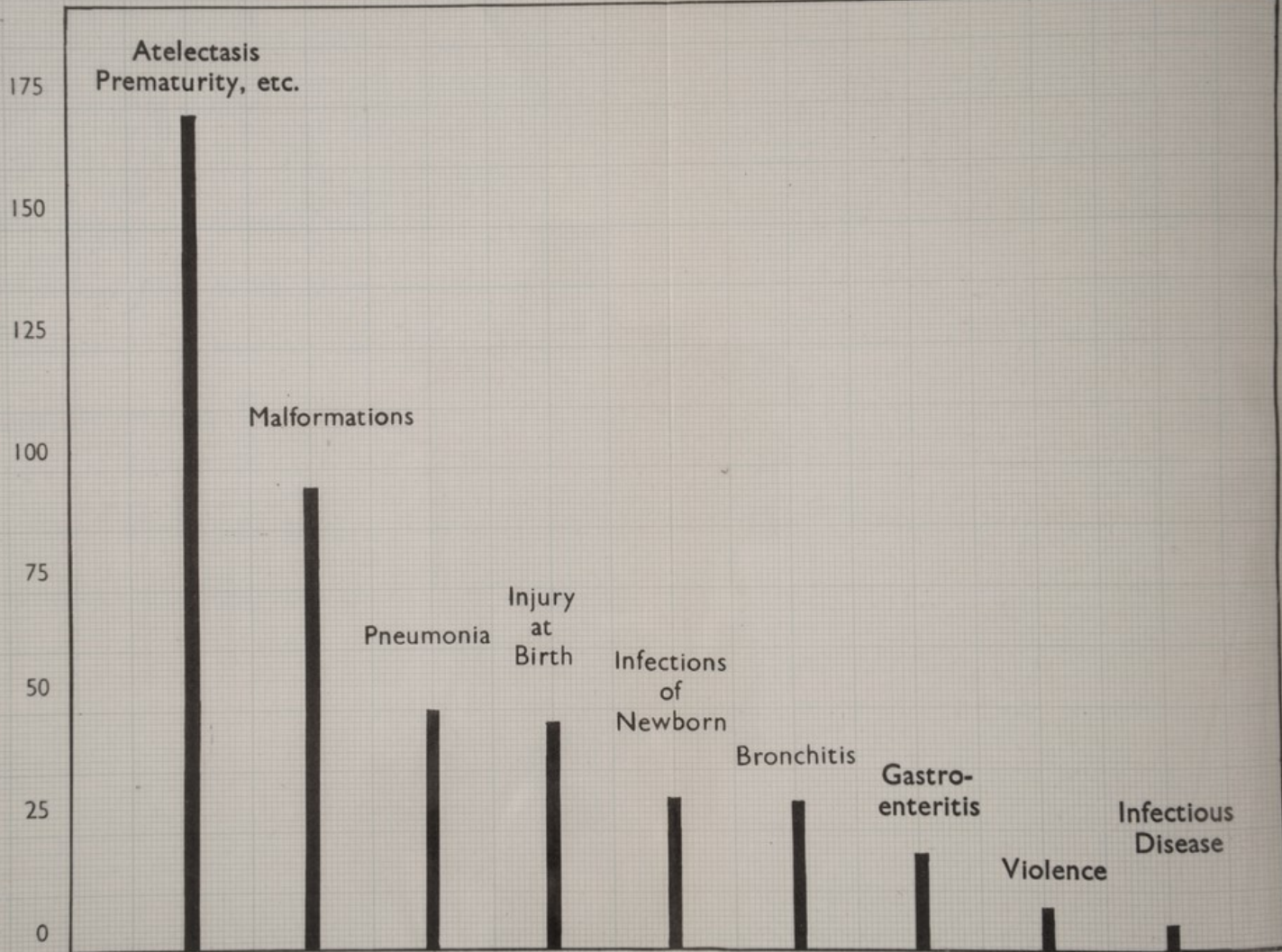
Death rate per 1,000 population



Total
Deaths

Total
Deaths

CITY OF LIVERPOOL
PRINCIPAL CAUSES OF INFANT MORTALITY — 1961

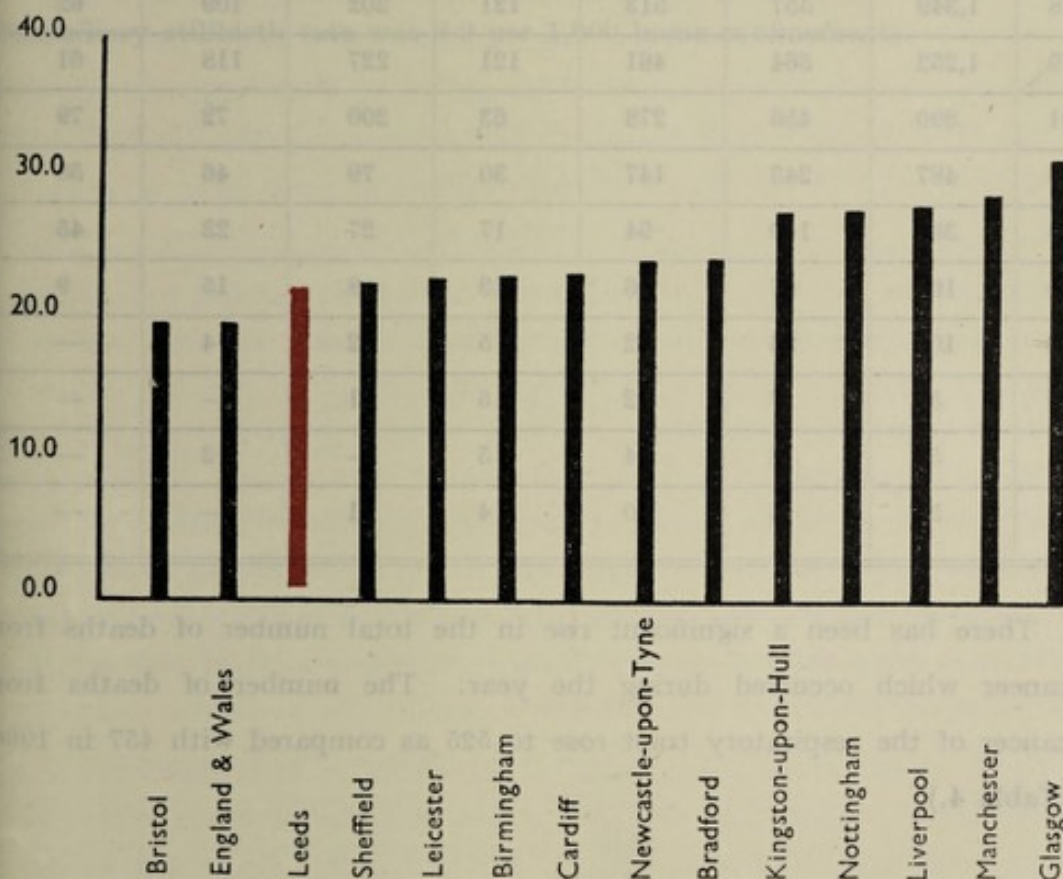


Infant Mortality.

The infant mortality rate rose very slightly during the year to 28.3 per 1,000 live births. A total number of 467 infant deaths occurred, of which 30 were illegitimate children. This represents an illegitimate infant mortality rate of 31.7 compared with a legitimate mortality rate of 28.1. The principal causes of infant mortality are represented in a graph facing this page, and complete causes are given in the statistical tables in the appendix at the back of this report.

CHART SHOWING INFANT MORTALITY RATE FOR A NUMBER
OF THE LARGER AUTHORITIES FOR THE YEAR 1961

Rate per 1,000
births



Perinatal Mortality.

This rate, which is the number of stillbirths and the number of deaths in infants under one week per 1,000 births is being increasingly used in statistics and it represents more fairly the hazards of childbirth. During 1961 the rate was 38.29 compared with 38.9 in 1960.

*Child Mortality.***Child
Mortality
Rate**

The various causes of child mortality, both in total and for specific diseases, are given in the table illustrated below. It will be seen that deaths from 1 year to 5 years of age fell from 54 to 51 in 1961.

**YEARLY AVERAGE NUMBER OF DEATHS IN SUCCESSIVE QUINQUENNIA, 1920-1959, AND
TOTAL DEATHS IN THE YEARS 1960 AND 1961.**

Year.	Deaths under 1 year of age.	DEATHS, 1 YEAR AND UNDER 5 YEARS OF AGE.							
		Total, 1 year and under 5 years of age.	General Diseases (including T.B.).	Respiratory Diseases.	Digestive Diseases.	Measles.	Whooping Cough.	Diphtheria.	Scarlet Fever.
						Included in General Diseases.			
1920-24	2,278	1,349	557	513	121	202	109	62	28
1925-29	1,879	1,252	564	461	121	227	118	61	23
1930-34	1,601	890	456	278	63	200	72	79	9
1935-39	1,283	487	243	147	30	79	46	58	3
1940-44	1,140	366	160	94	17	27	23	45	1
1945-49	1,100	168	67	36	13	8	15	9	—
1950-54	553	100	26	22	5	2	4	—	—
1955-59	432	57	7	12	5	1	—	—	—
1960	451	54	4	14	5	—	2	—	—
1961	467	51	4	10	4	1	—	—	—

**Deaths from
Cancer**

There has been a significant rise in the total number of deaths from cancer which occurred during the year. The number of deaths from cancer of the respiratory tract rose to 525 as compared with 457 in 1960. (Table 4.)

MATERNITY AND CHILD WELFARE

During the year, there was a slight increase in the birth rate. The **Births** total figure for live and stillbirths was 16,872. The total number notified was 20,671. The disparity between these figures is due to the fact that many women living outside the city came into Liverpool hospitals to be confined.

The total number of domiciliary births was 4,936, this being 104 less than last year.

The infant mortality rate was 28.3 as compared with 28.2 in 1960.

**Infant
Mortality**

The stillbirth rate was 22.5, the figure for 1960 being 23.07. The **Stillbirths** domiciliary stillbirth rate was 8.9 per 1,000 home confinements.

MIDWIFERY

During the year, 347 midwives notified their intention to practise midwifery in the city. This is higher than last year, when 297 midwives notified, but more midwives left during the year, so that at the end of the year there were actually fewer midwives in practice, 272 as against 282 last year. The decrease was in the hospital staff.

The total number of domiciliary births was 4,936, this was 100 less than last year. The percentage of home births was 28.7.

The number of hospital births increased to 71.3 per cent. The number of patients discharged before the tenth day also increased, being 2,787 in 1961, as against 1,046 in 1960.

Last year the lying-in period during which time the midwife is required to attend the mother and baby, was reduced from a minimum of fourteen days to ten days while the maximum period of attendance after confinement remained unchanged at twenty-eight days. This also affects the time the patient is expected to remain in hospital.

However, although it is only a year since the minimum period was reduced from fourteen to ten days, owing to the shortage of hospital beds, patients are already being discharged before the normal time. This has resulted in the very early discharges being looked after by the domiciliary midwives and the later ones by the health visitors. A table is given which shows the numbers discharged and notified to the health department. Those mothers who come home on the second or third days are usually patients who were originally booked for home confinement, but later because of some medical or obstetric reason it was considered wiser that they should be confined in hospital. After delivery, if everything is satisfactory, they come home to be nursed by the domiciliary midwife.

Those mothers who come home on the fourth or fifth days have sometimes had a stillbirth and feel they would be better at home, others have come home against medical advice. The remainder, discharged on sixth, seventh, eighth or ninth days are sent home early because the hospital beds are required for new patients.

Public opinion is changing and often the mothers themselves ask to go into hospital for 48 hours and then come home to be nursed. In a limited

number of cases, this has been done if the mother required hospital care for a medical reason but far more would do so for their social convenience if nursing care were provided for early discharges as a routine measure.

The midwives called in medical aid for 1,505 cases for different abnormalities. In 1,257 cases, a doctor had been booked for confinement. (Table 11.) **Medical Aid**

During 1961 there were 498 cases notified as puerperal pyrexia; 485 occurred in hospitals and thirteen in the patients' homes. (Table 10.) **Puerperal Pyrexia**

The midwifery staff at the end of the year consisted of a non-medical supervisor, two assistant supervisors and fifty full-time midwives, two of whom cared for premature babies. In addition, there were seven part-time midwives. These part-time midwives helped the full-time staff on busy districts, cared for patients discharged early from the hospitals and helped in the investigation of home conditions for suitability for home confinement. **Staff**

During the year one midwife retired, two transferred to take the health visitors' course and one left to do health visiting in the Lancashire County. One midwife went home to Ireland and two moved to be nearer relatives. Two others went back to work in hospital.

The vacancies were filled by six of our own pupil midwives, who qualified during the year, and six midwives from hospitals or other authorities.

The number of part-time midwives was allowed to decrease as the number of full-time staff increased.

A further five midwives are expected to take up duties on 1st January, 1962 (and, in fact, did so).

Last year the Health Committee granted permission for the provision of furnished accommodation for young, single, newly-trained midwives and a flat for two midwives was furnished and occupied at once. During 1961, two Corporation houses already allocated for the use of midwives were furnished, each to accommodate two midwives. All these were occupied by past pupil midwives on the staff. A further flat, in Speke, formerly used by the school nurses and a school dentist as a clinic, was converted and furnished for another midwife after the new clinic at Speke was opened. **Furnished Accommodation**

The provision of this furnished accommodation has helped in recruiting the young midwives who otherwise would not have been able to afford the furnishing of a house or flat.

One midwife who occupied a furnished house for a short time, vacated it and moved to unfurnished accommodation when she married. Another new ex-pupil immediately moved into the furnished house to share it with a second midwife.

Rota System of Off Duty

Recruitment has also been helped by the continued use of a rota system of off duty and night calls. This system has now been in operation for eighteen months. The great advantage is that on alternate weeks the midwife is off duty from 6 p.m. except on her partner's day off. In order to give the midwife complete rest and, at the same time, to ensure that the patients receive prompt attention, all calls between 6 p.m. and 6 a.m. go to the ambulance control officer. He is supplied with a list of midwives on duty and calls the midwife for the area.

For the patients, this system has the advantage that, at night, they only have one telephone number to remember and they will get a midwife in the shortest time. In turn, each of the supervisors of midwives is available on call in case any difficulties are encountered in the running of the scheme.

General Practitioners' Ante Natal Clinics

A total of 28 midwives attended 30 ante natal clinics held by general practitioner obstetricians so that doctor and midwife could see the patients together, and discuss the necessary ante natal care and treatment.

34 midwives also held ante natal clinics in eleven local authority centres so that they could see each others patients and the patients would get to know more than one midwife in case their own midwife is on leave or otherwise not available.

Equipment

All midwives have now been supplied with an oxygen infant resuscitator which is taken to each delivery so that it is available immediately should the infant show any sign of asphyxia. This apparatus was used in 92 cases during the year with good results in 82 cases, and improvement in four others.

Icterometers

In an effort to detect early signs of jaundice in premature or small babies, Icterometers have been issued to the midwives caring for premature babies and to the approved district midwives who teach the pupils. This instrument is like a small plastic ruler painted with shades of yellow. By comparison with the babies' skin it is possible to see if the jaundice increases or decreases. It is essential that babies with jaundice should be watched carefully, as any increase in the degree of jaundice may require a speedy removal to hospital for treatment.

All midwives have been supplied with gas/air machines for the relief of Analgesia pain in labour. They are also, by their rules, permitted to administer trilene with an approved apparatus. As it is necessary to train the pupil midwives to give both types of inhalational analgesia, two trilene machines have been bought and four more are on order.

This year, a change has been made in face mask technique in that midwives are supplied with disposable masks which are only worn once and then burnt or otherwise destroyed. This helps to cut down infection because soiled masks do not have to be carried away. In some cases, disposable towels are also used for the same reason. The cost of these disposable articles is only equal to the cost of laundry for towels and masks made of material.

The total domiciliary deliveries were 4,886, of which 3,751 were delivered by municipal midwives and 1,135 by the Liverpool Maternity Hospital district midwives. The total deliveries were 81 less than last year and the municipal midwives delivered 54 less than last year. The midwives also carried out 8,974 visits to patients discharged early from hospital and 3,911 visits to patients referred from hospital for the assessment of home conditions. The Liverpool Maternity Hospital district midwives also carried out 365 visits to patients discharged from the Maternity Hospital and 159 home conditions visits. Requests for home assessment numbered 2,320. Of these, 815 were subsequently booked for home and 1,363 were recommended for hospital confinement. There was no contact in 142 cases.

The staff position has been improving slowly but, owing to sickness and maternity leave, some midwives are still responsible for more than the recommended case load of 66 per annum. The majority of the midwives who recorded more than 100 deliveries were approved teachers who had the help of a pupil midwife who delivered and nursed over half their cases. Midwives who had no pupils were helped by part-time staff.

Liverpool Maternity Hospital district midwives were responsible for an average of more than 100 cases each but, again, each midwife had two or three pupils working with her.

Time lost by sickness amounted to 960 days for full-time staff, the equivalent of the work of three midwives for a year. Two midwives were on maternity leave during the year, involving a loss of 250 days.

Postgraduate Courses Postgraduate courses, which are compulsory for midwives, were attended by thirteen midwives during the year. The supervisor of midwives attended the special supervisors' course at Bedford College, London.

Midwives Houses Twenty-six midwives occupy Corporation houses or flats and the majority of these live in the areas in which they work.

Transport 22 midwives and the non-medical supervisor are now car drivers and owners and all midwives are classified as "essential" car users. This greatly facilitates the work and cuts down travelling time. Two part-time midwives also use their cars and this is particularly helpful as they have to cover a large area of the city when visiting patients discharged from the five hospitals that do maternity work. Thirteen midwives are cyclists and fifteen use public transport, as do five part-time staff.

Haemoglobin Estimations This test, which is recommended for every expectant mother to ascertain that she is not anaemic, was carried out through the Health Department on 1,804 patients.

A change has been made in arrangements for carrying out this estimation. The blood is taken by an assistant medical officer at the ante natal clinic and then the specimen is sent to one of three hospitals, Walton, Sefton General and Broadgreen, to be tested in the pathological laboratory. The test here, undertaken by technicians, is more accurate than that which was carried out by the supervisors on a different type of apparatus. On receipt of these reports from the hospitals, if the expectant mother is anaemic, she is followed up and treatment is given. The new arrangements for haemoglobin estimations are working most satisfactorily and the local authority is indebted to the Regional Hospital Board for their co-operation.

Ante Natal Care Ante natal care of the mother was carried out at 30 general practitioners' ante natal clinics, at all local authority clinics, at eleven midwives' clinics and also by visits to the patients' homes. Midwives attended 1,058 sessions at general practitioners' surgeries, and 782 at medical officers' clinics. Midwives' clinics were staffed by them on 1,307 occasions and 22,701 home visits were made.

Doctors were booked under the Maternity Medical Service in 95 per cent of cases, but were actually present at delivery at 7.6 per cent of all cases. It is, therefore, apparent that the midwife still accepts the responsibility for the actual delivery of her patient in the majority of cases.

Gas and air was administered to 3,305 mothers delivered by municipal **Gas/Air** midwives and 973 patients delivered by the Maternity Hospital midwives. The number of patients who received pethidine or pethilorfan was 3,331.

The local authority participates in a scheme, together with Sefton General **Part II** Hospital. The second part of the midwifery training is of six months' **Training of** duration. This year 39 pupils undertook district training with eleven **Pupil** approved midwife teachers. Each pupil was allocated to an approved **Midwives** district teacher for a period of three months and tutorials were given by the non-medical supervisor of midwives. These classes also included the teaching of relaxation in labour and mothercraft talks. Thirty-eight pupils qualified as midwives and six joined the staff.

The Emergency Obstetric Unit was called out on 67 occasions, in each **Transfusion** case to the mother. Nine patients were transferred to hospital and 34 **Unit** patients received blood transfusions at home. Of the 67 patients, five had antepartum haemorrhage, 28 had postpartum haemorrhage, and 32 had retained placenta, nine of which later also had haemorrhage. In addition, the Obstetric Unit was also called to one where there was a breach presentation and one case of twins.

The midwives were called to 57 emergencies by the ambulance service. **Emergencies**

Consultants were called to midwives' cases on 37 occasions, 27 times to mothers and ten times to babies. Table 12 gives the reasons for calling for further advice.

Cases booked to midwives, but later transferred to hospital numbered 878. (Table 13.)

Maternal Deaths.

There were two maternal deaths during the year. One of these was from **Maternal** haemorrhage. The patient, aged 34 years, was in her sixth pregnancy and **Deaths** had a history of a caesarean section for placenta praevia eight years previously followed by two normal deliveries and one miscarriage. For the last two years she had suffered from asthma and bronchitis. She had attended hospital at the nineteenth week and had been booked for delivery. In the meantime, her chest condition became worse and she was admitted to a medical ward of another hospital, having been sent by her own doctor. While in the medical ward she started to bleed and was transferred to the abortion unit. A few days later there was a sudden severe loss of $4\frac{1}{2}$ pints

followed by abortion of the foetus and the retention of the placenta. The patient became very shocked and blood transfusions were given. Evacuation of the uterus was performed and placenta found adherent over the lower segment. In spite of being given ten pints of blood, her condition was still poor, blood pressure only 80 mm systolic, and slight vaginal bleeding persisted. A diagnosis of rupture of the lower segment of the uterus was made and a laparotomy performed. An incomplete rupture of the lower segment was found and sub-total hysterectomy performed. The patient's condition improved for a while, but she then developed peritonitis and paralytic ileus. She died in spite of all treatment, seven days after the abortion.

The second death was due to incomplete rupture of the uterus. The patient, aged 38, was in her thirteenth pregnancy with a history of having had an incomplete abortion followed by curettage four years previously. She was booked for a hospital delivery and proceeded to advance to six weeks over the expected date of delivery. This postmaturity by dates was not confirmed either by size or by radiological examination. She went into labour spontaneously and when the cervix was only half dilated, had a sudden profound collapse which gave no time for treatment to be effective. At the post mortem, a rupture, four inches long, of the wall of the uterus and a massive haemorrhage separating the layers of the broad ligament were found. The patient died undelivered. She had not been given Pitocin.

Associated Deaths

There were two associated maternal deaths. The first of these was a young woman of 24 years, profoundly ill with a secondary carcinoma. She had had amenorrhoea for six months, but this was thought to be due to her general condition and as there was gross ascites and an enlarged liver, an abdominal diagnosis of pregnancy was not possible. It was not realised that she was pregnant until she suddenly aborted a macerated foetus. The pregnancy had no effect on the course of the disease. This was a first pregnancy.

The second death was due to heart disease in a woman of 29 years on her third pregnancy. There was a history of tuberculosis four years previously, which had been treated and cured. The patient had a normal delivery at home. Six days after delivery she became very ill, complaining

of pain over the lower abdomen suggestive of a thrombosis. Her admission to hospital was arranged and, though there was no delay with the ambulance, she died in the ambulance of cardiac failure.

A post-mortem examination showed cardiac lesions with gross thickening and distortion of the heart muscle and thickening and adhesion of the valves. At no time had any cardiac murmurs been heard and there was no history of rheumatic fever. She had had several chest X-rays with no reference to a heart condition apart from slight cardiac enlargement. This was an undiagnosed heart lesion.

Premature Infants.

Although 241 premature babies were born at home, a greater number than last year were transferred to hospital requiring care in a premature baby unit. Ninety-two were able to remain at home for nursing under the care of the premature baby team. Also, in addition to this, 627 premature babies either born in hospital or born at home and transferred to hospital, were later discharged to the care of the premature baby nurses. The majority reached the weight of 4 lb. 6 oz. before being discharged, but one weighed only 3 lb. 14 oz. and the premature baby team continued to visit until the baby was over 6 lb. in weight.

Among those babies born at home there were eight sets of twins, while among those discharged from hospital there were 63 sets of twins and two sets of triplets.

The midwives caring for premature babies made 1,996 visits to home deliveries and 4,237 visits to babies discharged from hospitals, making a total of 6,233 visits. They also made 245 visits to babies' homes before they were discharged to ascertain whether or not the conditions were suitable for them to be nursed at home while still so small.

During the year the loans were as follows:—

Cots	...	...	...	...	50
Blankets	...	...	...	...	30
Hot Water Bottles and Covers	...	...	...	...	58
Special Gowns	...	...	...	...	10
Pairs of Scales	...	...	...	...	7

LOCAL AUTHORITY CLINICS

Health Visiting

The work of the Health Visitor

1961 was characterised by the health visitors' work in the campaign against poliomyelitis. The tremendous response by the general public meant that during May and June (the first two parts of this immunisation campaign) many health visitors were working full-time on this valuable work. Also work in following up the contacts of cases in the poliomyelitis epidemic further reduced the staff on ordinary work.

Staff

At the end of the year there were—

- 79 health visitors doing health visiting and clinic duties;
- 2 full-time administrative staff;
- 1 full-time S.R.N.;
- 1 part-time S.R.N.; and
- 1 part-time S.E.A.N. continued to carry out many of the ancillary duties of the section.

Visits

17,204 babies were born during the year to mothers resident in Liverpool and to these 15,407 visits were made. To the children under the age of five years, the total number of visits during the year was 158,075 and visits of a special nature numbered 15,518, an increase again this year of 4,310. These special visits vary and are requested from all members of society, not only within the city, but on many occasions from outside when special information is required and it is felt that it is only the health visitor who can give it.

Poliomyelitis Contact Visits

Sixty-two cases of poliomyelitis were notified during the year and 1,113 visits were made to keep their contacts under surveillance. One particular case was that of a family where the mother was admitted to hospital, leaving the husband and two children at home. During visits by the health visitor, it was discovered that the husband and one child were also becoming ill and it was necessary to enlist full-time help for them. Being contacts of poliomyelitis, it was impossible to get even friends or relatives to lend a hand, but after many enquiries the welcome offer of the services of one of the nuns of a nursing order was gratefully accepted. This service was given until, after consultation with the health visitor and the general practitioner, the father and the two children were also admitted to hospital.

Advice to parents on the importance of immunisation against diphtheria and whooping cough has continued, and all who have heeded the advice have brought their children to a child welfare clinic session to avail themselves of the services offered. In addition, special sessions have been carried out in schools.

Following the change in the programme of immunisation and vaccination advice on vaccination against smallpox brought little response, but it was interesting to find that, during the summer months, when immunisation against diphtheria and whooping cough was suspended, more babies were brought to the clinics in their early months for vaccination against smallpox,

A marked increase has again been shown this year in the work of the health visitor with the aged, and altogether 4,484 visits were made as against 3,000 visits in 1960. Many of the requests for these visits come from doctors and voluntary organisations by whom it is thought that a visitor who has a wide knowledge of medical and social conditions is better able to assess the needs of these old people. These visits usually require a great deal of the health visitor's time and patience, for many of the old people are living on their own and are incapable of looking after themselves. For some of these, all the welfare services available are laid on and for those requiring hospitalisation, efforts are made, through co-operation with all the services concerned, to get the accommodation required. This year has seen a marked increase in the work of the Geriatric Unit at Newsham General Hospital, because the geriatrician has now come to rely on the report of the health visitor before he admits any old person to his unit. It is not sufficient for him to receive a request for an old person's admission to hospital, he must know the home conditions, have a detailed clinical picture of their condition and the urgency of their needs. On the other hand, the majority of his patients are not discharged until the health visitor has visited the home to find out what facilities are available for the continued care and attention needed. To meet these requirements the health visitors have made many more visits, many of them involving a great deal of time and the writing of 428 reports. The following are reports of some of these investigations.

1. (a) *Mrs. A, aged 97 years.*

Mrs. A lives with her daughter in a four-roomed terraced house, kept in excellent condition. The old lady is very well looked after by her daughter

Visits to Aged

Case
Histories

who has all the necessary nursing aids, but she is now finding it increasingly difficult to cope, as Mrs. A is completely bedridden and doubly incontinent. When I saw her she looked very poorly and complained of a pain in her chest. She also had periods of rambling. I contacted the family doctor and advised him of my concern for the old lady and he promised to visit. I have visited Mrs. A daily. There is no appreciable change in the old lady's condition, but she appears to be getting weaker. Doctor has visited and has prescribed a change of medicine and I have suggested that a district nurse should attend, but the daughter says she can manage. If Mrs. A could be admitted to hospital for a period it would give her daughter a chance of having a night in bed and get renewed strength to look after her mother when she returns.

1. (b) *Mrs. B, aged 77 years.*

In May, 1960, Mrs. B had an eye operation in Walton Hospital and her sight was partially restored. Her blind pension was stopped. In June, 1960, Mrs. B's sister from Scotland came to live with her and there was an enormous improvement in Mrs. B's health and in the home. Mrs. B had regular meals and she was kept clean. A mackintosh sheet and a commode were supplied by the Health Department, but Mrs. B refused to have them. At the end of September, 1961, Mrs. B's sister returned to Scotland and Mrs. B refused any help except that of a very dirty old lady who goes out and gets her rum and beer whenever she has the money. In October Mrs. B was found lying on the floor near the gas cooker; she had fractured her left arm. This was attended to in the Royal Infirmary. Since then her general condition has greatly deteriorated. She is once more incontinent and her mind is not very clear. A next door neighbour who occasionally helps Mrs. B contacted the doctor and Mrs. B hoped to be admitted to hospital last week (November 1961). She should have attended the Royal Infirmary with her arm but sent the ambulance away so that she should be at home when the ambulance arrived to take her to hospital. In my opinion Mrs. B is not fit to live on her own. She is a great danger to herself because of her failing memory and her general health.

2. (a) *Mrs. C.*

Case Histories I understand that Mrs. C is hoping to be discharged home in two weeks' time. Up to her admission to hospital this time, as you know, she had been dependent on neighbours and a home help. The neighbours have been extremely kind and for a long time have given Mrs. C every help they

possibly could. I now understand that they feel she is getting too much for them as she has had many falls over the last few months, and in many ways they realise Mrs. C is becoming more helpless. They are very concerned about her, but feel it is unfair that she should be alone for many hours and depending mostly on them.

2. (b) *Miss D.*

Following Dr. X's request for the above old lady's home to be cleaned prior to her discharge from the Halfway Hostel, I contacted the welfare section. They had this case in hand for some considerable time obtaining for her the service of a home help and meals on wheels, but she eventually refused to accept these services. They say there is nothing further to be done until she is discharged, when they will make arrangements for a home help.

I obtained the address of her nearest relatives and then went to visit her sister, who is over 80 years of age and suffers from chronic bronchitis and so is unable to help. Her daughter stated that on previous occasions she had offered to help Miss D but had been ordered out of the house and so is unwilling to try again. From there I went to see the brother and had to wait some considerable time to see him. He was under the impression that his sister had signed for her transfer to Westminster House and was annoyed to hear she was being discharged. We had a lengthy discussion and I gave him to understand it was his responsibility to get the house where Miss D lives cleaned. Mr. D is drawing his sister's pension and he also thinks that she has money in the post office and is hoping, I think, to work things to his advantage. According to his statements, he has helped his sister in so far as she will let him. The house is in a very dilapidated condition and dirty, and it would need the heart of a lion to tackle it. In my opinion Miss D is unable to look after herself or the home and if she returns home I think this neglect will continue.

3. (a) *Mrs. E, aged 80 years.*

This rather frail old lady is quite happy to be home and appears grateful for all that has been done for her. The burst that occurred in a pipe in the living-room wall was repaired in time for her discharge from hospital. She is not, however, very communicative, possibly due to her being deaf and one has to press for any information that is required. She is content to sit huddled by the fire and says she is all right and is being

looked after by her neighbour. I feel that she does not want to be bothered much with anyone and, but for her neighbour's help, would fail to look after herself.

Mrs. H is a very good neighbour; she does the shopping for Mrs. E, also looks in frequently during the day to see that she is all right. Mrs. H informed me that Mrs. E has dizzy spells and she is afraid of falling down the stairs. She is also incontinent of urine. I tried to persuade Mrs. E to have her bed brought downstairs, but she was reluctant to do this.

Case
Histories

When I visited today, Mrs. H had telephoned for the doctor to call and see Mrs. E because she said she had not been too well the previous day and this morning she had vomited her breakfast back. Mrs. E said she felt much better since she had vomited, but complained of vague pains in her back. I persuaded her today to have the lodger bring her bed downstairs. Mrs. E had a home help for four days last week, but none this week. I contacted the home help supervisor and she said she had been told by the home help that the lodger lit the fire and gives Mrs. E her breakfast each morning and a neighbour was in and out of the house all the time and so there was nothing for her to do. She had, therefore, discontinued the service. I informed her, however, of the need for someone to do the heavy cleaning and she has promised to see what she could do. I have ordered "meals on wheels" and these will commence as soon as there is a vacancy in the area. I have also requested a mackintosh sheet from the home nursing equipment office and a fireguard from the National Assistance Board. I will continue visiting as frequently as possible.

3. (b) *Mrs. F, aged 73 years.*

Visited and received no reply to repeated knocking on the door. A sister-in-law who lives two doors away saw me knocking, called me in and gave me some information about Mrs. F. Apparently she returned home on 21st February, 1961, and Mrs. C (the sister-in-law) knocked but got no reply. The following day Mrs. C knocked repeatedly and eventually Mrs. F came downstairs and told her that she had fallen and could not use her right arm. Mrs. C took her to the Royal Southern Hospital and it appears she had fractured her arm. Splints were applied, but when Mrs. F got home she removed them. The ambulance arrived for her next morning to take her to the out-patient department, waited for half-an-hour and then left. Mrs. C eventually saw her and took her to the hospital. Mrs. F was not back home when I visited.

Visited 23rd February.—Mrs. F had attended the Southern Hospital in the morning and had splints applied to her arm. She is very muddled in her conversation and states she cannot remember anything at all. She has a phobia about money and thinks that if people come to her home they are stealing her money. At the time of my visit she stated that she could not find £5 which had disappeared from her purse. Actually no neighbours will go inside her house because she is always accusing them of theft and is continually going to the local bridewell reporting money missing. Her home is very dirty and untidy with unwashed clothing and dirty dishes lying about. She tells me she has £3 17s. 6d. per week pension but her sister-in-law tells me she has more than that. Her sister-in-law has her in her own house and gives her soup and a dinner and buys food for her. The food which I saw on the table consisted of a packet of cream crackers, butter and some fruit. I did not see anything else. I believe she has had the "meals on wheels" service, but, as they could not always get a reply, they have stopped calling. She seems to have very few clothes and has not seen her family doctor for a long time.

Case
Histories

I think Mrs. F is incapable of looking after herself and I am quite sure that she will never cook herself any substantial meals at all. She has been continually taken into the Royal Southern Hospital, collapsing through malnutrition and the local police station know her well as she is always calling there and reporting thefts.

In 1960 it will be remembered a close liaison was established with the maternity hospitals in the city, with a view to more supervision being given to expectant mothers who were discharged from the ante natal units following some complication in their pregnancy. This has proved very successful in that many more visits have been paid to mothers to explain to them the importance of carrying out the instructions given to them by the hospital and to give advice and help where it was needed. Altogether 3,609 visits were made to ante natal cases and the following is a report on one of the cases:—

Liaison with
Maternity
Hospitals

"Mrs. G. I know Mrs. G and her family well and see quite a lot of her. The home situation is not good. Mrs. G is also known by another name, has six children and no husband. The house is not very clean or well cared for and the family are a bit of a problem one way and another. When visiting today Mrs. G was in bed resting and she says she is taking the prescribed tablets. There is no one to care for the smaller children so

I have arranged with the Children's Department for them to go into care temporarily and have said the three older children must attend school. I will keep the case under supervision and let you know of any change in the home situation."

**Visits to
Children
Discharged
From
Hospital**

Children discharged from hospital continue to play a great part in the work of the health visitor. During the year, 2,365 special visits were paid to children following their discharge and reports of their home conditions, management and progress sent to the paediatricians. Where satisfactory progress has not been maintained the health visitors have contacted the general practitioner concerned and, where necessary, have got directly in touch with the paediatrician at the hospital. In the latter cases the children have usually been re-admitted to hospital immediately.

**Visits to
Maternity
Hospitals**

Six health visitors have continued to make regular visits to two of the city's maternity hospitals for the purpose of health education and to give advice on social problems affecting the mothers attending the ante natal clinics. They have also, in many instances, been able to help hospital staffs by supplying information on adverse conditions and circumstances which may have affected their patients. The mothers are now coming to accept the health visitor as part of the health team and look forward to seeing her at home when the baby arrives.

**Mothercraft
Classes**

This close liaison has resulted in nearly 600 of the mothers booked for hospital confinements accepting the health visitor's invitation to attend one of the fifteen mothercraft and relaxation classes held in the local authority's clinics. Here small classes are arranged and talks given on such subjects as personal hygiene, clothes for the baby, diet during pregnancy, sleep, rest and the mechanism of labour, together with simple exercises in preparation for labour.

A senior health visitor was invited by the Liverpool Maternity Hospital to take part, with an obstetrician, a paediatrician and ward sisters in monthly classes for mothers and fathers to be. This has proved a most cordial arrangement and has resulted in a much closer relationship between the hospital and the health department.

**Epileptic
After Care**

The emphasis this year on the work with epileptic children attending Alder Hey Hospital has been on closer contact with the mothers and child patients attending the hospital clinics.

At each visit the mothers and the older children have each had the opportunity to talk to the health visitor alone to discuss progress and any problems which may have arisen since their last visit. In this way, personal, social and school problems were discussed and advice given where needed. Some of the shy mothers much appreciated the opportunity for a quiet talk to discuss matters, not always medical ones, which were worrying them. The social and family history was also taken for the case notes of new patients.

Fewer visits were paid to the homes, but some absentees were followed up where there were difficulties or lack of co-operation on the part of the parents. Visits were paid to schools to meet head teachers concerning children who had had epileptiform attacks during school hours, and also where the patient was experiencing some difficulty in his school life. In the latter category was a little girl, whose mother and her teachers were very bewildered because of the girl's reported difference in behaviour at home and at school. The mother firmly believed her child was a good and clever child, whilst the teachers were upset by her "exhibitionist" behaviour which was said to be disrupting the school classes. After discussion with mother, child and teacher concerning this child, a better understanding was reached and now the mother and school staff are co-operating to help the child to a more stable existence.

There was liaison with the youth employment officers to refer school leavers who were suitable for comparatively normal work in industry. Similar work has been carried out with patients attending the Royal Southern Hospital, but mainly with adults, many of whom need to be persuaded to do what doctor wants them to do, and as far as possible to become ordinary members of society. To do this, much time has been spent in introducing many of them to social activities. Others have been encouraged, with the help of the Disablement Resettlement Officer, to find jobs most fitted to their handicaps. Mothers of families have been given much encouragement by regular visiting to carry out their responsibilities to their homes and families.

In January, 1961, a health visitor joined the Neurological Unit at Walton Hospital and has been in attendance at all the clinics, held three times a week. She also attends a conference held each Friday to discuss special cases who have been called by appointment; also in attendance

Rehabilitation

**After Care
Work in
Neurological
Field**

are a neurologist, a neuro-surgeon, a psychiatrist, E.E.G. recording staff and ward staff. All are called upon to give their personal opinion on the finding of a solution to the various problems.

An increasing number of patients have been referred to her for employment or rehabilitation prior to employment and through contact with the various departments and the excellent co-operation of the Disablement Resettlement Officer, she has managed to place several in employment, or in training for employment.

The general practitioners have proved sympathetic and helpful and the many benefits provided by the local authority and the voluntary services have been invaluable to her and to her patients. Social contact with her patients has been kept by attending a club held on Friday each week.

Diabetic Health Visiting

The health visitors' work with diabetics has continued throughout the year and in July another health visitor, who was interested in this aspect of health visiting, was introduced to the work. She has a small case load for generalised health visiting. Liaison with hospitals, the home and the general practitioner has had satisfactory results, e.g., one young man was made known to the health visitor for diabetics by another health visitor who was worried by the possible break up of his marriage. He was visited and it was discovered that he had been put on probation for stealing, with a recommendation that he required medical attention.

He had lived with his wife and two children at his mother-in-law's house, but after a good deal of quarrelling with his mother-in-law, went to live with his father. It was evident that medical advice had not been sought and that a good deal of trouble was caused by him having hypoglycaemic attacks. Explanation of this was given to the man's wife and mother-in-law, also the necessity for medical attention. The general practitioner was seen by the health visitor and after some discussion about his patient, it was arranged that an appointment be made for him at the Royal Southern Hospital (from which he had long been a defaulter). As a result of this contact, the man was admitted to hospital and his insulin was considerably reduced. At the same time his need for re-housing was stressed and arrangements made by the almoner for the necessary forms to be sent in. The almoner recently informed the health visitor that he had again been an absentee from the out-patient department. On visiting, it was discovered that his reason for this was that on his last visit to the

hospital he had had to wait a long time to be seen and, since he had to travel from a Speke factory, the time away was deducted from his pay. The almoner was informed of this and she agreed to arrange another appointment with these facts in mind. The family is now living happily together with the mother-in-law and expecting to be re-housed from her condemned house.

Another interesting case is that of a young woman who was found to be in a coma when the health visitor visited. She had attended the Northern Hospital for several years but, since there were no beds there, she was taken into Sefton General Hospital and a detailed history of the case, which was known by the health visitor, given to the doctor. For this he was extremely grateful.

**Detailed
Problems
with
Diabetics**

This patient is again home but gradually going blind and since she can no longer see her syringe properly, it has been arranged, with permission of her doctor, for the district nurse to administer the insulin. The health visitor is also arranging for the patient to be registered as a blind person and receive an allowance to supplement her income.

Family doctors have, on many occasions, been grateful for the health visitor's care of their patients and often ask her to accompany them on their visits to difficult patients several of whom, by joint effort, have been persuaded to go into hospital. Doctors have asked the health visitor for information on blood sugar estimation taken at routine clinic attendance.

Presentation of facts to the almoner and hospital doctors, together with visits to the housing points section of the health department, the lettings office and doctors' surgeries, have helped in the re-housing of needy cases. General practitioners have been grateful for this.

Convalescence for out-patients at the health visitors request has often been arranged by the hospital. Transport to and from the clinic has often been arranged.

Recently the Liverpool University have undertaken some research into the genetic influence of diabetes and the health visitor has been asked to enlist the help of relatives of diabetic subjects by asking them to attend the University for consultation.

**Research into
Diabetes**

Families faced with eviction from their homes are brought to the notice of the health visitor by the chief welfare officer, but since many of these

families have got into this state despite all efforts and advice on how to avoid it, there is little the health visitor can do but see that these circumstances do not adversely affect their general health and welfare.

Co-operation with general practitioners is steadily improving and there is a regular flow of contact between them and the health visitors to try and find a solution to many of the medical and social problems of their various families. The following are interesting cases where the doctor and the health visitor have "got together":—

(a) *Mrs. H.*

Social
Problems
Referred to
Health
Visitors from
General
Practitioners

Frequent domestic friction, Mr. H much older than his wife; two children, one school child and one pre-school. Father makes frequent complaints of his wife's inability to look after home and children. Mrs. H usually lethargic and rather ineffectual. When revisited, Mrs. H gave an appearance of swelling of body and limbs, rather moon faced. Following telephone conversation, the health visitor was asked for her opinion and suggested "myxoedema". This condition was confirmed by Stanley Hospital. Mrs. H still attending and shows great improvement following a course of thyroid extract. Is still on these tablets.

(b) *Child I.*

Health visitor called in whilst visiting in a block of tenements. A young mother was found to be very distressed because her little boy was unable to stand. He had apparently been quite fit the previous day. He was fretful and complained bitterly if his right leg was touched. On the way to the telephone, the health visitor met the general practitioner on his rounds and accompanied him back to the house. He decided the child should be removed to Fazakerley Isolation Hospital, where poliomyelitis was confirmed. I is now fit and shows no sign of deformity.

(c) *Mrs. J.*

One evening a telephone call was received from Mrs. J who is well known to the health visitor from district visiting. She sounded very upset and seemed to think someone was planning to take her children away from her. The health visitor at once went round to see her and found her very distressed. She was upset by remarks people had made and repeated some of these. The health visitor reassured her and asked if she had seen her doctor, as she seemed in a highly nervous condition. She said she had

been to him complaining of sleeplessness and had been given tablets which she had not taken. Mrs. J said she would go again the following day and promised to take the tablets that night. She seemed much more relaxed and was even able to laugh at herself a little by the time the health visitor had left.

The following morning found her worried and upset. She said she felt unable to explain to the doctor how she felt and agreed to the health visitor seeing him first. Dr. S was very helpful and promised to visit, which he did. The health visitor was able to tell him a little of Mrs. J's family background including her fear of mental illness, from which some members of her family had suffered. She was visited later in the day and thought to be a little better. The following day she was again unhappy and depressed and the home completely disorganised. She had not had the prescription given her by the doctor made up and there was no prospect of her making the effort to go to the chemists. The health visitor herself took the prescription and there met Dr. S so that she was able to tell him how ill Mrs. J now seemed. Dr. S called again and, with the health visitor, tried to persuade Mrs. J to reveal the address of her husband's place of work. Eventually she did this and Dr. S left to ring Mr. J to ask him to return home and see him about care for the four children as he thought Mrs. J required hospital treatment. Mr. J returned home and after seeing Dr. S agreed to his wife's removal to hospital. Some hours later the mental welfare officer arrived and Mrs. J. was taken to Rainhill Hospital.

(d) *Mrs. K and family.*

Living in a tenement flat with husband and two children. Flat adequately furnished, husband a hard-working man in constant employment. Bad marital relations due to mother's depression and the inability to cope with a home and family. A period at a training centre had not produced any improvement.

The general practitioner and health visitor discussed this case following a visit to the clinic by the husband. It was decided to have the wife seen by a psychiatrist to exclude any psychological reason for the depression. The husband disagreed about this but after a visit by the health visitor he agreed to discuss it further with the general practitioner. The children were unsettled and withdrawn so a period of convalescence was advised. As the psychiatrist advised treatment at the Psychiatric Day Hospital, it

was arranged that the children's convalescence should coincide. The general practitioner requested that frequent home visits be made by the health visitor (at a time when the husband was there) during the time of treatment. All was satisfactory for three months after the mother's discharge, when the depression returned and the home conditions deteriorated. Again the case was discussed by the general practitioner and health visitor and it was discovered that before marriage the patient was a happy sort of person though of a rather negative personality and it was felt she was just unable to cope with the responsibility of a home and family. It was decided to suggest that the mother obtain employment and the younger children be admitted to a day nursery. The husband agreed with this after talks with the general practitioner and the health visitor. The outcome has been most satisfactory. The children are happy and friendly and putting on weight. The patient enjoys the company of her workmates and together the husband and wife do the housekeeping.

**Co-operation
with General
Practitioners**

In one part of the city, at the surgery of Drs. X, Y and Z, a monthly meeting has been arranged whereby doctors, health visitors and other social workers meet to discuss patients and families which are presenting a problem, and the doctors have been amazed at the knowledge the health visitors possess of factors which may very often have a great deal to do with a patient's illness.

One general practitioner in a congested part of the city has the services of a health visitor at his ante natal and child welfare clinic one afternoon per week. She is there for the purpose of weighing babies and giving general advice on health and social matters to the mothers and children attending the clinic. It is hoped in the New Year to extend this service to a general practitioner practising in the Edge Lane district of Liverpool.

In another part of the city the health visitors play a very active part in two very alive associations interested in the problems of youth. They attend fortnightly and monthly meetings along with heads of schools, probation officers, juvenile liaison officers, Ministers of Religion, N.S.P.C.C. and education welfare officers and youth leaders.

The health visitors have continued to meet requests from several organisations to speak at evening meetings on the work of the health visitor, the health services, parentcraft and other subjects, and have assisted with the instruction of the regular flow of students, both national and international.

After-care and follow-up of persons suffering from venereal disease has **V.D. Welfare** continued, and this year the nurse dealt with 253 cases. She has made 1,037 visits which resulted in 132 cases reporting for treatment. The remainder promised but failed or had moved and could not be traced.

Local Authority Clinics

There has been an increase again this year in the number of mothers and children attending the clinics throughout the city.

**Attendances
at Local
Authority
Clinics**

3,490 mothers attended the ante natal clinics and made 8,872 attendances.

17,566 children under the age of five made 101,927 attendances.

Toddlers' attendances were 13,423—slightly less than in 1960.

A new child welfare clinic in a Church Hall was opened in the Hunts Cross area in November, which brought the total of maternity and child welfare centres provided for the community throughout the city to 26. Each month, 248 child welfare sessions and 92 ante natal sessions are held and to these the health visitors made 9,384 visits to continue their advice to parents on the maintenance of good health, to assist in prophylactic measures against disease, and to listen to and advise on the many medical and social problems brought to the centres by parents, friends and relatives.

In addition to the sessions held during the poliomyelitis campaign in May and June, special sessions were held in the local authority clinics during the year and to all of these the health visitors made 971 attendances to assist in the actual immunisation of the public and to keep careful records of all immunisations. One of the administrative staff has continued to keep careful check on all vaccine received and used, and ensured that no centre has, at any time, been without a supply of vaccine.

General practitioners have continued to send their patients along to the clinics for blood testing only, and these numbered 1,267 as against 789 in 1960. Altogether 3,227 tests were made.

Midwives ante natal clinics are held in twelve of the centres where mothers attend for supervision by the midwife booked for their confinement and at the same time have the opportunity of group and quiet talks with the health visitor on general health and welfare.

682 mothers attended the mothercraft and relaxation classes and seven special sessions for fathers were held in the evening.

The following cases of children under the age of five years suffering from physical defects, or thought to be mentally backward, were referred to the school health department for treatment if necessary:—

Mental assessment	...	...	...	72
Physical assessment	...	...	...	18
Hearing tests	...	...	...	35
Speech defects	...	...	...	28
Eye defects	...	...	...	280
Orthopaedic	...	...	...	165

HOME NURSING SERVICE

The work of this service includes all types of cases under the headings of medical, surgical, maternal complications, gynaecological, infectious diseases, chronic illness and children's diseases. Nursing visits were made between the hours of 8.30 a.m. and 1.30 p.m. or 4.30 p.m. and 7 p.m. In addition, an emergency staff were on duty each evening from 8 p.m. until 10.30 p.m. The nurses were based on nine centres situated at strategic points throughout the city.

Two new centres were opened during the year, one at the Formosa Drive clinic on 4th April and another at 202, Grove Street on 17th July. The introduction of the new centres helped considerably in the efficiency of the service as both replaced smaller, inconvenient premises. The Formosa Drive centre incorporated two smaller units formerly working from East Lancashire Road and Manica Crescent and the Grove Street centre took over from 3, Maynard Street.

There was an increase in demand for the services of the district nurses, a **Visits** total of 345,756 nursing visits being made to 14,949 patients, an increase of 3,629 cases and 15,326 visits. 2,501 visits were paid to 347 children under one year.

It was interesting to note a change in the type of work with an increase **Types of Cases Nursed** in the number of heavy geriatric cases requiring nursing attention which involved the district nurses spending a longer time on such visits. On the other hand, the number of cases requiring injections decreased to 48.82 per cent of the cases attended, against 75 per cent in 1957.

4,786 visits were made between the hours of 8 p.m. and 10.30 p.m., an **Late Night Visits.** increase of 1,382 treatments.

The course of district training was four months for state registered **Training** nurses and three months for nurses qualified as health visitors or midwives.

During the year, 27 nurses, including two male nurses, were successfully trained as Queen's Nurses.

16 were trained for Liverpool.

5 trained as Independent Students.

4 trained for County Boroughs.

2 trained for County Councils.

In addition, fifteen students from other authorities attended the three-week lecture blocks and weekly study days for theoretical instruction, the sending authorities undertaking their practical training.

Incontinent Laundry Service.

This service was started in February, 1961, and has proved to be a most valuable and necessary part of the home nursing service. It enabled many chronically ill patients to be nursed at home who would otherwise have occupied urgently needed hospital beds. Laundering of soiled linen was carried out by the corporation washhouses, collections and deliveries being made as required, varying from daily to once weekly. Some 166 patients received this service, mostly two or three times weekly during 1961.

The patients' need of this service varied, but most lived alone or had very bad home conditions, in one or two rooms with nowhere to wash or dry the soiled linen.

Mrs. A.

Cases
illustrating
value of
incontinent
laundry
service

A doubly incontinent patient, living in a two-roomed flat, was nursed by her daughter and the district nurse for nine months very satisfactorily with the help of the laundry service calling three times weekly. Before the nurse called in the laundry service, it was almost impossible to carry on nursing the patient at home. The daughter already had four children to look after and all the laundry from the patient, often changed twice a day, had to be done at night when the family had gone to bed, as there was no space to dry and air sheets, etc. Often these were hanging about for days in the same room as the patient. It was unbelievable the difference the laundry service made to the daughter's outlook, as she was getting very tired and weary. The district nurse reports: "she now has an adequate supply of linen to hand, clean and aired, to change the patient whenever required. The whole family is truly grateful for this much needed help."

Mrs. B.

Diagnosis: stroke, right hemiplegia, weight 14 stone. Doubly incontinent. Patient being nursed by her daughter who also has a young family. The district nurse visited and found the two difficulties the daughter was coping with were (a) the old bed, and (b) washing and drying of bedding in the effort to keep her mother dry and clean. Nurse applied for laundry service

and a bed for the patient. With twice daily nursing visits and dry bedding always to hand, the patient's skin condition improved and became satisfactory.

The district nurse reports: "the family cannot praise the laundry service too highly, the daughter thinks it is wonderful. It has helped to keep another old lady at home amongst her family, where she appears to be very happy."

Mr. C.

Diagnosis: senile dementia, aged 73 years, waiting for admission to geriatric unit. This patient was a widower, cared for by his daughter who has a husband and four children at school to look after as well. Due to the patient's mental condition he was incontinent which made a great deal of washing and the daughter would have found it impossible to manage without the aid of the laundry service.

The daughter herself was not a very efficient housewife and needed a great deal of moral support. She showed signs of breaking down under the strain, but the help given by the incontinent laundry service enabled her to continue to look after her father at home.

Day Nurseries.

Eleven nurseries and child minders were registered with the local authority under the Child Minders Regulation Act, 1948. The nurseries are visited regularly by one of the assistant medical officers for the purpose of giving any necessary advice and help regarding the welfare of the children.

There are twelve day nurseries with places for 670 children. The improved staff situation was maintained throughout the year, and this has resulted in an improved standard of care for the children and of training for the student nursery nurses.

Nine of the local authority nurseries are approved for the training of nurses for the National Nursery Examination Board Certificate.

The training scheme was operated by both the health department and the education department, each receiving applications and assuming responsibility for their own students. During the course of the two years' training there is an interchange of students between these departments to give experience of both education and health department nurseries. The

students attend the Mabel Fletcher Technical College for all lectures, tutorials, etc. Before being accepted for training, applicants must pass an entrance examination organised by the Mabel Fletcher Technical College.

After taking the examination, nursery nurses may be employed in either health or education nurseries. Some are employed in the care of babies in maternity hospitals and others find employment looking after families in their own homes.

Home Nursing Equipment.

During 1961 the demand for this service continued to increase and it was necessary to purchase a considerable quantity of new equipment in order to avoid any delay in the delivery of items required by patients. Certain specialised equipment has also been purchased for a few severely crippled patients receiving help and advice from the occupational therapists.

At the end of 1961 there were 1,928 items of equipment on loan or available for loan. Loans of home nursing equipment have greatly increased over the past four years, as can be seen from the following table:—

1957	1958	1959	1960	1961
2,278	2,896	3,298	3,712	4,279

This has entailed a great increase in the amount of clerical work and transport involved in the issue and return of equipment. The articles are delivered to the patient, and when no longer required, are collected and transported to the cleansing centre at Carnegie clinic. When cleansed they are taken to Gascoyne Street stores for re-issue.

Welfare Foods.

The function of this service is to arrange for the distribution to the public of National Dried Milk, cod liver oil, vitamin tablets and orange juice. For this purpose 55 distribution centres were in use throughout the city, classified as follows:—

- 17 full-time centres
- 13 part-time centres
- 2 mobile points
- 23 voluntary centres

The majority of the full-time and part-time centres were in clinic premises, but we are greatly indebted to two city stores for kindly providing facilities for the distribution of welfare foods, on a full-time basis, and to the numerous chemists and proprietors of a few dairies, who distribute welfare foods on a voluntary basis.

The distribution figures for the past two years are as follows:—

	1960	1961
National Dried Milk (tins) ...	345,370	315,690
Cod Liver Oil (bottles) ...	40,425	27,967
Vitamin Tablets (packets) ...	38,837	26,197
Orange Juice (bottles) ...	310,486	182,414

It will be noted that there has been a decrease in the distribution of welfare foods, compared with the previous year. This was probably due to the fact that from 1st June, 1961, the price of orange juice was increased, and a charge was made for vitamin tablets and cod liver oil, which had previously been free. The price of National Dried Milk has not changed. On the other hand, the sales of proprietary brands of dried milk and vitamin foods have increased, as shown in the following table:—

	1960	1961
Proprietary Dried Milk Preparations ...	122,008	142,273
Proprietary Vitamin Preparations	17,838	25,126

Accidents in the Home

During 1961, 591 accidents occurred in homes resulting in "999" telephone calls for an ambulance. Many more cases were taken to hospital by other means of transport, but this investigation deals only with those cases where an emergency call was considered necessary. This does not give any indication of the severity of the accidents as many minor accidents are dealt with by emergency calls, while some severe injuries are seen by a general practitioner who may then arrange admission to hospital.

CHIROPODY SERVICE

At the end of 1961, the health department chiropody service had been in operation for eighteen months and statistics available for a complete year show this to be an essential and much appreciated service for the elderly.

Chiropody Treatments

During the year, 19,167 chiropody treatments were carried out at the clinics and 546 treatments given to patients in their own homes.

The district clinics have established their popularity and patients attending the central foot clinic often request treatment nearer home when they grow feeble with advancing years. Table 25 shows the attendances at the various clinic centres during the whole of 1961. Particularly severe weather during December caused a marked decline in the attendances at all clinics, but otherwise a steady average of 7.5 attendances was the rule.

New District Chiropody Clinics

In May a chiropody clinic was started at Townsend Avenue Centre, Norris Green, and in July, a weekly chiropody session was opened at the League of Welldoers Club, Scotland Road. The attendances at both clinics are most satisfactory. Additional clinic sessions are still required, particularly in the Queens Drive and Fazakerley areas, but due to the difficulty of recruiting additional qualified staff, it has not been possible to expand the service any further during 1961.

Appointment of Full-time Chiropodist

A full-time chiropodist was appointed in December. Part of his time will be spent at various chiropody clinics and on the remaining days of the week he will carry out domiciliary chiropody visits. With this appointment it is hoped during the coming year to provide a more adequate domiciliary chiropody service as, although the waiting list was considerably reduced, the interval between treatments was rather longer than advisable. Table 26 gives details of the chiropody treatments.

Accidents in the Home.

Accidents in the Home

During 1961, 891 accidents occurred in homes resulting in "999" telephone calls for an ambulance. Many more cases were taken to hospitals by other means of transport, but this investigation deals only with those cases where an emergency call was considered necessary. This does not give any indication of the severity of the accidents, as many minor accidents are dealt with by emergency calls, while some more severe injuries are seen by a general practitioner who may then arrange admission to hospital.

For the purpose of this enquiry, the cases were divided into six groups, **Types of Accident** indicating the type of accident: falls, burns, scalds, poisoning, cuts and miscellaneous accidents. These groups were then further subdivided into age groups: 0-5 years, 6-15 years, 16-29 years, 30-49 years, 50-59 years, 60-69 years, 70 years and over.

Type of accident	0—5 years	6—15 years	No Information	Parents present at accident	Parents not present at accident
Falls	124	35	5 3	71 11	48 21
Poisoning ...	65	6	9 1	21 —	35 5
Scalds	63	14	4 2	53 11	6 1
Burns	35	16	7 4	19 7	9 5
Cuts	17	30	— 1	12 11	5 18
Miscellaneous ...	45	21	4 2	33 9	8 10

The type of accident most common in all age groups was a fall. 50·3 per cent of all the cases under review were in this group. No other type of accident occurred in such large numbers. The second largest group was that which included all accidents not included in the other groups, but this accounted for only 10·7 per cent of the total accidents. As might be expected, the largest number of fatal accidents were due to falls; fifteen deaths occurring, all in people over the age of 30. Although only 9·7 per cent of all accidents were due to burning, six deaths occurred in this group; the second largest number of fatalities. This is an indication of the severity of the injury sustained in almost all the burning accidents in this group.

The age group most commonly affected by accidents of all types was that containing children from birth to six years of age; falls were again the commonest type of accident. Men and women over the age of 70 represented the next most numerous group: very few people in this group had any other type of accident than a fall. School children up to fifteen years of age were the group next most commonly affected, but in this group accidents due to cuts were almost as common as falls.

It was not possible in this survey to determine the actual cause of all accidents, or how many of them were preventable. It appears, however, that the number of accidents, some fatal, occurring in the home is great, and that information is available which would be helpful in planning to reduce the incidence of these accidents. It is proposed, therefore, that a more detailed review of all accidents occurring in homes will be undertaken in the next twelve months.

HOME HELP SERVICE

1961 was an unhappy year for this section. In February permission was given for a gradual increase of staff from 275 to 390 by March, 1963, but one month later a cut of £10,000 in the estimated cost of the service was imposed, which meant a reduction of 40 home help staff leaving 235 at 31st December.

<i>Statistics of cases:—</i>				<i>1961</i>	<i>1960</i>
Maternity	...	...	...	212	199
Tuberculosis	...	...	...	5	19
Chronic sick and aged	...	...	...	1859	2037
Others	...	...	...	735	793

In order to assist as many applicants as possible with this depleted staff, the service was organised in the following manner:—

These were not affected. They were booked in advance in the accustomed manner and help was provided when needed. The usual hours of attendance were from 9 a.m. until 5.30 p.m. daily, excepting Saturday and the home help was present for periods of one to four weeks.

No case of acute illness needing help was refused. The home help attended for the shortest possible period each day depending on the needs of the patient and the family circumstances. If there were children under school age, full-time service was given, but in other cases two or four hours' help was provided each day and the length of service was limited to a maximum of four weeks.

Most applicants under this heading were aged persons living alone and the alternative to home help service was hospital or residential care. These patients were in need of daily attention and the home helps had two patients to look after each morning. Their duties included fire-lighting, preparing one or two meals, keeping the home as clean as time would allow and shopping. They also did the personal washing. To perform these duties in two hours' time is not easy and many of the staff returned in the afternoon to give unpaid service, such as hair washing and extra shopping.

Housework service

This is a service for the aged and handicapped who live alone and who need help with their housework and shopping but are able to cope with their fire-lighting and cooking. The home help usually attends four hours weekly and is able to report any deterioration in the health or circumstances of her patient.

As it was impossible to deprive the sick applicants of help, the housework service was the one most affected by the cut in the service. Assistance was refused to those who had daughters who were able to help. This action was very unpopular and caused some distress, but it was the only just method of dealing with the situation.

Charge for service

As from March 6th, 1961, the minimum charge of 4s. per week was discontinued and by arrangement with the National Assistance Board it was decided that applicants in receipt of National Assistance should be provided with service free of charge. This decision caused a loss of income of approximately £9,000 per year.

Types of cases and families assisted during the year:—

(1) Mrs. A. aged 21 years suffering from a kidney infection and pregnancy—one child twelve months of age. Service was provided from 9 a.m. until 3 p.m. daily until the confinement occurred, when help was needed until 5.30 p.m. Total service—six weeks.

(2) Mr. B. A call was received from a general practitioner stating that a mother and three children were sick with the youngest child a possible poliomyelitis victim. A home help of 60 years of age agreed to attend and was injected with a protective serum before being transported to the home, where she remained until the removal to hospital of the entire family five days later.

(3) Mrs. C.—aged 49 years—is a widow with a serious heart condition. She has three children aged eighteen, thirteen and ten years and has received help on two mornings each week for the past three years. A good neighbour assists with the shopping and cooking on other days.

(4) Miss D.—aged 75 years—is very handicapped with arthritis and, recently, oedema. She has received service since August 1949 but with difficulty because of her ungrateful and unco-operative manner which antagonises the staff. This lady has refused hospital care and receives daily help.

(5) Mr. E.—aged 71 years—is partially paralysed and his wife aged 74 years was discharged from hospital after the amputation of a leg. Daily service was arranged for four hours reducing to two hours four weeks later. Their only daughter was recently confined and service will continue until she can assist.

HEALTH EDUCATION

Parents' Clubs.

Norris Green Parents' Club

This year members continued to attend steadily on the first Wednesday in each month. The numbers varied from 16 to 21 members present who continued to be keen and interested in the meetings. The group adviser for the clinic was present at each of the meetings.

The programme was as follows:—

January	A small informal Business Meeting.
February	Annual General Meeting. A new Chairman, Secretary, Treasurer and Librarian were appointed with four other Committee members and they agreed to an annual subscription of 1/-.
March	Dr. Gray, Tuberculosis Officer, spoke on First Aid in the home.
April	Mr. Joseph, a Probation Officer, spoke on his work.
May	Business Meeting.
June	Two films—"Growing Girls" and "The Birth of a Baby" were shown by Miss Langham (School Nurse).
July	A representative of Ovaltine Ltd. showed four films.
August	A cooking demonstration by the Gas Board. A new Treasurer was appointed.
September	Superintendent Wood of Liverpool Women's Police gave an interesting and informal talk on her work.
October	Business Meeting.
November	Floral decoration in the home.
December	Business Meeting. Final preparations for the Christmas Party.
Social Events	27th July—a Coach Trip to Chester Zoo. 14th December—a Children's Christmas Party in the Clinic.

This was considered to be a very successful year for the club. The members enjoyed the meetings and continued to observe the original conditions laid down that the main purpose of the club was educational. It is felt also that the informal meetings between members and public health staff continue to be of mutual help.

Sarah McArd Parents' Club

This parents' club differs in many ways from the Norris Green Club. Here the majority of mothers are single, and also the membership is always changing as children leave the nursery. It is also more difficult for a widow, for example, to finish her domestic chores after a day's work and go out to an evening social event. Attendances were not very good on the whole during 1961. Meetings were arranged for the third, or last, Wednesday in the month.

- April Mrs. E. M. Braddock, J.P., M.P., gave a most interesting talk.
No further meetings were held until—
- 20th September when a large and enthusiastic gathering saw colour transparencies
of their children in the nursery.
- There was some discussion as to whether or not to continue the Club,
but the members were unanimously in favour of it being continued.
- 18th October A well attended, busy meeting heard an officer of the St. John
Ambulance Brigade talk on First Aid in the Home and members
took part in demonstrations.
- 20th December A very good attendance, when members enjoyed a social evening.

In spite of the setbacks in 1961, it is felt there is still hope of continuing a parents' club at the nursery and it is proposed to resume meetings in 1962 and to invite members of the Norris Green club to a meeting to take part in the Tufty Club campaign.

In addition, many members of the staff, including Medical Officers, the **General** Chief Welfare Officer, the Chief Public Health Inspector, and the Principal Assistant (Admin.), gave many lectures on request to various church and social organisations. There is now an excellent collection of coloured film slides available for all senior members of the staff who need to lecture on the work of the department, illustrating the many activities upon which we are employed.

The work of the department covers many aspects which are of special interest to certain sections of the public, and requests were received for speakers on subjects of particular importance to the organisations concerned. Although a number of the requests were for talks on the general work of the section, food hygiene, offices and smoke abatement were the most popular subjects. The usual facilities have been provided for the training of inspectors, health visitors and nursing staff.

Although details of the first and second stages of the large scale anti-**Anti-Poliomyelitis Campaign** poliomyelitis campaign are contained in the section dealing with immunisation, it is reasonable to mention here that both in conception and results the campaign can be regarded as a highly successful piece of health education and almost every usual mode of public appeal was used in its furtherance. Public meetings were held in the Town Hall and the fullest support was received from the churches and press. Posters in several sizes and designs were exhibited widely and special articles and advertisements appeared daily in the press. The television and radio authorities co-operated

freely, and the local cinemas, with the permission of the Cinematograph Exhibitors' Association, exhibited coloured slides at all performances. Loudspeaker equipment was used at football grounds and from mobile vans, and an aeroplane was engaged on towing a banner.

Liverpool Show

The Liverpool Show in July provided an opportunity to draw the attention of visitors to problems of special importance and having regard to the conversion of firegrates in smoke control areas, different types of suitable firegrates and fuels were displayed at the Show. Advice was also given to visitors on various aspects of smoke abatement.

In addition there were sections devoted to district nursing, occupational therapy, and a special exhibit concerning dental health which was manned on a rota basis by dentists in private practice in the City. This was arranged in conjunction with the West Lancashire, West Cheshire and North Wales Branch of the British Dental Association. There was also a special clinic in operation for members of the public desiring inoculation against poliomyelitis. As usual also there was an annexe for the showing on a sound projector of films dealing with the subjects being exhibited.

Health Visitors

The health visitors play a very active part in two very alive associations interested in the problems of youth. They attend fortnightly and monthly meetings with heads of schools, probation officers, juvenile liaison officers, ministers of religion, N.S.P.C.C., and education welfare officers and youth leaders.

The health visitors have continued to meet requests from several organisations to speak at evening meetings on the work of the health visitor, the health services, parentcraft and other subjects; and have assisted with the instruction of the regular students.

INFECTIOUS DISEASE

Number of confirmed cases of infectious diseases reported during 1961:—

Dysentery	335
Erysipelas	29
Food poisoning	99
Malaria (contracted abroad)	2
Measles & German Measles	5,546
Meningococcal meningitis	10
Ophthalmia neonatorum	73
Paratyphoid fever	4
Pneumonia—Acute primary and influenzal	383
Poliomyelitis—Paralytic	47
Non-paralytic	15
Puerperal pyrexia	498
Scarlet fever	321
Tuberculosis—Pulmonary	405
Other forms	54
Whooping cough	341

No cases of anthrax, diphtheria, acute infective encephalitis, plague, smallpox, typhoid or typhus fevers occurred during the year.

The incidence of infectious disease cases in 1961 was less than in 1960 with the notable exception of poliomyelitis.

Throughout the year, a close and cordial co-operation has been afforded the department by Dr. A. B. Christie and Dr. H. E. Parry of Fazakerley Isolation Hospital, and by Professor D. T. Robinson, Dr. E. C. Armstrong and Dr. G. B. Bruce White of the Public Health Laboratory Service, Liverpool.

Poliomyelitis in Liverpool 1961.

146 Liverpool patients were initially admitted to isolation hospital during 1961 as suffering from poliomyelitis, but in only 62 cases was the diagnosis finally confirmed. 47 (75·8 per cent) were paralytic and 15 (24·2 per cent) non-paralytic cases. 21 (44·7 per cent) of the paralytic cases had been immunised against poliomyelitis and 26 (55·3 per cent) had not been immunised.

Five (33·3 per cent) of the non-paralytic cases had been immunised and ten (66·7 per cent) had not been immunised. Two were fatal (ages five and seventeen) and neither had been immunised against poliomyelitis. This is a marked increase over the number of confirmed cases in 1960 (three paralytic and one non-paralytic) and is the highest total since 1950, when 135 cases were recorded (106 paralytic and 29 non-paralytic). Chart A illustrates the monthly incidence of confirmed cases in relation to the poliomyelitis immunisation campaign (May-June). Charts B and C similarly illustrate the monthly incidence of confirmed paralytic cases for 1948 and the peak year of 1950.

(i) *Comparison of 1961 with 1949 and 1950*

1949 was very similar to 1961 regarding the number of cases and form of paralysis, e.g.:—47 paralytic and nineteen non-paralytic cases in 1949; 47 paralytic and fifteen non-paralytic cases in 1961, but in 1950 there were 106 paralytic and 29 non-paralytic cases. A comparison of these three years in monthly incidence shows that in both 1949 and 1950, the main incidence occurred from July to the end of November with the peak periods in the second and third week of September, whereas in 1961 there was every indication that poliomyelitis was increasing from May onwards. Again the peak was reached in the second and third week of September—but it would appear that the May—June poliomyelitis campaign in which approximately 403,000 persons received two injections of poliomyelitis vaccine in Liverpool considerably affected the pattern of poliomyelitis in the City in 1961. It is considered that the protection given to such a considerable proportion of Liverpool's population, together with the estimated number of 180,000 (of whom 130,000 had had a third injection) who had previously been given poliomyelitis immunisation since 1956, averted what may have been a serious epidemic.

(ii) *Age and Sex Incidence*

The following is a summary of age incidence of cases in 1961:—There were 49 patients under the age of four years; seven in the age group 5—14; six in the age group 15—40, with no cases over the age of 40 years. Of the 47 paralytic cases, 29 were male and eighteen female. Of the non-paralytic cases, ten were male and five female.

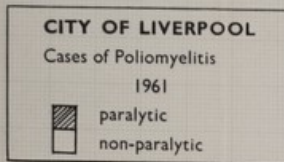
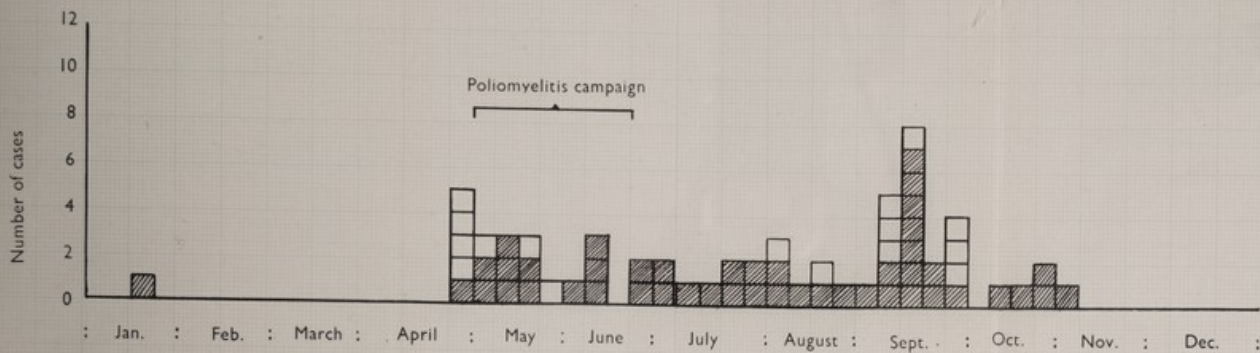
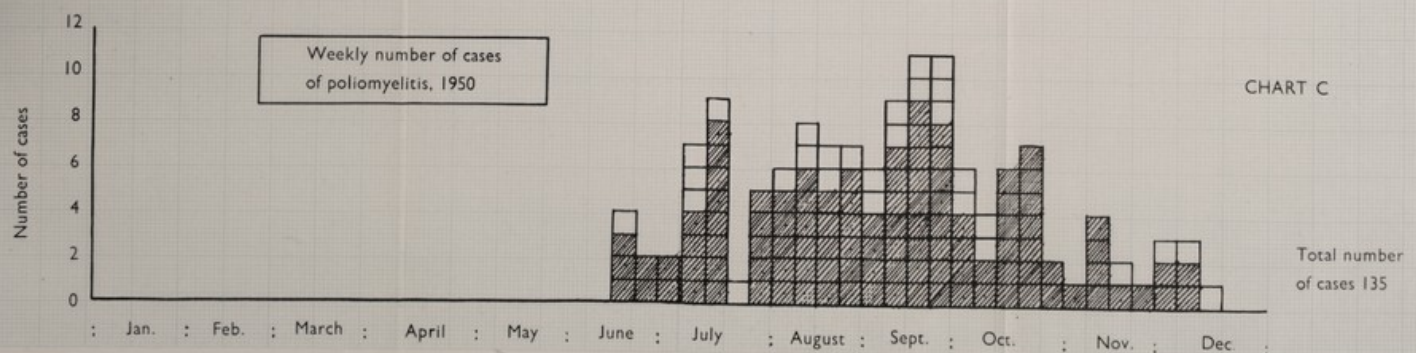
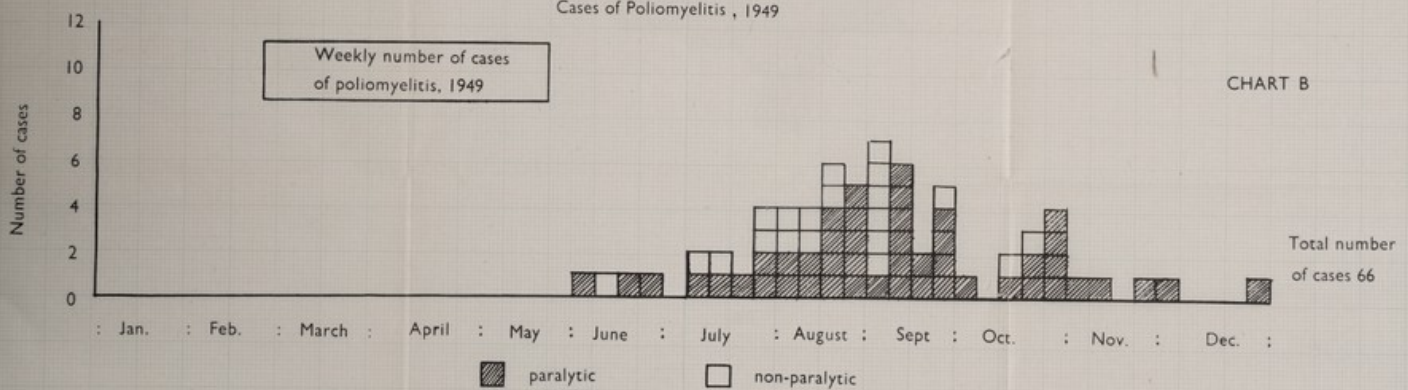


CHART A

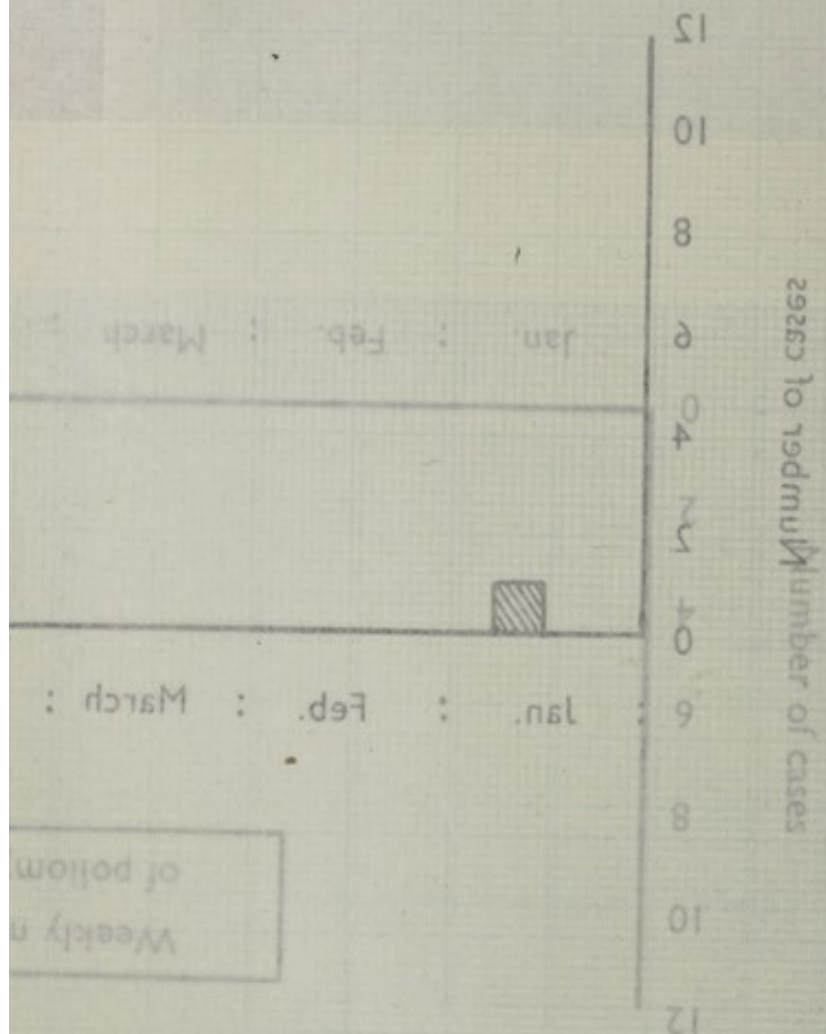


CITY OF LIVERPOOL
Cases of Poliomyelitis, 1949

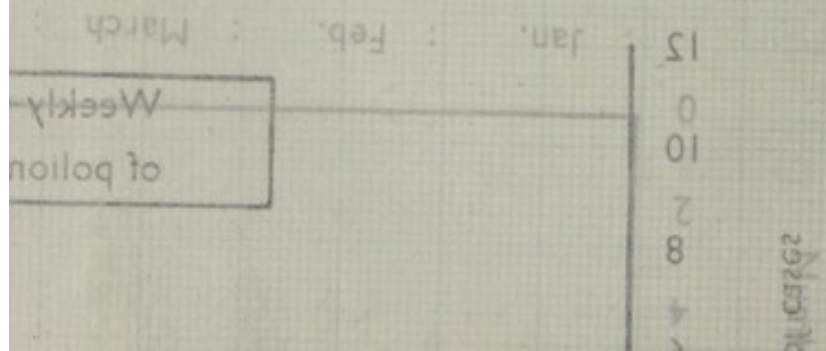
CHART B



CITY OF LIVERPOOL
 Cases of Poliomyelitis
 1961
 paralytic
 non-paralytic



Weekly number of poliomyelitis cases



Weekly number of poliomyelitis cases

TABLE I
Cases of Poliomyelitis by Age Groups

Age group	Paralytic			Non-Paralytic		
	Males	Females	Total	Males	Females	Total
0-4	22	15	37	8	4	12
5-14	4	2	6	1	—	1
15-40	3	1	4	1	1	2
over 40	—	—	—	—	—	—
	29	18	47	10	5	15

(iii) *Immunisation state of cases*

The immunisation state of all cases were investigated. 36 (58 per cent) of the 62 cases had not been immunised. Eleven had received one injection of poliomyelitis vaccine; thirteen had received two injections although in cases the second immunisation was less than two weeks before onset and two had received more than two injections (Table II).

TABLE II
Immunisation State of Poliomyelitis cases

	Paralytic	Non-paralytic	Total
Not immunised	26	10	36
1 injection	9	2	11
2 injections... ..	11	2	13
More than 2 injections	1	1	2
	47	15	62

(iv) *Relationship between date of immunisation and onset of disease*

The relationship between the dates of poliomyelitis immunisation and dates of onset of the disease were calculated in all those cases who had received immunisation (Table III). From the table it will be observed that in four cases (three paralytic and one non-paralytic) the last injection was given within four days of the onset of the disease. Only in two of these cases was there less than a 48 hour gap between injection and onset of the disease. In both these instances there was no direct evidence that the injection provoked disease. In all other instances the time lapse was so extensive that provocative poliomyelitis could not be considered.

TABLE III

CASES OF POLIOMYELITIS 1961

Relationship between dates of Poliomyelitis Vaccination and dates of onset

	Paralytic (P) Non-Paralytic (NP)	Dates of Injections				Date of onset	No. of days between last vaccination and date of onset
		1st	2nd	3rd	4th		
1	P	3. 5.61	—	—	—	13. 3.61	—*
2	P	1. 5.61	—	—	—	5. 5.61	4
3	P	1. 5.61	—	—	—	4. 5.61	4
4	P	11. 5.61	—	—	—	12. 5.61	1
5	NP	11. 5.61	—	—	—	12. 5.61	1
6	P	1. 5.61	—	—	—	22. 5.61	21
7	P	2. 8.61	—	—	—	28. 8.61	26
8	P	2. 5.61	31. 5.61	—	—	3. 6.61	3
9	P	3. 5.61	2. 6.61	—	—	30. 6.61	28
10	P	12. 5.61	9. 6.61	—	—	17. 7.61	38
11	P	10. 5.61	8. 6.61	—	—	18. 7.61	39
12	P	10. 7.61	—	—	—	11. 8.61	32
13	NP	1. 5.61	29. 5.61	—	—	16. 8.61	79
14	P	13. 1.61	22. 2.61	—	—	25. 8.61	184
15	P	16. 9.58	7.10.58	1. 6.59	16.5.61	6. 9.61	113
16	P	6. 5.61	2. 6.61	—	—	6. 9.61	96
17	NP	5.61	6.61	—	—	6. 9.61	90 approx.
18	P	5.61	6.61	—	—	4. 9.61	90 approx.
19	P	27. 3.61	—	—	—	8. 9.61	165
20	P	4. 5.61	3. 6.61	—	—	11. 9.61	100
21	P	2. 5.61	—	—	—	8. 9.61	129
22	NP	31. 5.61	—	—	—	29. 7.61	57
23	P	3. 5.61	3. 6.61	—	—	16. 9.61	105
24	P	1. 5.61	29. 8.61	—	—	24. 7.61	56
25	NP	1.10.59	29.10.59	2. 6.60	—	30. 9.61	120
26	P	2. 5.61	4. 7.61	—	—	6.10.61	94

*Child vaccinated prior to result of seriological examination.

(v) *Virology*

Examination of the stools of both paralytic and non-paralytic cases was undertaken by Dr. G. B. Bruce White of the Liverpool Public Health Laboratory. Poliomyelitis virus type I (Epidemic type prevalent in Great Britain in 1961) was found in the stools of 41 cases (33 paralytic and eight non-paralytic). Poliomyelitis virus type 3 was found in the stools of one paralytic case (a girl aged eleven years who developed the disease on 24th July, 1961). In the remaining twenty cases, the stools were negative for poliomyelitis virus in eight cases and not examined in the remaining twelve cases.

(vi) *Severity of illness in paralytic cases*

The severity of illness in the paralytic cases has been divided into five groups:—

severe	moderate/mild
moderate/severe	
moderate	mild

depending upon the site and extent of initial paralysis. These divisions, together with immunisation state, are grouped in Table IV.

TABLE IV

Severity of illness in paralytic cases

	Severe	Moderate/ Severe	Moderate	Mild/ Moderate	Mild	Total
Immunised ...	3	—	9	1	8	21
Not immunised ...	7	1	13	—	5	26
TOTAL ...	10	1	22	1	13	47

It will be seen that 26 (55.3 per cent) of the paralytic cases had not been immunised and 21 (44.7 per cent) had received some protection. Seven of the severe cases had received no protection as compared with three who had. Thirteen of the moderate cases had received no protection as compared with nine who had, whereas eight of the mixed cases had received poliomyelitis immunisation as compared with five who had not been immunised.

(vii) *Residual paralysis*

Thirty-five (74.4 per cent) of the 47 paralytic cases had some form of residual paralysis (January 1962) as follows:—

Severe paralysis of all limbs; 1	} Seven severe/moderate paralysis
Paralysis both legs; 1	...	...	...
Flail legs; 2	...	...	...
Flail right leg; 2	...	...	...
Flail right arm; 1	...	...	...
Calipers both legs; 1	} 12 moderate paralysis
Calipers right leg; 4	...	...	...
Calipers left leg; 7	...	...	...
Mild left leg; 2	} 3 mild paralysis
Mild left arm; 1	...	...	...
Mild sequels; 10	} Miscellaneous sequelae e.g. single muscle paralysis
Facial Paralysis; 2				
Slight respiratory weakness; 1				
Total	35

A one year old male child was initially an iron lung case, but appears to have made a complete functional recovery. This child had received two poliomyelitis immunisation injections before the onset of the disease.

*Paratyphoid Fever***Paratyphoid
Fever**

During 1961, four clinical cases of Salm. paratyphi B were notified and confirmed in Liverpool. This is a decrease of 15 over the 1960 notified cases. These cases were discovered following routine sampling of stools of patients suffering from gastro-enteritis. During these investigations, one symptomless excretor was found. The details were as follows:—

Patient	Age	Sex	Clinical Case	Symptomless Excretor	Site	Phage Type
1	10 months	F	+	—	} Family Outbreak	} Beccles Var. 4
2	6 years	F	+	—		
3	4 years	F	+	—		
4	1 year	M	+	—	} Family Outbreak	} Type I
5	52 years	F	—	+		

The illness of patient I commenced after eating a wafer biscuit with a desiccated coconut layer. This was a very important and interesting finding.

The discovery two years ago of the presence of *Salm. paratyphi B* in imported desiccated coconut from Ceylon (see Annual Report 1960) had alerted the department to the potential danger of this foodstuff. Continuous sampling and detainment by the port health sampling officer (see details of isolation of salmonellae in desiccated coconut, page 57) had to a large extent prevented infected coconut being released to the confectionery trade. However, in March 1961, a baby of 10 months (Case I) had paratyphoid fever; the organism was identified as *Salm. paratyphi B*, type Beccles Var. 4. The parents had given the baby bits of coconut covered biscuit some ten to fifteen days before the illness began. Two older children in the same household, aged six years and four years, were found to be infected with this same phage type; these children had also eaten the biscuits. There were no biscuits left in the house, but samples from the shop where they were bought were examined. *Salm. paratyphi B* was not found in any of them, but in one sample, *Salm. ferlac* was identified. This phage type had already been isolated from imported desiccated coconut sampled at the port. (A full report was published in "The Lancet", 12th August 1961.)

The second small family outbreak of paratyphoid fever occurred on 10th April 1961, when a one year old boy developed enteritis. *Salm. paratyphi B*, phage type I was isolated from his stools. It was not possible to trace the source of his infection to contaminated foodstuffs. Stool specimens from the household (three adults, two children aged three years and four years) produced positive specimens from only one person, the patients' grandmother (a symptomless excretor). She was in the habit of arranging the feeds for this child. It was established that some four to five weeks previously, she had experienced a mild attack of gastro-enteritis (the source of this illness was not traced, but *Salm. paratyphi B* type I is a common type of paratyphoid organism in Liverpool). She made a full recovery and after treatment her stool examinations became negative for paratyphoid organisms. She was a convalescent carrier when she infected the child, and fortunately she did not develop into a chronic carrier. Following the appropriate treatment, the child also made a full recovery.

Register of Chronic Typhoid and Paratyphoid Carriers

During 1961, there were no additions to the register of chronic typhoid and paratyphoid carriers. Details of the present known chronic carriers in Liverpool are as follows:—

CHRONIC CARRIERS

No.	Disease	Date First Positive	Age	Sex	Occupation
1	Para. B. (1) ...	1941	56 years	F	Housewife
2	Para. B. (1) ...	1941	63 years	F	Housewife
3	Para. B. (1) ...	1958	71 years	F	Housewife
4	Para. B. (untyped) ...	1956	37 years	F	Research Worker
5	Para. B. (1) ...	1958	36 years	F	Housewife
6	Para. B. (1, Var. 2)	1959	36 years	F	Housewife
7	Para. B. (1, Var. 6)	1960	55 years	F	Housewife
8	Para. B. (1) ...	1960	48 years	F	Housewife
1	S. Typhi (E.I.) ...	1928	47 years	F	Housewife

Whooping Cough

Whooping Cough

During the year 341 cases of whooping cough came to the notice of the Health Department, representing a case rate of 0.46 per 1,000 of the population as compared with 1.9 per 1,000 in 1960. This total of 341 cases shows a marked decrease compared with the 1,440 cases in 1960. There were no deaths attributable to whooping cough.

Measles

Measles

During the year 5,541 cases of measles were reported, representing a case rate of 7.4 per 1,000 population as compared with 11.7 per 1,000 population in 1960. This was a decrease of 3,299 in the number of notified measles cases over the 1960 figure of 8,840. There was one death from measles representing a death rate of .0013 per 1,000 population. The following table shows the incidence of measles during the last eight years.

INCIDENCE OF MEASLES CASES AND RATE PER 1,000 POPULATION

Year	1954	1955	1956	1957	1958	1959	1960	1961
Cases ...	8,599	5,998	6,662	10,180	7,189	6,299	8,835	5,541
Rate per 1,000 population ...	10.9	7.7	8.6	13.2	9.4	8.3	11.7	7.4

Scarlet Fever

The decrease in the number of notifications of scarlet fever continued during 1961, when 321 cases were reported, representing a case rate of 0·4 per 1,000 population as compared with 0·6 per 1,000 population in 1960. This total of 321 cases shows a decrease of 155 (33 per cent) over the 476 cases reported in 1960, and is the lowest figure recorded for the City. No deaths were attributed to scarlet fever during the year as has been the case for the previous nine years.

Food Poisoning Investigations

Since the Food Hygiene regulations 1956, came into operation on the 1st January 1956, 43,828 specimens from 25,442 persons have been examined bacteriologically in connection with gastro-enteritis investigations. Of this number 4,122 specimens from 2,740 persons were in respect of the year 1961.

160 cases of food poisoning were traced in Liverpool during 1961, of which 99 were officially notified to the Health Department, 33 symptomless excretors of food poisoning organisms were found amongst their family contacts. Of the total number of food poisoning, infectious cases and symptomless excretors 103 (53·4 per cent) were due to salmonellae, 53 (27·5 per cent) to the staphylococcus toxin and 37 (19·1 per cent) to clostridium welchii. Of the 103 isolations of salmonellae, 70 were from clinical cases (of which 46 were notified and 24 discovered by the department) and 33 were symptomless excretors. The details are given below:—

Salmonella phage type	Notified Cases	Discovered Cases	Symptomless Excretors	Total
Salmonella bredeney	1	—	—	1
„ enteritides	3	—	—	3
„ heidelberg	9	2	2	13
„ infantis	1	—	—	1
„ meleagridis	1	2	2	5
„ san diego	1	—	—	1
„ typhi-murium	30	20	29	79
	46	24	33	103

This is an improvement over 1960 and 1959 when 121 and 200 isolations of salmonellae occurred. As before, *Salm. typhi-murium* was the commonest strain isolated (79 in 1961, 121 in 1960 and 180 in 1959). This steady improvement in Liverpool reflects the care taken by the department in following up every case of gastro-enteritis, the detection of symptomless excretors and arrangements whereby their family doctors are informed immediately so that active treatment can be initiated. Emphasis upon food hygiene and food sampling has also assisted, in a major way, in producing a purer food available for sale. This drive towards better hygiene in relation to food is appreciated by the food trade, so much so, that many of the larger concerns are sending staff on the food hygiene courses arranged by the health department at the Liverpool School of Hygiene. It is hoped that as these arrangements become more widely known, more catering staffs will attend these courses thus qualifying in food hygiene. Co-operation during the year from general practitioners, food firms, restaurants and hospitals concerned in the investigation of outbreaks has been helpful and cordial.

Clostridium Welchii Food Poisoning

An outbreak of enteritis affected 37 employees of the general post office at a main canteen in Liverpool on 24th August. Details were as follows:—

Ten kitchen and 27 other members of the staff of the post office suffered moderate to severe enteritis, lasting up to nine hours following the mid-day lunch on the 24th August. The meal consisted of soup, roast heart, stuffing, and apple tart. Specimens of roast heart and both cooked and uncooked stuffing were submitted for bacteriological examination. Specimens of stools were obtained from the ten members of the kitchen staff and from the assistant supervisor, who was also a victim.

Clostridium welchii organism were found in six of the stool specimens from the ten kitchen staff (including the cook and two assistant cooks) and from the specimen submitted by the assistant supervisor.

No pathogenic organisms were isolated from the roast heart, but heat resistant *Clostridium welchii* were present in samples of uncooked stuffing used in the preparation of the meal. A sample of uncooked stuffing from a fresh pack was bacteriologically examined, with negative results.

It was ascertained that in the preparation of the suspected meal, the heart was cooked on the 23rd August and was left on the kitchen table overnight. It was stuffed on the 24th with stuffing prepared that day.

It would appear from this investigation that the cause of the outbreak of *Clostridium welchii* food poisoning may have been the infected stuffing. It was not possible to establish that the stuffing had been bought already infected or whether it had become infected by a member of the kitchen staff during its preparation.

Despite the mistaken practice of leaving cooked meat unrefrigerated overnight, the general standard of hygiene in the canteen was well maintained.

A Milk Borne Outbreak of Salmonella typhi-murium.

In July 1961, sixteen cases of gastro-enteritis due to *Salm. typhi-murium*, phage type I, Var. 5, were traced to unpasteurised tuberculin tested milk from one dairy in Liverpool.

**A Milk Borne
Outbreak of
Salmonella
typhi-
*murium***

The first case occurred on the 19th July, with fourteen cases between the 23rd and 31st July (eight cases between the 23rd and 24th July; three cases between the 26th and 28th July; two cases on the 30th and one case on the 31st July). The last case was reported on the 5th August. Two of the cases were so severe as to necessitate admission to hospital. *Salmonella typhi-murium*, phage type I Var. 5 was isolated from the stools of thirteen, the other three were negative. Subsequently, five symptomless excretors of the phage type of salmonella were found amongst 47 home contacts. The age incidence in the group of eighteen positive salmonella excretors is of interest in that the majority (61 per cent) were under fifteen years of age, and of these, nine (50 per cent of the total) were children under the age of five years.

An investigation into the source of the gastro-enteritis showed that the only common foodstuff, in all instances, was the milk supply; being a raw tuberculin tested milk produced and bottled by a small dairy in the neighbourhood. This dairy was an old established one, with its small herd of 36 tuberculin tested cows, housed in a shippin at the rear of the premises.

Six of the animals were kept in a smaller shippon in the main building. The dairy supplied only unpasteurised tuberculin tested milk to 740 households, who were regular customers.

On the 14th August, six samples of mixed bottled milk of the herd obtained at that morning's milking, and later, separate milk from each individual cow, were taken and examined for salmonellae, with negative results.

On enquiry, it was learnt that one of the cows had severe diarrhoea on the 17th July. This condition deteriorated up to the 21st July, when the cows' milk was excluded from milk for sale to the public. By the 22nd July, milk from this animal had dried up. Despite veterinary treatment, the cow died on the 25th July. An important feature was that the milk from this cow had not been mixed with the total bulk milk from the other cows on every occasion of milking, but had been added to milk from the five cows with which it shared the smaller shippon.

Milk sales, although recorded, did not indicate the cows which supplied the milk, but fortunately milk which could have been infected only amounted to approximately eighteen gallons of the total 105 gallons distributed daily. It was estimated that approximately 90 families, numbering 220 persons, were possibly at risk out of a total of 740 families (2,220 persons). This could also account for the small number of cases of gastro-enteritis traced. During this illness the cow had not been isolated and was only removed from the shippon at the time of death. No post-mortem was performed, but the veterinary surgeon who attended the animal stated that it had died of a "burst ulcer" in the intestines, and after the circumstances surrounding the food poisoning incidences were discussed with him, he was of the opinion that clinically the cow may have been suffering from a severe salmonella infection.

Unfortunately, by the time investigations were initiated, the carcase had been destroyed, together with dung from both the dead beast and the other cows. Subsequent examinations of the remainder of the herd were negative. Specimens of dung from animals in close proximity to the stall where the dead animal had been kept were also negative for *Salm. typhi-murium*.

The buildings, milking stalls and yard, were in good condition with an adequate water supply. There were no vermin or flies.

The staff at the dairy, including the dairyman foreman, numbered seven. All were in good health with no history of recent illness. Their stools, on repeated examination, were negative for salmonella organisms. Their milk supply had not come from the cows in the smaller shippon where the sick animal had been kept.

The epidemiological evidence suggested a connection with contaminated raw milk from one small dairy. No carriers or excretors were found among the staff at the dairy. It was believed that the source of this infected milk came from the cow that died from enteritis.

This outbreak emphasises the necessity to insist that efficient heat treatment and subsequent clean handling of milk is the only guarantee of its freedom from pathogenic micro-organisms.

Staphylococcal toxin food poisoning

On the 21st December, 27 members of the staff at a Liverpool hospital developed moderate to severe gastro-enteritis between ten to twenty hours following a Christmas dinner. Enquiry showed that the Christmas dinner had been served to the staff in two sittings; one on the 20th December and the other the following day. All the persons affected had eaten the meal on the 21st. The menu was the same for both meals and consisted of:— Tomato soup, turkey, stuffing, sausage, roast and mashed potatoes, Brussels sprouts and carrots and gravy followed by Christmas pudding with brandy sauce and mince pies.

Staphy-
lococcal
toxin food
poisoning

Investigations

Faecal specimens from nine of the victims and three of the kitchen staff were submitted for bacteriological examination. Two of the specimens from the victims were found to be infected with *Staphylococcus pyogenes* (phage type 42E) in small numbers. The remainder were negative. Specimens of food involved were submitted for examination and *Staph. pyogenes* (phage type 42E) were present in small numbers in the prepared Brussels sprouts. This was the only individual item of food common to all the victims.

Hand and nose swabs from three members of the kitchen staff were also submitted for examination, and one of the nasal specimens was reported to be infected with *Staphylococcus pyogenes* (phage type 42E). This positive swab was taken from the kitchen maid who had prepared the Brussels sprouts.

The kitchen staff, at first, denied that any food had been left over from the 20th December and used again on the 21st but it was noted at the time of the investigation that stuffing, prepared sprouts and carrots, left over from the 21st were available for examination on the 22nd December when the investigations started. When this was pointed out to them they admitted that on certain occasions they kept left over food, especially if certain vegetables or other foodstuffs were scarce.

It would appear that this may well have happened with some of the Brussels sprouts. *Staphylococcus pyogenes* (type 42E) present in the nose of the preparer had become deposited on the sprouts probably following the initial cooking, left overnight in the warm kitchen and warmed up the following day. There would be sufficient time for the toxin to be formed and *Staphylococcus pyogenes* (type 42E) was isolated from the stools of two of the victims.

Salmonella infection of imported Desiccated Coconut.

Salmonella infection of imported Desiccated Coconut

Throughout 1961, there has been a vigorous investigation into the degree of salmonella infection in imported desiccated coconut in Liverpool.

During the year, a total of 10,285 samples of desiccated coconut were bacteriologically examined and of these 391 (3·80 per cent) were subsequently found to be infected with salmonella organisms. *Salm. paratyphi* B were isolated from 19 (4·80 per cent) of the positive isolations. The following table shows various phage types of *Salm. paratyphi* B and *Salm. typhi-murium*, in addition there were 37 different serotypes of salmonellae which are included in table V.

TABLE V

Salmonellae in Desiccated Coconut

Salmonella Paratyphi-B				Salmonella abacetuba	...	...	2
Phage type beccles variant 2	...	1		Salmonella adelaide	...	...	1
Phage type beccles variant 3	...	1		Salmonella angoda	...	...	21
Phage type jersey variant 2	...	1		Salmonella barielly	...	...	13
Phage type scarborough	...	3		Salmonella bootle	...	...	1
Phage type I variant 9	...	1		Salmonella braenderup	...	...	2
Phage type 3b variant 2	...	2		Salmonella bredeney...	...	...	2
Phage type untypable	...	10		Salmonella charity	...	...	3
TOTAL	...	19		Salmonella chester	...	...	1
Salmonella Typhi-murium				Salmonella chingold	...	...	1
Phage type I	...	8		Salmonella chittagong	...	...	4
TOTAL	...	8		Salmonella cubana	...	...	1
				Salmonella ferlac	...	...	108
				Salmonella hvittingfoss	...	...	12
				Salmonella ilila	...	...	1
				Salmonella kotte	...	...	14
				Salmonella lancing	...	...	1
				Salmonella lexington	...	...	2
				Salmonella litchfield	...	...	2
				Salmonella mount pleasant	...	...	1
				Salmonella muenster	...	...	2
				Salmonella nchanga	...	...	5
				Salmonella newport	...	...	8
				Salmonella oranienberg	...	...	2
				Salmonella perth	...	...	19
				Salmonella poona	...	...	3
				Salmonella rubislau	...	...	12
				Salmonella schwarzengrund	...	...	1
				Salmonella senftenberg	...	...	22
				Salmonella shangani	...	...	5
				Salmonella sims bury...	...	...	1
				Salmonella solma	...	...	5
				Salmonella stanley	...	...	2
				Salmonella thompson	...	...	1
				Salmonella treforest	...	...	4
				Salmonella waycross	...	...	78
				Salmonella wellikada	...	...	1
							364

Following the identification of *Salm. paratyphi-B*, type Beccles var. 4 in a marshmallow biscuit purchased at a Liverpool restaurant on 21st November, 1960 (reported in the Annual Report 1960) a full investigation was conducted at the Liverpool factory where it had been prepared some ten days previously (a full report was published in "The Lancet" August 12th, 1960). It was clearly established that the source of infection in the marshmallow biscuit had been Ceylonese desiccated coconut, which on five per cent sampling had been passed as free from infection by the Port Health authority before its release. It was also clearly established that in the preparation of the biscuit insufficient temperature was used to kill any salmonellae present in the coconut.

In December 1960 and January 1961 a number of cases of paratyphoid fever caused by *Salmonella paratyphi* B phage type Beccles Var. 4 occurred in the Midlands in the Redditch, Solihull and Meriden districts. The source of infection was traced to the coconut coating on marshmallow biscuits at this Liverpool factory.

As soon as it was pointed out to them that the biscuits were a danger to the public, the biscuit manufacturing company recalled all these marshmallow biscuits from the retailers, and desiccated coconut is no longer used as a top dressing for its biscuits.

Throughout these complicated and very trying investigations, the health department were given every facility and co-operation by the biscuit company.

Dysentery

Statistics: During the year, 335 cases of Sonne dysentery were notified in Liverpool.

In addition 125 clinical cases and 140 symptomless excretors of *Shigella sonne* were discovered following upon investigation of cases of gastroenteritis and their home contacts; thus making a total of 600 known excretors of shigella sonne organisms in Liverpool.

Dysentery in Day Nurseries

Dysentery in Day Nurseries

During the year, eight outbreaks of Sonne dysentery occurred in five day nurseries, making a total of 69 cases. Four of the outbreaks occurred in the same nursery. This was a decrease of 55 in the number of cases as compared with the 1960 figure of 124.

The following table summarizes these eight outbreaks:—

Nursery	Date of onset of first case	Date when nursery clear of infection	Clinical cases		Symptomless Excretors		Totals
			Staff	Children	Staff	Children	
A	24.2.61	11.3.61	—	1	—	1	2
B	15.3.61	24.4.61	—	1	—	7	8
A	27.4.61	6.5.61	—	1	—	—	1
A	23.6.61	12.7.61	—	2	1	1	4
A	5.9.61	18.9.61	—	5	—	4	9
C	18.9.61	27.9.61	—	2	—	1	3
D	17.10.61	17.11.61	1	2	3	21	27
E	27.10.61	27.11.61	—	3	—	12	15
			1	17	4	47	69

Of the total of 69 cases, eighteen (26.1 per cent) were clinical cases and 51 (73.9 per cent) were symptomless excretors. Of the eighteen clinical cases, one was a member of the staff employed at the nurseries and seventeen were amongst the children. Of the 51 symptomless excretors, four were staff and 47 were children. This is a marked improvement on the previous year when a total of 25 staff were involved; due in no small measure to the active measures taken by nursery doctors and matrons, especially the supervisor of day nurseries to instil the principles and practice of hygiene amongst the young nursery nurses.

Control Measures

There has been no change in the control measures first instituted in 1955 and the following summarizes the procedure adopted:—

To eliminate outbreaks caused by symptomless or convalescent carriers amongst newcomers to the nursery, stool specimens are examined for a week before the child is due to enter. By this means, a considerable number of carriers are prevented from entering nurseries and starting outbreaks. Should an outbreak occur, then all children in contact with enteritis have stool specimens examined on at least three separate occasions following the initial occurrence of infection. Every case of diarrhoea (even quite mild) in a day nursery is always stoolled. Infected children are excluded and remain absent from the nursery until three consecutive negative results have been obtained. This is extended at discretion. Co-operation with general practitioners is well established and cordial, and specimens from families are examined and the practitioner notified of the results.

Influenza A Epidemic

Influenza A reached Epidemic proportions in Liverpool between the 3rd January and the 28th February, 1961; the peak of the epidemic being reached in the week ending 31st January, with 10,457 new national insurance sickness claims. During this nine week period, a total of 60,452 new sickness claims were received at Liverpool National Insurance offices. The influenza virus identified (from seriological specimens) was classified as Influenza A2 (A/Eng/38/61) during this period.

Influenza A has reached epidemic proportions in Liverpool on two previous occasions during the past decade; the first in 1950-51, and the second in 1957 (compare Annual Reports 1951 and 1957). It is therefore of interest to compare the 1961 epidemic with these two previously reported epidemics.

Comparison of New Sickness Claims

Comparison of New Sickness Claims

A comparison of new sickness claims between the three outbreaks is shown in the diagram. It will be seen that the 1961 epidemic was more gradual and less "spectacular" in building up to its peak when compared with the previous outbreaks.

Comparison of Mortality and Morbidity

Comparison of Mortality and Morbidity

The total number of deaths from influenza for the epidemic weeks in 1951, 1957 and 1961 were 469, 81, and 94, respectively. The figures for the worst single week were more striking; 202 deaths in 1951, compared with 25 in 1957 and 26 in 1961. These findings are repeated to a greater extent with other respiratory deaths; 1,459 in 1951, 442 in 1957 and 897 in 1961. It will be seen that the mortality rate in 1961 is double that of 1957 and less than half that of 1951. When the morbidity is compared for these periods; 64,197 in 1951, 76,857 in 1957 and 60,452 in 1961, it will be seen that the 1961 epidemic was more severe than the 1957 epidemic, but not so serious as the outbreak in 1951.

Table VI compares the death rates (in age groups). There is evidence that both the 1951 and 1961 epidemics attacked a much larger proportion of older persons in the community, whereas in 1957 they almost entirely escaped.

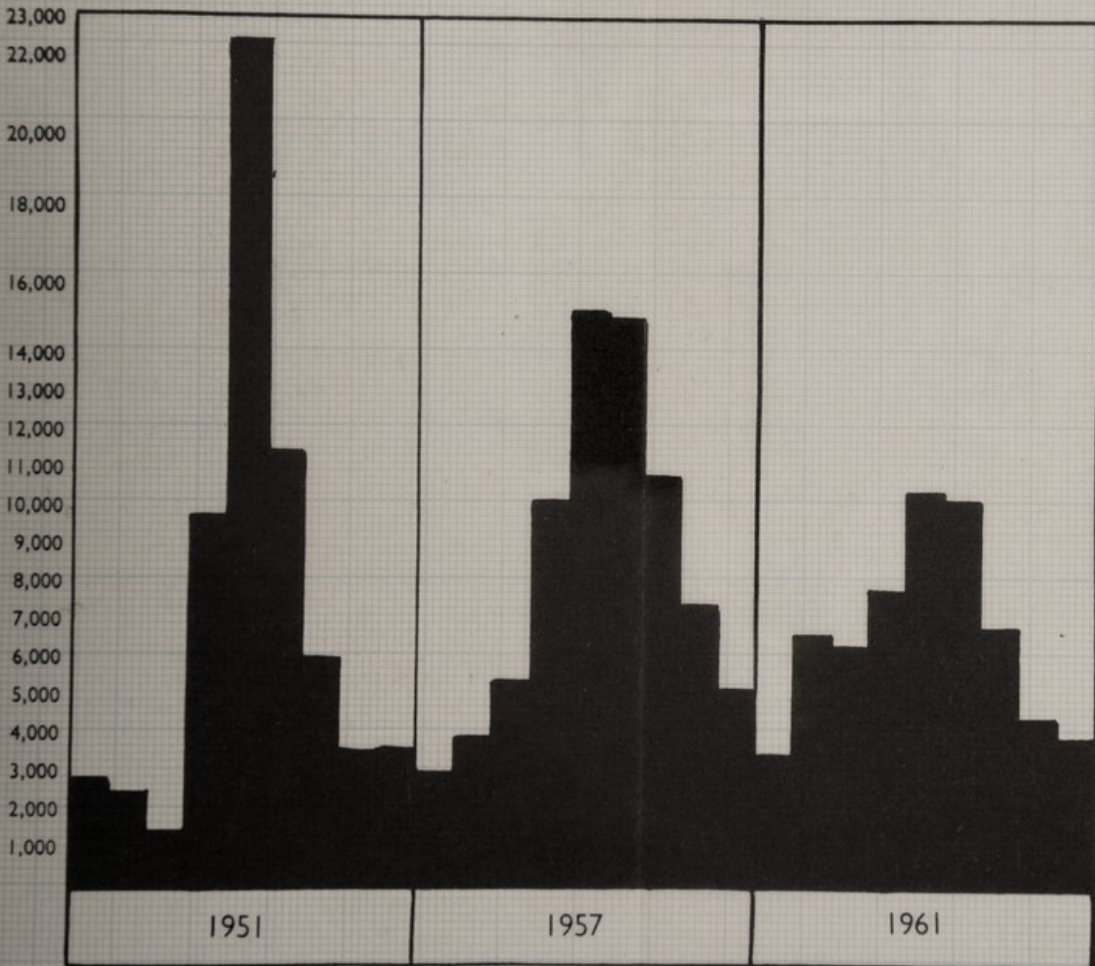
Table VII enumerates the school absence figure during the 1961 epidemic. The peak was reached on 3rd February when the average sickness rate was 24.1 per cent for infants schools, 13.3 per cent for junior schools and 17.1 per cent for senior schools. In 1957, the highest rates were among the older children (average sickness rate was 39.6 per cent for infants schools, 40.2 per cent for junior schools and 50 per cent for senior schools).

Climatic Factors

Climatic Factors

All three epidemics started during periods of cold weather, the epidemic sequence of events being cold weather, influenza epidemics with large numbers of cases, followed by a high death-rate. As mild weather supervened, the epidemics decreased.

NEW NATIONAL INSURANCE SICKNESS CLAIMS DURING PERIODS OF EPIDEMIC INFLUENZA.



NEW NATIONAL INSURANCE CLAIMS DURING PERIOD INFLUENZA.

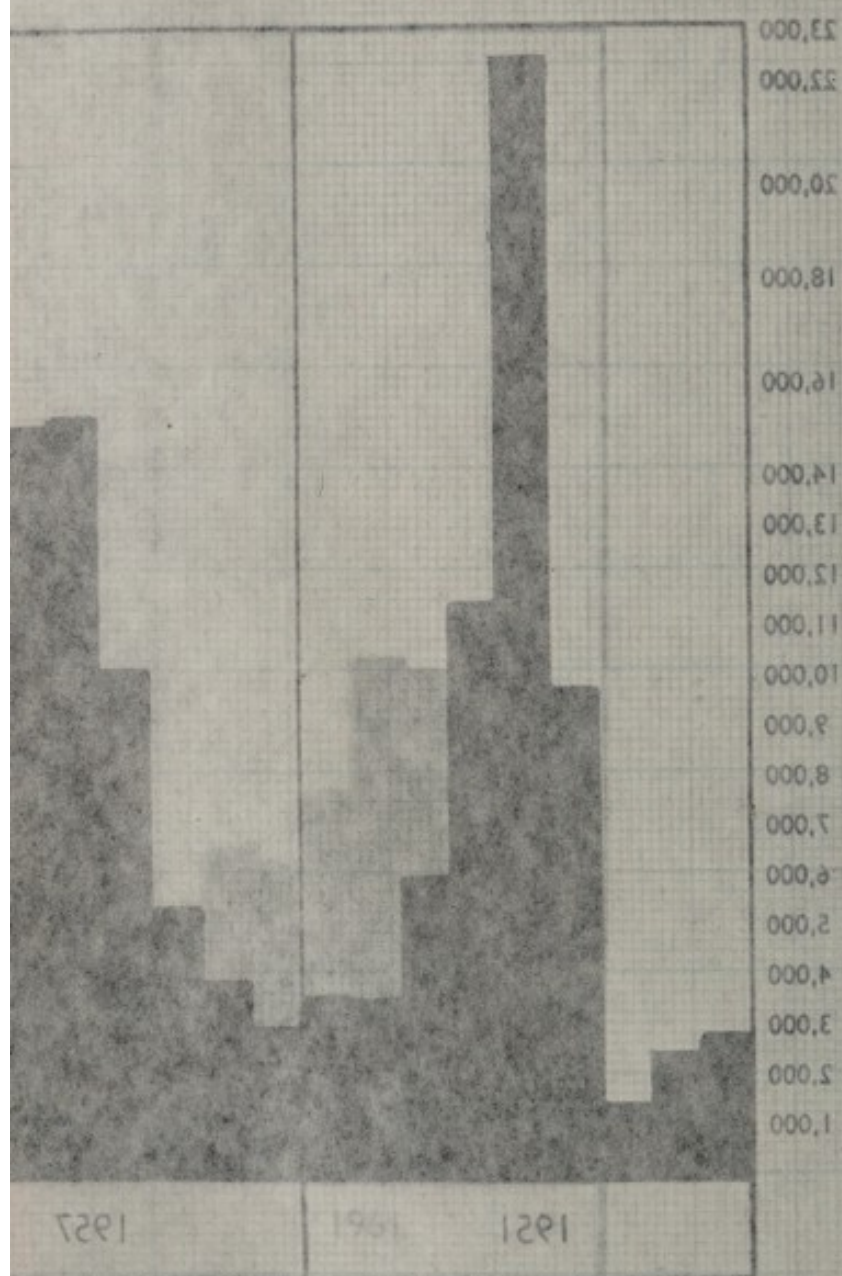


TABLE VI
INFLUENZA EPIDEMICS—1951, 1957 and 1961
No. of Deaths in Age Groups

Week ended	Age (in years)	0—1			1—14			15—54			55—64			65—74			75+			Total		
		Outbreak			Outbreak			Outbreak			Outbreak			Outbreak			Outbreak			Outbreak		
		1961	1957	1951	1961	1957	1951	1961	1957	1951	1961	1957	1951	1961	1957	1951	1961	1957	1951	1961	1957	1951
21st Jan., 1961	Total ...	15	6	20	1	1	10	24	14	28	54	26	40	78	37	72	104	43	74	276	127	244
14th Sept., 1957	Influenza ...	—	—	—	—	—	—	—	—	—	2	—	—	1	—	—	1	—	2	4	—	2
23rd Dec., 1950	Other Pneumonias	—	—	3	—	—	3	—	—	1	—	1	3	—	3	7	3	7	8	3	11	25
28th Jan., 1961	Total ...	9	8	13	1	5	2	28	21	48	57	17	56	73	32	86	108	37	96	276	120	301
21st Sept., 1957	Influenza ...	—	—	—	—	—	—	3	—	2	2	—	5	3	—	7	2	—	2	10	—	16
30th Dec., 1950	Other Pneumonias	—	—	3	—	1	1	1	—	1	—	1	1	2	1	5	1	3	7	4	6	18
4th Feb., 1961	Total ...	14	5	18	2	2	7	29	26	84	65	40	121	105	45	218	132	54	210	347	172	658
28th Sept., 1957	Influenza ...	—	—	—	—	1	1	2	—	8	4	4	12	9	—	37	9	1	27	24	6	85
6th Jan., 1951	Other Pneumonias	—	—	4	—	—	3	1	3	9	3	4	13	2	4	27	1	11	25	7	22	81
11th Feb., 1961	Total ...	13	7	22	4	2	12	35	38	106	52	41	155	94	63	273	161	63	326	359	214	894
5th Oct., 1957	Influenza ...	—	—	1	1	1	—	2	8	27	4	4	35	9	2	58	10	3	81	26	18	202
14th Jan., 1951	Other Pneumonias	—	—	7	—	—	3	—	2	13	1	4	13	2	4	33	2	9	42	5	19	111
18th Feb., 1961	Total ...	13	7	15	1	1	6	36	34	52	34	44	90	85	62	177	107	60	241	276	208	581
12th Oct., 1957	Influenza ...	—	—	1	1	—	—	—	9	13	2	3	22	6	10	33	3	3	45	12	25	114
20th Jan., 1951	Other Pneumonias	1	3	7	—	—	—	—	4	3	—	3	10	—	7	15	2	12	33	3	29	68
25th Feb., 1961	Total ...	6	3	12	1	2	4	23	23	43	29	46	40	72	58	98	93	66	125	224	198	322
19th Oct., 1957	Influenza ...	—	1	—	—	—	—	2	3	4	—	6	5	3	8	19	9	3	22	14	21	50
27th Jan., 1951	Other Pneumonias	—	—	—	—	—	1	—	1	2	1	4	3	—	6	7	2	10	13	3	21	26

TABLE VII
INFLUENZA 1961
School Attendance

Week Ending	School Attendance (%)		
	Infants	Junior	Senior
20.1.61	87.5	89.8	89.3
27.1.61	80.2	86.4	84.7
3.2.61	75.9	86.7	82.9
10.2.61	79.4	87.7	84.9
17.2.61	88.6	91.3	88.9

NOTE.—During these weeks Measles notifications averaged 175 per week.

Ornithosis Survey

Ornithosis Survey

Ornithosis infection in the wild pigeons of Liverpool has been found to be widespread (Annual Report of the Medical Officer of Health 1956-57). In 1961, serological evidence of recent infection with a virus of the Psittacosis LGV group was obtained in a binman attached to the City Cleansing Department and the possibility that he might have contracted ornithosis during the course of his employment was considered.

History of Case

History of Case

The binman, aged 31 years, was admitted to the Regional Cardiac Centre with a seven day history of intermittent breathlessness and precordial pain. Clinical examination revealed no significant abnormality; but the electrocardiograph was persistently abnormal and suggested a diagnosis of pericarditis rather than coronary occlusion. The possibility of a virus aetiology was considered and complement fixation test on the serum sample collected on the 24th day of illness showed a psittacosis LGV titre of 1/160, rising to 1/320 after a further two weeks. Complement fixation tests for antibodies to influenza viruses A, B and C, adenovirus, R burnetti and sendai and mumps virus were negative, as was the Paul Bunnell test. It was presumed that the pericarditis had been secondary to ornithosis infection. No specific therapy was given; the symptoms gradually subsided and the electrocardiograph was normal after two months. Twelve months later the complement fixation titre for psittacosis/LGV virus had fallen to 1/40.

Epidemiology

The patient was employed as a sweeper/binman in the Liverpool City Epidemiology Cleansing Department and had been so employed for twelve years in an area of high wild pigeon population. He was not a bird fancier and did not keep domestic pigeons. He did recall handling a dead wild pigeon when emptying refuse some ten to twelve days prior to the onset of his illness. It was thought that this may have been the source of his infection.

In an effort to determine whether or not employees attached to the City Cleansing Department might be at a greater risk in contracting ornithosis than other members of the community, a small survey on sweeper/binmen was carried out.

Survey

Samples of blood were examined from 127 men, employed in the central Survey area where the pigeon population is reported high (Group A) and 57, selected as a control group employed on the outskirts where there are few wild pigeons (Group B). The ages and duration of service of the men in both groups were more or less the same. A note was made of whether or not each man was a bird fancier and kept or had kept, within the past ten years, caged birds at home.

It was difficult to ascertain the number of men who actually handled dead birds during the course of their employment. Few in either group admitted direct handling, though as expected, disposal of dead birds was almost a daily occurrence in Group A.

The sera were screened for antibodies to the psittacosis LGV group of viruses. A titre of at least 1/5 was taken as an indication of past infection at an indeterminate date with a member of the group, provided that the sera were free of anticomplementary activity and did not show non-specific fixation with a normal yolk-sac antigen prepared in the same manner as the specific antigen.

The results were summarised as follows:—

	No. of Sera tested	No. of negative titre	No. with titre of at least 1/5	No. of Bird Fanciers	Per cent. positive Sera
Group A ...	70	67	3	14	4.3
Group B ...	57	54	3	24	5.3
	127	121	6	38	
Overall percentage of positive titre					= 4.7

Only one of the six infected cases was a bird fancier—he kept a parrot.

This overall figure of 4.7 per cent in employees of a cleansing department, giving a titre indicative of past infection with a member of the psittacosis LGC group of viruses suggest there is no undue public health hazard from contact with wild pigeons. Statistical examination of the sera tested according to place of work in areas of high or low pigeon density did not reveal any information of statistical significance. Sporadic cases do occur amongst persons exposed to pigeon excreta and those in intimate contact with these birds; these persons should be aware of the possible risk.

Infectious Disease Consultations

Infectious Disease Consultations During 1961, 88 visits were made to private houses by the medical staff at the invitation of general practitioners, as follows:—

Chickenpox	51
Herpes Zoster	3
Measles	18
Non-paralytic poliomyelitis ...	7
Paralytic poliomyelitis ...	9
	<hr/>
	88

IMMUNISATION AND VACCINATION

Poliomyelitis Immunisation

The immunisation of children and adults continued throughout the year. In December, 1960, poliomyelitis immunisation was extended to the over 40 age group—vaccine for this group of persons was to be obtained by general practitioners from chemists by prescription on form E.C.10. In April, 1961, the Ministry advised fourth booster inoculations to be given twelve months after the third inoculation.

Statistics

During the year, a total of 406,229 attended for first and second inoculations; 26,497 for the third inoculation and 12,726 for a fourth inoculation, compared with 13,758 in 1960. This dramatic increase was due to the special poliomyelitis immunisation campaign held in Liverpool from the 28th April, 1961, to 13th May, 1961, for first inoculations and 26th May, 1961, to 16th June, 1961, for second inoculations.

The following Table illustrates these figures:—

	1st and 2nd Injections	3rd Injection	4th Injection
Maternity and Child Welfare Clinics ...	46,960	12,107	6,394
Hatton Garden Clinic	78,925	1,154	28
General practitioners	112,544	12,636	6,304
Special clinics	120,948	600	—
Industry	46,852	—	—
Totals	406,229	26,497	12,726

Immunisation Campaign (May/June)

Towards the end of 1960, a complete analysis of the percentage of poliomyelitis immunisation in the City had been undertaken (see Annual Report, 1960). It was observed from this analysis that ten wards of the City had a particular low percentage of persons inoculated against poliomyelitis. It was agreed by the City Council in January, 1961, that an effort be made through a publicity campaign in May and June to increase immunisation generally in the City, but particularly in the ten wards.

A. Special Clinics

Following upon experience in the 1959 Mass X-Ray Campaign, it was decided to establish sixteen additional clinics in suitable buildings (e.g. Church halls, School of Hygiene, training centres, etc.) and negotiations were made with the City Engineer's Department for the hire of certain premises. In addition, four of the larger stores in Liverpool (Owen Owen Ltd., T. J. Hughes, Lewis's Ltd. and Freemans) together with Reece's Ltd., graciously offered valuable facilities within their buildings for additional clinics to be installed. Messrs. Pfizers Ltd., also provided a large mobile clinic (a specially constructed van) for two weeks in May and three weeks in June.

B. Industry and General Practitioners

Both general practitioners and Industrial medical officers in the City were encouraged to take an active part in the campaign and, where necessary, mobile teams consisting of doctors, nurses and equipment, were sent daily to factories and large concerns not covered by their own factory medical officers or by private arrangements.

C. Equipment

It was decided that sterile disposable syringes and needles sealed in cellophane envelopes would be used at all special clinics, mobile vans and by the mobile teams in industry. At maternity and child welfare clinics the normal procedure of sterilising syringes and needles would be undertaken, supplemented, where necessary, with disposable syringes should there be an overwhelming demand for immunisation.

D. Vaccine

Salk vaccine was used throughout the year and during this campaign. For the period of the campaign, three additional large capacity refrigerators were obtained on loan to supplement the existing refrigerator capacity at the health department and maternity and child welfare clinics. To serve the special clinics in church halls, etc., special containers for vaccine were designed so that the vaccine would be kept within the required temperature ranges (4° - 10° C.). While awaiting use CARDICE was used as the cooling element and in all instances, these containers were excellent and served their purpose.

E. Staff

(i) Medical

It was anticipated that medical staff would be one of the main problems. To supplement the normal medical staff of the health department, two full-time locums were engaged for the period of the campaign and a total of 56 different local doctors engaged on a part-time sessional basis. It was eventually necessary, with the agreement of the Education Committee, to transfer the majority of school medical officers from normal school health duties to assist in the campaign during two weeks in May and three weeks in June.

(ii) Nurses

The majority of nursing duties were undertaken by health visitors, school nurses and tuberculosis nurses. In addition, a number of assistant nurses (26) were recruited for the campaign. All possessed either S.R.N. or SEAN qualifications and were invaluable in supplementing the health visitor staff, either at the special or maternity and child welfare clinics.

(iii) Clerical

As with the nurses, a number of clerical staff (16 at first, increased by a further seven later) were recruited to assist not only with the heavy clerical work expected at the centres, but also with the sorting of completed cards at Hatton Garden.

F. Publicity

Experience, gained during the mass X-Ray campaign was especially useful; special posters were designed in all sizes for display around the City, in factories, office buildings and outside the special centres. Publicity in the form of television and radio news items, cinema slides and a multiplicity of newspaper articles and advertisements was repeated as in the X-ray campaign. The occurrence of a poliomyelitis death, a young man from Southport, a few days before the actual start of the campaign, plus the occurrence of suspected non-paralytic poliomyelitis in a Liverpool family increased the impact of the campaign publicity on the general public.

Virtually overnight, the campaign which had been originally planned for ten wards had to be brought forward three days and extended to the whole of the City. This sudden demand for vaccination by a large proportion of the inhabitants of Liverpool extended throughout Merseyside and eventually

increased over the whole country. It is to the credit of the whole department and especially to the medical staff engaged on poliomyelitis vaccination, upon whom the full burden fell, that there was no breakdown of vaccinations and no serious delays. Praise must also be given to the Liverpool general practitioners who co-operated in this great venture so magnificently.

Yellow Fever Vaccination

During the year, the basement immunisation clinic has continued to be used for the immunisation and vaccination of ships' crews and foreign bound travellers. As before, a charge is made for these services as follows:—

Yellow fever vaccination—25s.

Cholera (two injections)—7s. 6d.

Typhoid and paratyphoid (two injections)—7s. 6d. per injection.

Smallpox (one vaccination)—7s. 6d.

A total of 3,309 yellow fever vaccinations, 749 smallpox vaccinations, 399 TAB inoculations and 419 cholera inoculations were carried out during the year.

The following table shows the number of injections on a monthly basis:—

Month	Yellow Fever	Smallpox	T.A.B.	Cholera	Totals
January ...	268	30	24	20	342
February ...	355	49	19	13	436
March ...	313	72	25	21	431
April ...	221	55	28	34	338
May ...	276	60	30	24	390
June ...	279	73	24	26	402
July ...	221 (227)	71 (44)	48 (13)	37 (32)	377 (316)
August ...	389 (197)	112 (47)	72 (24)	59 (29)	632 (297)
September ...	191 (246)	59 (22)	23 (12)	83 (7)	356 (287)
October ...	275 (226)	54 (39)	49 (14)	21 (24)	399 (303)
November ...	295 (230)	54 (41)	32 (21)	54 (21)	435 (313)
December ...	226 (169)	60 (22)	25 (19)	27 (23)	338 (233)
Totals ...	3,309 (1,295)	749 (215)	399 (103)	419 (136)	4,876 (1,749)

* The figures in parenthesis indicate inoculations performed during the same period 1960.

When the second half of this Table (July-December) is compared with that of 1960, it will be seen that the total vaccinations/inoculations given at the clinic increased from 1,749 to 2,537, an increase of 788 (45 per cent); an indication of the increasing popularity of this centre, in a central position in the City, with shipping firms and travellers.

The clinic is open each day, Monday to Friday, from 2 p.m. to 4.30 p.m., and attendances are regulated by appointment. Arrangements have been made, from time to time, however, to visit ships in dock and give the injections on board, especially when there has been a last minute change in sailing orders.

Tetanus Immunisation

Tetanus immunisation in the form of tetanus toxoid has been made available during the year to both maternity and child welfare clinics and general practitioners. A total of 9,816 children (0-14 years) received active tetanus protection as follows:—

Age groups				0—4 years	5—14 years	Totals
General practitioners	...			3,533	1,821	5,354
Clinics	...	...	...	1,089	3,373	4,462
Totals	...	...	...	4,622	5,194	9,816

Tetanus Immunisation Register

Following a meeting at the health department between representatives of the health department, Alder Hey Children's Hospital and the Royal Liverpool Children's Hospital, Myrtle Street, it was decided to organise a tetanus immunisation register. Initially, this register would be available to the two hospitals mentioned, the health department and local general practitioners but would be extended if found successful. Its purpose was to provide a three way delivery of information concerning details of a child's protection against tetanus. It was agreed that this was very necessary in order to:—

**Tetanus
Immunisation
Register**

- (i) To have accurate information concerning the patient's previous protection against tetanus (e.g. triple antigen or tetanus toxoid);
- (ii) To start or complete active immunisation against tetanus by the use of tetanus toxoid.
- (iii) To provide information to doctors to help them to decide on the choice between giving anti tetanus serum or tetanus toxoid in individual cases, thus to reduce the number of cases of indiscriminate use of serum and the incidence of serum reaction and anaphylactic shock in persons reactive to live serum.

A small record card was devised on which complete details of the child's previous and future tetanus immunisation could be recorded. A copy of each card is to be kept at each of the three centres, viz.:—health department, Alder Hey and Myrtle Street Children's Hospitals. Daily exchanges of information will be telephoned to each centre so that the accuracy of every record card will be maintained. It is hoped that this service will commence operation early in 1962.

Diphtheria Immunisation

Diphtheria Immunisation

Diphtheria immunisation has continued as in previous years at the child welfare clinics and schools as well as by general practitioners. A total of 13,182 children were given primary inoculation during the year and 3,801 received a booster inoculation. This is 12,764 less than in 1960 (25,946) and 963 less than in 1959 (14,145). The marked fluctuation in numbers immunised is due to two main factors; in 1960 there were two outbreaks of diphtheria in Liverpool (a total of six cases including one death) which caused a heavy demand for immunisation. In 1961 there were 62 confirmed cases of poliomyelitis (see epidemiological section, page 43). All combined immunisations were stopped in the Local Authority clinics and general practitioners were advised to do the same from May to November in order to minimise the possibility of provocative poliomyelitis.

The age groups of the children under 15 inoculated during the year, together with an estimate of the percentage of the child population immunised during the past five years is given in the Table below:—

TABLE D.

	Under 1 year	1—4 years	5—9 years	10—14 years	Total under 15 years
Primary inoculations completed in 1961	1,598	6,508	3,289	1,529	12,924
Booster inoculations completed in 1961	—	409	2,358	929	3,696
Percentage of child population immunised during past 5 years	10%	80%	49.7%		55.3%
Percentage of child population immunised since birth	64.6%		96.8%		—

Whooping Cough Immunisation

During the year the campaign against this disease continued and the same arrangements were made as for diphtheria; a total of 11,313 receiving protection with three injections of either combined or triple antigen. The inoculations were given at the child welfare clinics and by general practitioners. This is 3,846 less than in 1960, but this is due to the postponement of all triple antigen injections as a precaution against provocative poliomyelitis during the later part of 1961.

Smallpox

Vaccination against smallpox continued at the child welfare clinics and by general practitioners. During the year a total of 6,808 persons were vaccinated against smallpox, of these 6,554 were children under the age of one year. This is more or less the same as in 1960 (see Table 30). It is very worrying that such a small number of children are protected and the small number of revaccinations (264) also reflects the lack of protection which exists amongst the populace. At the time of writing, the danger is emphasised by the presence of a number of confirmed cases and deaths from smallpox in the Midlands. Liverpool is one of the major seaports of this country with a heavy passenger traffic to and from India, Africa and South America; countries in which smallpox is endemic. There is thus a constant danger, especially with increased air traffic, for undiagnosed smallpox to be admitted, and with such a small number of persons having adequate protection against the disease, constant risk of epidemic smallpox.

TUBERCULOSIS

New Notifications

It was expected that in 1961 the new notifications of cases of tuberculosis would be slightly higher than they were in 1960. This would have been in accordance with the experience of other cities in which Mass X-ray campaigns have been held where there has been a slight increase in new notifications in the second year following such a campaign. The reason put forward for this trend is that a clear chest X-ray gives a feeling of security to patients for many months and that even in the presence of symptoms there is a delay in presenting for examination due to this feeling of security that a fairly recent clear chest X-ray has produced. Diagnosis of new disease for this reason can, therefore, be delayed for eighteen to twenty-four months following a Mass X-ray campaign so that an increase in new notifications is to be expected in the second year following such a campaign. In Liverpool, however, this has not proved to be the case as the new notifications for 1961 are slightly less than they were in 1960. This fact confirms the success of the 1959 campaign. The discovery of 1,045 new cases of tuberculosis in the four weeks of the campaign, their isolation, supervision and treatment has had a tremendous effect in preventing the spread of this disease in the City, a fact which is confirmed by the continued fall in the new notifications.

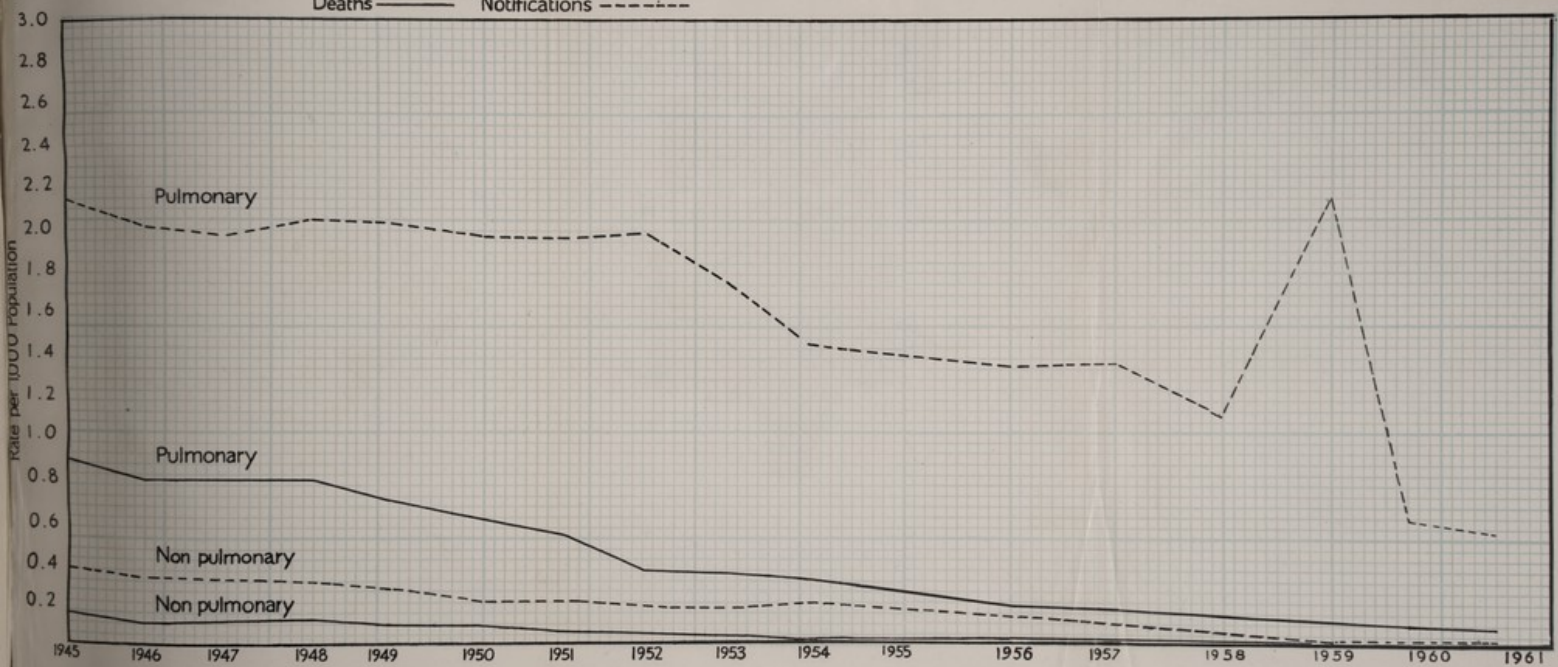
In 1960, 489 new cases were notified; the figure for 1961 was 464, a reduction of 25 cases. A comparison of this figure with that of 1958, the year before the campaign reveals the immense effect that this campaign did have on the spread of tuberculosis. In 1958 there were 874 new notifications, this means that within three years the rate of new notifications has virtually been halved.

In 1961 there were 410 cases of pulmonary tuberculosis notified and 54 non-respiratory cases. The figures for 1960 being 424 pulmonary and 65 non-respiratory. In 1958, 795 were pulmonary cases and 79 non-respiratory cases.

Table No. 85 in the statistical appendix gives a detailed analysis of the 1961 figure while the accompanying map A relates the cases to the ward population in each of the forty wards of the City.

Tuberculosis Mortality and Morbidity, 1945-1961.

Deaths ——— Notifications - - - - -



TUBERCULOSIS—1961

Graph showing incidence of new cases reported in 1961 in sexes and age groups.

Males —————
Females

40

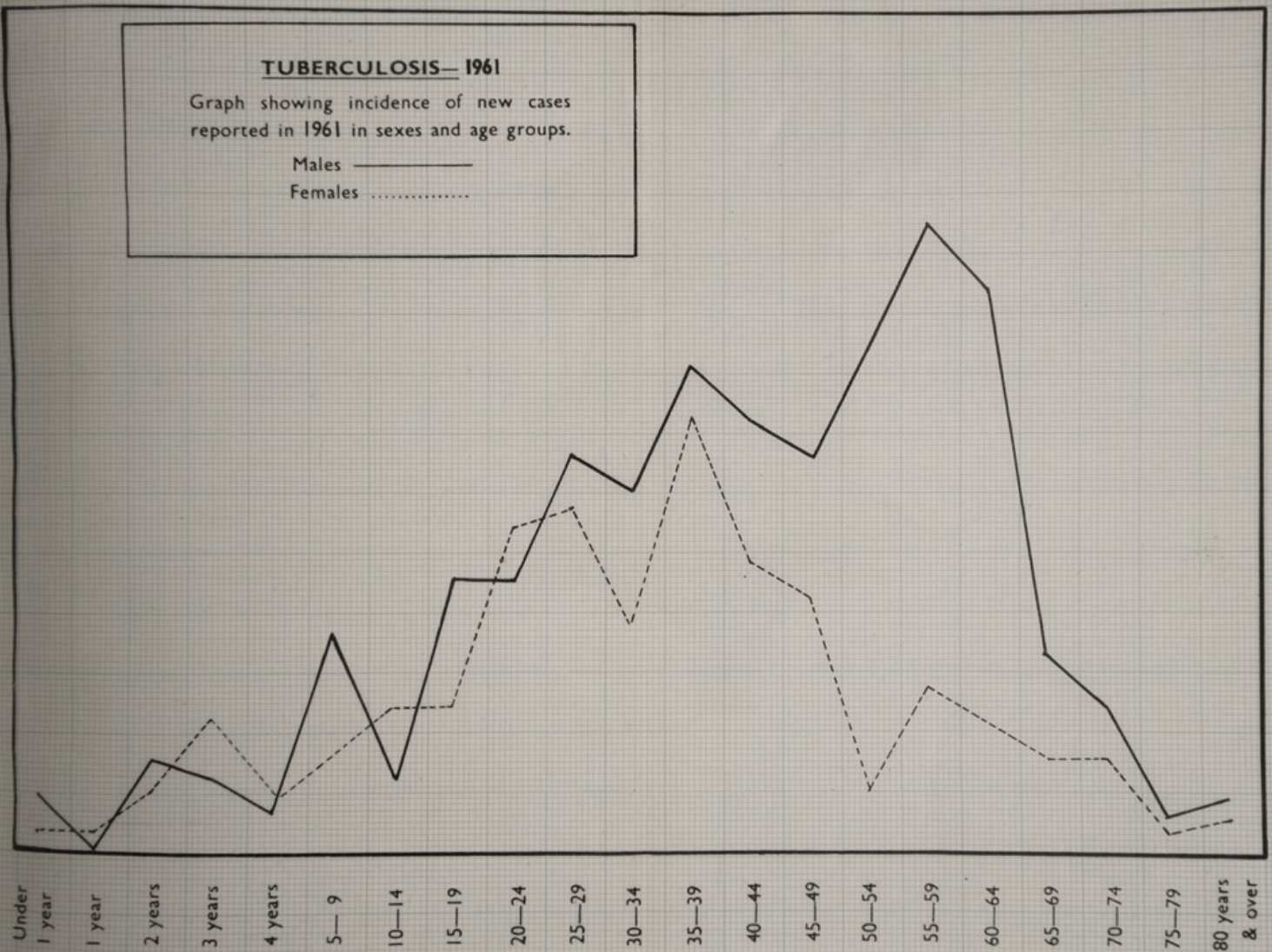
30

20

10

0

Under 1 year
1 year
2 years
3 years
4 years
5—9
10—14
15—19
20—24
25—29
30—34
35—39
40—44
45—49
50—54
55—59
60—64
65—69
70—74
75—79
80 years & over



Map A indicates the whereabouts of the known new cases of tuberculosis discovered in 1961. Reference to this map will show that new cases occur more frequently in the central area of the City where living conditions are congested and houses are sub-standard. Distribution of new cases

Map B compares the rate per 1,000 of new notifications over the past five years by wards.

Rehousing of established cases of tuberculosis is responsible for maintaining the high total of cases on the register in the Corporation estates (Map C). Distribution of total cases on the registers

The high figure in St. James and other central wards, as previously stated, is associated with the congested living conditions and sub-standard houses found in these wards.

The following table shows that there has been little change in the manner in which the disease was discovered. There has, however, been a slight increase in the proportion of cases discovered as a result of illness, and a marked reduction in the number found as a result of mass radiography:— The diagnosis of new cases

Found as a result of illness	...	...	...	...	...	...	338
Found as a result of examination of contacts	...	...	...	...	...	...	30
Found as a result of mass miniature radiography	...	...	...	...	...	...	48
Found as a result of adult routine examination	...	...	...	...	...	...	29
Found as a result of examination at child welfare clinic	...	...	...	...	...	...	1
Found as a result of school medical examination	...	...	...	...	...	...	2
Others (e.g. General Practitioner examination, Shipping Federation examination, etc.)	...	...	...	...	...	...	16

Of the above, ten notifications were posthumous and five cases left the district before investigation could be made.

In 1960, 32 new cases were discovered as a result of contact examination, in 1961 the figure was 30. This decreased trend was expected and is due to the fact that such a large number of active cases were removed from the population of the City during 1959.

Only two cases were found as a result of routine school medical examinations. This is a most encouraging indication of the improvement in the health of our school children.

**Relationship
to the
Social
Groups**

**Distribution of population in social classes related to the distribution of new cases
of tuberculosis in these classes.**

1960 and 1961 Compared

Social Group	I		II		III		IV		V	
Year	1960	1961	1960	1961	1960	1961	1960	1961	1960	1961
No. in each class per 1,000 population based on last available census ...	19	19	102	102	503	503	131	131	245	245
No. of cases in each class per 1,000 new notifica- tions	14	5	71	65	463	386	281	317	261	227

**Age and
Sex
Incidence**

This year the distribution of new cases was as follows: 63 per cent males and 37 per cent females. The peak incidence for women was again sharp and occurred between the 20th and 24th years. It is the usual finding all over the country.

Incidence amongst men again differs somewhat from the national picture, which shows a peak in the fifth and sixth decades. The Liverpool figures have two peaks, the incidence being more or less elevated from fifteen to 64 years. These points are well illustrated in the accompanying graph.

**Tuberculosis
Death Rate
(Provisional
Figures)**

There were 80 deaths from respiratory tuberculosis and six from non-respiratory disease during 1961. These figures represent 0.107 and 0.008 per 1,000 population respectively. They are compared, with those for the preceding thirteen years, in Tables 35 and 36 of the appendix, whilst Table 34 gives details of the ages at death from the various forms of tuberculosis.

**Morbidity
and Mortality
Compared**

The incidence of, and deaths from tuberculosis in Liverpool for the last thirteen years are illustrated in the accompanying graph. It is now hoped that a period of progressive improvement will reduce the problem of tuberculosis.

Tuberculosis After-Care and Prevention.

**Work of the
Tuberculosis
Visitors**

One new tuberculosis visitor was appointed during the year. This appointment was made to fill a vacancy due to a resignation. The number of visitors, therefore, remains at eighteen, sixteen female and two male, working from the four chest clinics; five are attached to the South and East and four to the North and Central Clinics. This disposition is based upon

the actual numbers of cases on each of the clinic registers. Whilst the number varies to some extent from clinic to clinic, on average each visitor has some 440 cases to look after. About 80 per cent of these are quiescent and visited at home once every six months. Visits are allocated centrally by use of a card index system which ensures that no known cases are missed and that visits are paid at fixed intervals of time. In addition to these regular visits, visits are made to contacts, those discharged from hospital, defaulters at clinics, and as an investigation for housing applications. Also every patient on treatment at home is visited twice or three times a week by the district nurse as a result of the new urine testing scheme. The administration of this scheme has allowed for the possibility that any difficulties encountered at this visit are communicated quickly to the tuberculosis visitor concerned so that action may be taken at once. This has to a large degree, altered the concept of tuberculosis visiting in the City as under these conditions a patient is visited when the need is greatest and such a visit is most acceptable to the patient, thus achieving a standard of efficient visiting that no rota system could ever hope to attain.

The total number of visits made during the year was 24,481. Access was not obtained in 3,692 of these. Each visitor thus made an average of 29 visits each working week. The reduction in the number of visits compared with 1959 when a total of 40,233 were made, is due to a number of factors. In the first place there were fewer new cases notified and this reduced the number of contact visits. Secondly, the improved housing situation has reduced the number of environmental visits necessary. Such a reduction is, of course, welcome, as it means that more time can be spent at each visit.

The essential contact between the visitors and the clinic staffs, more especially the chest physicians, has been maintained, as in the past, by attendance at contact clinics, which averaged out at rather less than two such sessions per visitor each week, as in 1960.

During 1961, seven patients have had occupational therapy at home and thirteen have attended the Rumney Road unit. Most of the patients have had long-standing disease and find it difficult to adjust themselves to the idea of work after months and sometimes years of enforced rest. Because of their physical condition some patients are only capable of very light handicrafts, while others need much encouragement and reassurance before they are convinced that some form of work and light exercise will not cause a further breakdown.

**Occupational
Therapy for
the
tuberculosis
patient**

One patient, who had chest surgery, was found to be sitting at home, afraid to go out or do anything. At first she was visited by the occupational therapist at home and later taken out with other patients. After a few months she was persuaded to attend the occupational therapy unit and has now been referred to the Disablement Resettlement Officer for retraining. The process of rehabilitation is sometimes very slow and some patients may never be able to return to full employment and the aim then can only be to give them some interest in life.

Tuberculosis Rehousing

The basis of rehousing tuberculosis patients during 1961 was a resolution of the City Council in which it was decided that six per cent of the total available tenancies in the City were to be allocated to the Medical Officer of Health for the rehousing of tuberculosis patients only. The recommendations of the Medical Officer were made direct to the City Architect and Director of Housing, thus replacing the old system whereby each individual case was presented to the Housing Allocation (Special) Sub-Committee and the final recommendation to the City Architect and Director of Housing was made after discussion by this Committee on a monthly basis.

The system in operation during 1961 proved of great value because the ability to recommend such cases directly to the City Architect and Director of Housing meant that tuberculosis patients were rehoused with much greater speed. It is considered that the speed with which an infectious tuberculosis patient can be rehoused is the all-important factor in preventing the spread of this disease.

Refusals by the patients of the offer made have not, on the whole, presented much difficulty as at the start of 1961 it was decided to deal with each refusal on an urgent individual basis and thanks to the co-operation of the City Architect and Director of Housing's department, this was always possible. As soon as the refusal was made the Housing department communicated this to the Health department, who at once took steps to have the offer inspected, either by an assistant medical officer or a tuberculosis visitor. Should it have been considered that, from the tuberculosis point of view, the refusal was justified, the City Architect and Director of Housing's department were informed at once and the offer became invalid and another was made. If, however, the refusal was considered unjustified, then personal contact was made with the patient, the whole housing situation explained and every effort was made to get the patient to accept. In the great majority of cases this proved successful.

The six per cent system, as it became known, held good until the end of October 1961 when, due to the new plans which had to be put into operation to enable the City Architect and Director of Housing to allocate houses for 1962, and taking into consideration the many extra demands that would be made upon him in this year, it was decided that six per cent of the total available tenancies in 1962 would be a larger allocation for tuberculosis than circumstances would allow and a "Block system" of allocation was put into operation as from 1st January, 1962. This will mean that in 1962 there will be 180 allocations available for the Medical Officer of Health for both tuberculosis and general medical cases. It is possible that there will be 120 allocations for tuberculosis and 60 allocations for general medical cases. Direct recommendation to the City Architect and Director of Housing is still in operation so that the element of speed in rehousing is still retained.

For the period 1st November, 1961 to 31st December, 1961, a total allocation to the Medical Officer of 45 available tenancies to include tuberculosis and general medical cases was accepted.

There is no doubt that 1961 saw a great advance in the concept of rehousing tuberculosis patients. To begin with, all recommendations had a positive sputum and were considered infectious. These were, under this system, rehoused with great speed, the aim being that patients should be rehoused within a maximum period of three weeks from the Medical Officer's recommendation. Once all the positive sputum cases were rehoused the worst of the sputum negative cases began to be recommended and this is the policy at present being pursued.

In 1961, 152 cases of tuberculosis were recommended for rehousing, of which by 31st December, 92 had been rehoused to everyone's satisfaction. 28 refused the offers made to them, in spite of inspections which showed the refusal to be unjustified. A clear explanation to the patient concerned of the housing situation existent in the City further failed to result in acceptance of the offer made. 32 cases were still outstanding, i.e., had not been made an offer, at 31st December, 1961, but of this figure, 27 were recommended in December 1961 and it was too early to expect an offer to be made in these cases.

*Disposal of Sputum by Tuberculous Patients.***Sputum
Disposal**

The problem of safely disposing of infected sputum is largely one of educating individual patients in a satisfactory regime, and without their co-operation no scheme can be successful. Most patients have been very willing to play their part and they have been constantly reminded of their obligations towards others by the tuberculosis visitors.

Polythene flasks and a solution of hypochlorite is the method adopted for sputum disposal in this city, the cost of the flasks and solution being borne by the local authority, and the patient's supplies replenished, as necessary, about once a month. 216 patients on domiciliary treatment were supplied with sputum disposal flasks during the year.

*B.C.G. Vaccination.***B.C.G. in
Schools**

The scheme for vaccinating school children, operating under Section 28 of the National Health Service Act, continued to be highly successful. Vaccination was offered to 13,179 children between the ages of thirteen and fourteen, and 11,542 parents signed the consent form. The number Heaf tested was 11,318 and 1,426 positive reactors were X-rayed to exclude the possibility of tuberculosis. There were 9,892 negative reactors and these were offered B.C.G. 8,467 actually received vaccination, leaving 1,425 still due to be vaccinated. These are at present being done as and when opportunity arises.

**Vaccination
of New Born**

B.C.G. was again offered to the babies born at the Sefton General Hospital maternity unit into non-tuberculous households, and 1,825 were vaccinated during their first week of life. As the Ministry of Health have ruled that follow-up skin tests are unnecessary in these cases, the mothers were asked to bring their babies back, for inspection only, after six weeks. 1,201 did so, while 30 moved to other local authority areas before the six weeks had elapsed. Their record cards were sent to the Medical Officers of Health concerned. B.C.G. was again given to 153 babies born in the maternity unit at Walton Hospital, 150 at Mill Road Hospital, and 225 at Broadgreen Hospital.

**Successful
Avoidance of
Section 172**

Considerable help has been given to the chest clinics by the tuberculosis after-care section in connection with their patients who suffer from active tuberculosis and who persistently refuse to attend the clinic for X-ray and examination. It will readily be appreciated that this is a matter of the

greatest importance both in the patient's own interests, as regular supervision of active disease is essential if the patient is to be cured, and also in the interests of the community as it is essential to know who are the infective cases if the spread of this disease is to be controlled.

In 1961, 156 such cases were dealt with by the section, made up as follows:—

North Chest Clinic	...	...	...	...	37 cases
South Chest Clinic	...	...	...	...	42 „
Central Chest Clinic	...	...	...	...	24 „
East Chest Clinic	...	...	...	...	53 „
					<hr/> 156 <hr/>

It should be borne in mind that efforts had been made for a minimum period of one year and in some of the cases for a much longer period, some of them up to five years, to get these patients to attend the clinic but without success. These efforts included a minimum of twelve written invitations for clinic appointments, all of which were ignored, many visits by the tuberculosis visitor, where everything from a firm promise to attend, to open hostility, were encountered and at least one home visit by the tuberculosis officer or chest physician. Further, all these cases were considered active and many were cases in which Section 172 of the Public Health Act, 1936 could have been enforced.

A successful result was obtained in 149 of these cases. Some needed a second and even third visit when called up the second time, as once again, they did not respond, but each case has ultimately been persuaded to attend the clinic regularly and is doing so, and if domiciliary treatment is needed, this is also now being supervised.

Of the seven outstanding cases, five have certainly left the City and in spite of extensive efforts to trace them, in which the Ministry of Labour and the Ministry of Pensions and National Insurance have co-operated, we have failed to do so.

The other two cases are still being visited, but still refuse to co-operate and it is likely that legal action will be taken against them in the very near future.

Mass Radiography

Mass Radiography.

The Liverpool Regional Hospital Board administer the mass radiography services within the City and in the surrounding districts. There is a static unit operating in Hood Street and three mobile units, one of which has its headquarters at Park Hospital, Orphan Drive. The static unit examines individuals from three main sources:—

- (a) Cases referred by general practitioners, mainly within the City;
- (b) National Service recruits;
- (c) Business firms in the City and adjacent areas.

During 1961, this unit made 28,985 such examinations, of which 12,766 were referred by general practitioners and 16,219 were from business firms.

All prospective employees of the city nursing service are X-rayed by the Hood Street unit before their engagement, as are candidates for employments as school teachers, and recruits to the City police force. The entry medical examination of Corporation employees now includes a chest X-ray and all these are done at Hood Street, as are the chest X-rays for Corporation superannuation medical examinations and those required for other reasons to Corporation employees.

The three mobile units, more particularly the No. 4 unit from Park Hospital, co-operate to the full with the Health department by arranging visits to factories and other premises when cases of tuberculosis have been discovered there. The numbers X-rayed by each unit are as follows:—

No. 2 unit	...	36,796
No. 3 unit	...	35,405
No. 4 unit	...	35,482

X-ray examination of school children has been replaced by a more selective examination of those children who are found to have positive Heaf reactions at the routine annual testing of the 13-14 year age group.

Tuberculosis Welfare.

Tuberculosis Welfare

During 1961, 212 cases have been the subject of reports to the National Assistance Board with a view to determining their eligibility for the special rates of allowances applicable to cases of tuberculosis. The National Assistance Board constantly reviews persons in receipt of allowances and requests confirmation that the individuals are still receiving treatment or are

under the supervision of the chest physician. The department co-operates to the full in this matter and supplies the Board with the information required.

Liaison is maintained with the Ministry of Labour with a view to assisting in the rehabilitation of suitable cases.

Summary of cases dealt with during the year 1961:—

A. Total cases referred by the Ministry of Labour to Tuberculosis Officers	...	181	Rehabilitation
(a) Examined and found fit for light, part-time or full-time employment	...	155	
(b) Not fit for employment	... ..	2	
(c) Failed to attend for examination	... ..	0	
(d) Certified as non-tuberculous	... ..	0	
(e) Cases not yet examined	... ..	24	
B. Actual numbers of patients reported by Ministry of Labour as placed in employment	... ..	73	

Work of the Chest Clinics.

A statistical survey of the work done during 1961 at the four chest clinics is given in Table 90 of the Appendix.

The chest physicians have kindly contributed the following reports.

Dr. F. E. Crawley, from the South Chest Clinic, writes—

**Reports
of the
Chest
Physicians**

During the year there has been a slight fall in the numbers of patients found to have tuberculous infection of the lungs. Last year I gave some reasons why there might not be any improvement in the figures this year, and this small improvement is therefore a satisfactory finding. The number of patients found to have non-respiratory tuberculosis shows a slight increase, but no significance can be attached to the figures as this may simply indicate a more conscientious notification of the discovery of non-respiratory infection, much of which has in the past escaped notification. Since milk-borne tuberculous infection is now rare, non-respiratory tuberculosis should be notified since only by this method can there follow a search among the contacts to discover the source of infection, which nowadays is almost invariably from a patient with pulmonary disease which may not be producing symptoms.

Large numbers of patients have been removed from the tuberculosis register in the last two or three years indicating the confidence of cure after adequate treatment with effective drugs, followed by a few years supervision at intervals which can be longer than was considered safe before these drugs were available. For these reasons the numbers on the tuberculosis register and total clinic attendances are lower.

The over-all number of new patients seen has increased by 16 per cent—an indication of the increasing use of the clinic in the diagnosis of all forms of respiratory disease.

The numbers and percentage of babies receiving B.C.G. vaccination in Sefton General Hospital both show a slight fall due to a temporary cancellation of the arrangements at the end of the year, at the time of an outbreak of infection in the hospital nursery.

Patients on home treatment with P.A.S., whether or not initially treated in sanatorium, now have regular visits from the district nurse who, by testing the patient's urine, can tell if the drug is being taken in proper doses. It is useful to have reliable information on this point, but the necessity for regular provision of urine samples, sometimes under awkward circumstances, has not infrequently caused considerable concern to even the most co-operative patient, and some have expressed in very strong terms their concern at this investigation into home treatment of a disease which still, to many of them, has a considerable stigma attached to it.

Dr. D. Osborne Hughes, from the East Chest Clinic, writes—

East

While the over-all picture shows a continued decline in the incidence and mortality from tuberculosis in this part of the City, there remain a number of disquieting features which show that the advance is uneven and indicate points of attack in order to improve the position still further.

Over the past few years, the number of patients on the register has fallen, this improvement is greatest in the case of women and children, the men who up to 1954 had slightly better figures for incidence than women, have since lagged. The same trend is seen when figures for death and recovered cases are compared, in both these instances the improvement has been greater for women patients.

It is when figures of new cases are compared that the unsatisfactory position of the males is best shown—in 1952 there were 113 new female cases of pulmonary tuberculosis and 122 male cases; in 1961, the figure for

females had dropped to 29, but there were still 83 new male cases. If infectious cases alone are compared, we find that female cases in 1961 were 23 per cent of the 1952 figures, whereas for males the reduction is to 80 per cent only; in fact, 1961 produced more male infectious cases than any year since 1957.

Not only is the incidence of the disease greater in men, but when found, the disease is usually more extensive; without the help of the patient and their doctors, this problem will not be solved.

Many patients regard a cough with sputum as normal and so do not consult their doctors at an early stage. If when they do go, all such male patients were referred for chest X-ray or had a specimen of sputum examined, diagnosis would be made a little earlier with advantage to both the patient and his contacts.

The routine visitation of patients on treatment with P.A.S. has confirmed the suspicion that back-sliding was not infrequent; these visits have helped to keep the defaulters on their toes, but the conscientious patients tend to resent the supervision and we try to limit the visiting so that only those who need encouragement are supervised.

We have, as yet, no experience of the working of this new scheme for the allocation of houses, but most of the urgent new cases have been re-housed. There seems to be considerable difficulty in arranging for transfers either to smaller or larger houses of patients whose accommodation is no longer suitable.

The situation with regard to the employment of patients reflects the general picture on Merseyside. Middle-aged men, many of them unskilled, whose main disability is dyspnoea, are difficult to place in employment; the description applies to many with chronic bronchitis without pulmonary tuberculosis, and apart from expanding Remploy facilities, no solution is in sight.

The number of B.C.G. vaccinations carried out has again risen and increasing numbers of school children receiving vaccination at school must reduce the number of susceptible young adults in the population.

School children found to be tuberculin positive at routine school examination at thirteen years of age are X-rayed at this clinic—so far no case of active tuberculous disease has been discovered.

Dr. W. D. Gray, from the North Chest Clinic, writes—

North

It is gratifying to note that there has been a continued decline in new notifications of tuberculosis for 1961, the figure for that year having fallen to 99 as compared with 133 in 1960 and 180 in 1958, the year before the mass radiography campaign. This figure is a little unexpected as in some areas following a mass radiography campaign, I understand that there has been a rebound in the year, two years following the campaign, so that more new notifications have been found then than in the year immediately after the campaign.

There is a gratifying drop in the positive sputum cases at home from 75 to 42 and only eight of these have resistant organisms compared to fifteen during 1960. This is in some measure due to the success we have had in persuading these patients to come into hospital for further treatment with the new antibiotics.

Fifty-nine people died from pulmonary tuberculosis during 1961 but 25 of these, though on our register with tuberculosis, actually died from other causes. During 1960 there were 60 deaths from pulmonary tuberculosis and 31 were due to other causes. Owing to the elderly nature of many of our tuberculous patients nowadays, I think that we are going to be left with a hard core of tuberculous deaths now for some time to come, many of them dying from tuberculosis complicated by chronic bronchitis, pneumonia or even carcinoma of the lung.

Our contact work this year remains virtually the same; 482 were examined as compared with 480 in 1960 but this is an improvement in the contact ratio as fewer new cases were notified in the same period. 200 children were vaccinated with B.C.G. as compared with 204 in 1960 and, in addition, 153 were done at Walton Hospital compared with 211 in 1960. There has been a decline in tuberculin tests from 761 in 1960 to 691 in 1961.

Total attendances of Liverpool patients during 1961 was 6,455, of whom 1,205 were for other chest conditions. There has been a slight decline in attendances at the clinic for tuberculosis and an increase in attendances for such conditions as chronic bronchitis. For the first time in the history of the clinic area the number of patients on the register has fallen below 2,000 to 1,973. It is the practice of the Chest Clinic, however, when taking a patient off the register to urge him to continue to attend for an annual X-ray, particularly if he is within the older age group. I believe that this

is necessary to detect relapses in the 60 and 70-year-olds and thus prevent them sowing a future generation with disease.

It is pleasant to recall that during 1961 an Industrial Rehabilitation Unit was opened in Liverpool which has been of considerable assistance to some of our patients. Previously, the nearest unit was in the Manchester area and patients were sometimes reluctant to go into lodgings whilst they attended for assessment of their work capabilities and the appropriate training. The clinic continues to receive every co-operation from the Disablement Officers of the Ministry of Labour.

Dr. F. J. Welton, of the Central Chest Clinic, writes—

The encouraging trends in the national pattern of tuberculosis are **Central** reproduced in the central area of Liverpool, but probably to a lesser degree than elsewhere. Thus we had 155 newly diagnosed cases of pulmonary disease in 1961, only ten fewer than the previous year, and of these cases, well over half (84) were found to be infectious when first diagnosed. A total of 1,828 contacts were seen and this is a slight decrease as compared with the previous year. 668 tuberculin tests and 411 B.C.G. vaccinations were carried out and these figures also show a similar decrease. They do represent, however, a considerable amount of work carried out by the health visitors in persuading family contacts to attend the clinic.

A useful indication of the total amount of tuberculosis infection in the community is the number of known cases of sputum-positive disease in hospital. In 1960 there were 97 such cases known to be sputum-positive at large in the central area and the equivalent figure for 1961 was 83, again a moderate and expected decrease. Of these cases, 21 had organisms of tuberculosis which were either partially or totally resistant to the three first-line drugs, compared with 23 in 1960. There was naturally a proportionate decrease in the number of total attendances at the clinic, and as cases are removed from the clinic register as "recovered" or because of transfer to the outskirts of the city, each year sees a diminishing total of patients on the register.

This report is written just three years since the 1959 mass radiography campaign and it is as well to recall that the early results of this survey indicated that there was in the central Liverpool area a considerable residual unknown pool of tuberculosis infection. This unknown pool still exists and

from time to time cases of tuberculosis are still diagnosed at a very late stage, some of them dying a few days after the initial diagnosis and hospital admission.

It is in the light of these facts that the work of the clinic, including that of the health visitors, must be assessed. To form a judgment based on statistical returns alone would be unwise for, as present trends proceed, it is clear that a good deal more effort per case or per contact will be required, especially from the health visitors if the old axioms of "find, isolate and treat" are to be followed. For the ultimate eradication of tuberculosis, these axioms are still valid and great care must be taken to ensure that no sense of complacency is allowed to hinder progress. The prejudice and ignorance which have contributed to the high incidence of tuberculosis in central Liverpool still remains as a constant challenge.

Another difficulty with which we are daily confronted is the continuing sump of unemployment as a result of which many of our middle-aged and older men who become fit for work are quite unable to find suitable employment. More surprising is the number of younger men who still seem to face quite long periods of unemployment with apparently little concern.

Early diagnosis and modern treatment can be the complete answer to the continuing problem of tuberculosis only if all preventive and social aspects are simultaneously tackled with equal enthusiasm. The close liaison which has been established between the health department (including the school health service) and the chest clinic indicates that these important matters are appreciated in the organisation and direction of the attack, and it is on the maintenance of this important link that future success will depend.

PAS in Domiciliary Treatment—A Preliminary Report.

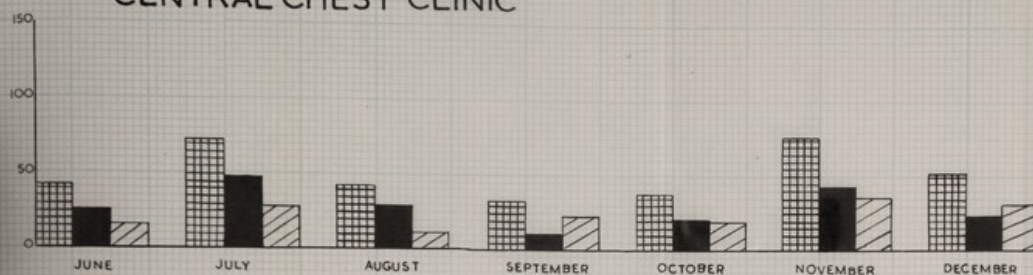
PAS in
Domiciliary
Treatment—
A Preliminary
Report

Tuberculosis organisms which are resistant to treatment by one, two or all of the three most important and widely used anti-tuberculosis drugs are being encountered in practice. In Liverpool, during the past three years, the number of new notifications infected with such organisms has shown an increase.

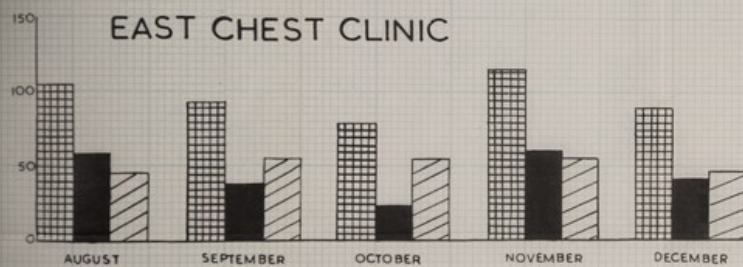
As a result of the development of safe anti-tuberculosis drugs, two of which, PAS and INAH, can be taken by mouth, together with an improvement in living conditions brought about by the slum clearance policy, the

DOMICILIARY TREATMENT SCHEME

CENTRAL CHEST CLINIC






EAST CHEST CLINIC



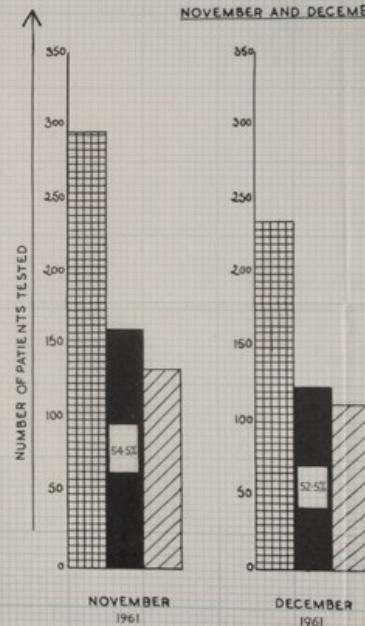
NORTH CHEST CLINIC



-  Total number of patients tested
-  Number of unsatisfactory patients
-  Number of satisfactory patients

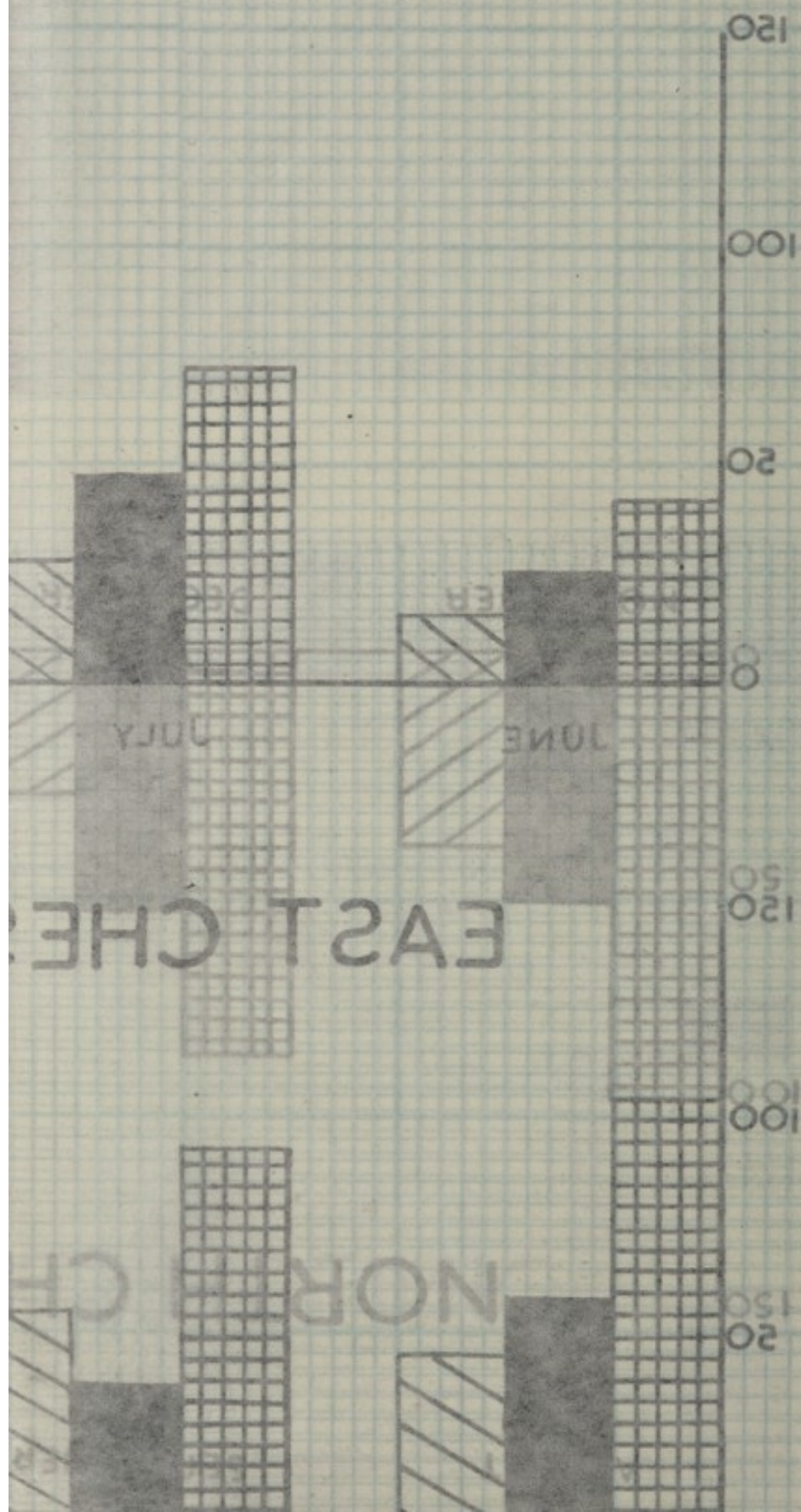
CENTRAL, EAST AND NORTH CHEST CLINICS COMBINED

NOVEMBER AND DECEMBER 1961



DOMICILIARY TREATMENT SCHEME

Number
of
patients



number of tuberculosis patients undergoing treatment at home has greatly increased. In these cases the general practitioner, advised by the chest physician, prescribes the drugs and thereafter it is left to the patient to take the drugs exactly as directed. This situation exposes both the patient and the community to some risk because, should the patient fail to take these drugs as directed, and particularly to take less than the amount prescribed, then the resulting low blood level of the drug is, without a doubt, an important factor in the development of drug resistant strains of tuberculosis organisms.

Once an organism has developed resistance to particular drugs it would appear to be capable of producing generations of organisms with a similar characteristic. Should an individual become infected with such organisms the disease so reproduced will not respond to the drugs to which resistance was originally acquired. Similarly, such an individual could infect other people who likewise would suffer from disease unamenable to the action of these drugs. The gravity of such a situation is greatly increased when the choice of drugs that can be used is strictly limited. This, unfortunately, is the case with tuberculosis.

There are three main anti-tuberculosis drugs, they are: Streptomycin, Isoniazid (INAH), and Para-aminosalicyclic acid (PAS). These drugs normally are not given singly but in combination. The commonest and most convenient combination to give without constant supervision being PAS and INAH.

Reference has already been made to the danger of underdosage with these drugs, but, as Streptomycin has to be given by intra muscular injection, and this is usually carried out in the patient's home by the district nurse, little danger of underdosage exists with this particular drug. It is, however, with PAS and INAH, both of which are taken orally, that the danger of underdosage and consequent low blood levels is of importance and a method of supervising the treatment of patients in their own homes, if their anti-tuberculosis therapy is confined to these two drugs, becomes essential to reduce the risk of producing drug resistant strains of organisms.

In June 1960 the first-ever real effort to solve the difficult problem of domiciliary supervision was made in Liverpool and a scheme to supervise all patients on domiciliary treatment for tuberculosis where PAS was included in the therapy, was commenced. This scheme depended on the discovery

of a simple test for the detection of PAS in the urine of a patient taking that drug, i.e., noting the colour change when a reagent stick (Phenistix) was dipped into such urine (no change in colour: negative result; dark purple: positive result).

In the first place it was decided to run a pilot scheme organised from the Central Chest Clinic, which serves a compact and circumscribed area of the City centre. It was decided that all patients on domiciliary treatment and taking PAS would have their urine tested in the manner described. District nurses were employed to do the urine testing and the administrative details of the scheme were as follows:—

Each patient taking PAS was issued with two urine specimen bottles, one labelled 11.00 a.m. to 1.00 p.m. and the other 9.00 p.m. to 11.00 p.m. These times were chosen as being the most likely times that a patient's urine would certainly contain PAS if the patient was taking the treatment correctly. The patients were instructed to save in the appropriate bottle a sample of their urine passed between the times indicated. Each patient was asked by the chest physician to co-operate but the purpose of the test was not divulged to the patient. The fact that instruction to co-operate came from the chest physician seemed to convey to the patient the impression that the test was part of the treatment and the great majority of patients accepted the tests without comment.

To begin with the test was carried out on each patient three times a week until a pattern of the patient's drug taking behaviour was established. Those whose tests proved to be consistently satisfactory were then visited less frequently until ultimately they were "spot checked" at varying intervals of time. Those patients whose tests showed them to be taking their treatment in an unsatisfactory manner were reported to the chest physician, who, at his discretion, either changed the treatment to include an injection or warned the patient of the steps he would take should the tests show no improvement. In these cases the high rate of testing was maintained.

In August, 1961, the East Chest Clinic was incorporated into the scheme and in November 1961 the North Chest Clinic was included. At this stage 302 patients were involved and 3,624 tests were being performed by the district nurses in a month.

The results are illustrated in the following graphs and tables.

TABLE A

Number of Tuberculosis patients in Liverpool first notified during years 1959-61 and found to be resistant to treatment by certain widely used anti-tuberculosis drugs

	1959	1960	1961
Resistant to PAS	42	68	134
Resistant to INAH	40	56	128
Resistant to Streptomycin	23	29	67
Resistant to PAS and INAH	40	59	128
Resistant to PAS, INAH and Streptomycin	17	26	43

TABLE B

Results of urine testing—Central, East and North Chest Clinics

	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
CENTRAL CHEST CLINIC— Number of Patients tested	43	73	42	34	38	77	53
Patients with unsatisfactory tests	26 60.5%	44 60%	30 72%	11 32%	18 51%	42 54.5%	21 40%
Patients with satisfactory tests	17 39.5%	29 40%	12 28%	23 68%	20 49%	35 45.5%	32 60%
EAST CHEST CLINIC— Number of Patients tested	—	—	105	94	80	117	90
Patients with unsatisfactory tests	—	—	59 56%	38 40%	24 30%	61 52%	43 48%
Patients with satisfactory tests	—	—	46 44%	56 60%	56 70%	56 48%	47 52%
NORTH CHEST CLINIC— Number of Patients tested	—	—	—	—	—	103	93
Patients with unsatisfactory tests	—	—	—	—	—	58 57%	60 64.5%
Patients with satisfactory tests	—	—	—	—	—	45 43%	33 35.5%

TABLE C

NOVEMBER 1961—PHENISTIX COLOUR CHANGES—UNSATISFACTORY PATIENTS

No Change	Pink	Light Purple	Dark Purple
1,052	681	197	14

TABLE D

NOVEMBER 1961—PHENISTIX COLOUR CHANGES—ALL PATIENTS

No Change	Pink	Light Purple	Dark Purple
1,052	681	1,217	674

TABLE E

RESULTS OF URINE TESTING

Comparison of Sexes

	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
CENTRAL CHEST CLINIC							
Males—							
Number Tested ...	21	43	20	15	19	50	33
Number unsatisfactory ...	12	23	14	2	7	29	14
Number satisfactory ...	9	20	6	13	12	21	19
Females—							
Number tested ...	22	30	22	19	19	27	20
Number unsatisfactory ...	14	21	6	9	11	13	7
Number satisfactory ...	8	9	16	10	8	14	13
EAST CHEST CLINIC							
Males—							
Number tested ...	—	—	46	47	40	59	45
Number unsatisfactory ...	—	—	29	20	18	30	22
Number satisfactory ...	—	—	17	27	22	29	23
Females—							
Number tested ...	—	—	59	47	40	58	45
Number unsatisfactory ...	—	—	30	18	6	31	21
Number satisfactory ...	—	—	29	29	34	27	24
NORTH CHEST CLINIC							
Males—							
Number tested ...	—	—	—	—	—	54	50
Number unsatisfactory ...	—	—	—	—	—	26	33
Number satisfactory ...	—	—	—	—	—	28	17
Females—							
Number tested ...	—	—	—	—	—	49	46
Number unsatisfactory ...	—	—	—	—	—	32	24
Number satisfactory ...	—	—	—	—	—	17	22

TABLE F

CENTRAL, EAST AND NORTH CHEST CLINICS COMBINED

	1961		% of Total Number Tested 1961	
	November	December	November	December
Total Number of Patients tested	297	236	Unsat.	Unsat.
Number of Patients with unsatisfactory tests.....	161	124	54.5%	52.56
Number of Patients with satisfactory tests.....	136	112	—	—

TABLE G

November and December 1961

CENTRAL, EAST AND NORTH CHEST CLINICS COMBINED

Comparison of Sexes

	Males		Females	
	1961		1961	
	November	December	November	December
Total Patients tested	163	148	134	98
Unsatisfactory	85	69	76	55
Satisfactory	78	59	58	53

TABLE H
Results of Urine Testing in Age Groups of Patients Tested
(above 15 years of age only)

Chest Clinic	1961	Years 15 to 24		Years 25 to 34		Years 35 to 44		Years 45 to 54		Years 55 to 64		Years 65+	
		Unsatis- factory	Satis- factory	Unsatis- factory	Satis- factory	Unsatis- factory	Satis- factory	Unsatis- factory	Satis- factory	Unsatis- factory	Satis- factory	Unsatis- factory	Satis- factory
Central ...	June ...	5	2	3	2	7	4	4	3	Nil	3	4	1
	July ...	10	4	6	5	15	9	8	6	2	4	3	3
	August ...	7	1	2	5	11	3	8	2	1	2	2	3
	September ...	1	4	1	4	3	6	2	5	2	1	1	3
	October ...	3	5	3	1	5	4	3	6	3	2	1	2
	November ...	6	4	6	4	15	8	10	10	3	6	2	2
	December ...	4	4	4	2	7	8	3	9	1	6	1	2
	August ...	14	7	11	10	14	9	7	8	9	5	3	5
	September ...	6	13	8	12	11	12	4	8	3	8	2	5
	October ...	4	9	3	10	6	14	—	9	3	10	1	4
	November ...	5	10	14	8	11	17	13	5	9	10	3	4
	December ...	6	6	9	9	9	12	5	7	7	7	1	5
North ...	November ...	5	3	11	10	8	4	18	15	9	6	6	7
	December ...	7	2	10	8	7	4	18	10	7	6	10	3

TABLE J
RESULTS OF URINE TESTING BY AGE GROUPS

November 1961 and December 1961

(Over 15 years only)

CENTRAL, EAST AND NORTH CHEST CLINICS COMBINED

Age Groups	15 to 24 years		25 to 34 years		35 to 44 years		45 to 54 years		55 to 64 years		65+ years	
	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.
Number of Patients tested ...	33	31	53	42	63	47	71	52	43	34	24	22
Patients with unsatisfactory results ...	16	19	31	23	34	23	41	26	21	15	11	12
Patients with satisfactory results	17	12	22	19	29	24	30	26	22	19	13	10
Number of Patients period tested taking treatment satisfactorily ...	51	39	42	46	46	51	42	50	51	56	54	46
Number of Patients period tested taking treatment unsatisfactorily ...	49	61	58	54	54	49	58	50	49	44	46	54

TABLE K
RESULTS OF URINE TESTING
Comparison of Social Classes

Social Group							I		II		III		IV		V	
U : Unsatisfactory S: Satisfactory							U	S	U	S	U	S	U	S	U	S
CENTRAL CHEST CLINIC	1961															
	June ...	—	—	1	1	11	6	5	4	9	6					
	July ...	—	—	2	4	13	9	11	6	18	10					
	August ...	—	—	1	—	12	4	5	2	12	6					
	September	—	—	1	—	3	8	1	2	6	13					
	October ...	—	—	1	1	6	7	2	1	9	11					
	November...	—	—	4	1	11	16	5	5	22	13					
	December	—	—	1	2	6	14	2	6	12	10					
EAST CHEST CLINIC	1961															
	August ...	—	—	6	9	34	23	4	5	15	9					
	September	—	—	6	8	18	30	5	8	11	10					
	October ...	—	—	4	9	15	28	2	8	5	11					
	November...	—	—	8	11	31	24	8	9	14	12					
	December	—	—	8	5	22	25	5	6	8	11					
NORTH CHEST CLINIC	1961															
	November...	—	—	8	5	20	24	—	11	20	5					
	December	—	—	5	4	28	12	9	12	18	5					

TABLE L

RESULTS OF URINE TESTING IN SOCIAL CLASSES

NOVEMBER 1961 AND DECEMBER 1961

CENTRAL, EAST AND NORTH CHEST CLINICS COMBINED

Social Groups	I		II		III		IV		V	
Number of Patients Tested ...	—	—	37	25	126	107	48	50	86	64
Number Unsatisfactory ...	—	—	20	14	62	56	23	26	56	38
Number Satisfactory ...	—	—	17	11	64	51	25	24	30	26
Number of Patients per 100 tested taking treatment										
Unsatisfactory ...	—	—	54	56	49	52	48	52	65	59
Number of Patients per 100 tested taking treatment										
Satisfactorily ...	—	—	46	44	51	48	52	48	35	41

The result of the first month's testing (June 1961, Central Chest Clinic only) can be said to show that a very serious problem existed. Of the total number of patients tested, 60.5 per cent were shown, without any doubt, either not to be taking any treatment (no colour change of Phenistix) or to be taking less than the prescribed dose over twenty-four hours (pink Phenistix).

Reference to Table B (August 1961, East Chest Clinic and November 1961, North Chest Clinic) show that the problem of the "unsatisfactory taker" was common to all three clinics: 56 per cent East Chest Clinic, 57 per cent unsatisfactory North Chest Clinic.

November 1961 was the first month in which the three Chest Clinics took part in the scheme and Table B shows the over-all picture for the City for that month, viz.: out of a total of 297 patients tested, 161 patients were, without doubt, taking their anti-tuberculous treatment in an unsatisfactory manner; 1,944 tests were performed on the urine of these 161 patients in November 1961. Table C shows the results.

In November 1961, a total of 3,624 urine tests were performed, the results are shown in Table D.

Regarding light and dark purple to be satisfactory results and no change and pink to be unsatisfactory results it will be noted that in November 1961, 1,891 tests were satisfactory and 1,733 tests were unsatisfactory, that

is, there were 158 more satisfactory tests than unsatisfactory tests and yet 162 patients were deemed to be taking their treatment in an unsatisfactory manner, while 138 only were taking treatment satisfactorily. This apparent discrepancy is accounted for by the fact that a number of "unsatisfactory patients" did, on occasions, have satisfactory tests, thus showing the haphazard way in which treatment was being taken.

It will be noted from Table B that continued urine testing in the Central Chest area did give rise to some improvement in the position, as in September 1961, and again in December 1961, there were more satisfactory cases than there were unsatisfactory cases. Although the position in December 1961, that is after seven months urine testing of the patients of this clinic, left much to be desired, of 55 patients tested, 24 still proved to be taking their treatment in an unsatisfactory manner, while 31 were considered to be satisfactory.

The position in regard to the patients of East Chest Clinic, Table B, is rather different. This clinic serves a better area of the City than does the Central Chest Clinic and the patients are, in the main, of a higher standard of intelligence. The results of five months' testing would indicate that these patients concluded correctly the reason for the urine testing much sooner than did those of the Central area. Still, the results for August 1961, that is the first month of testing for the East Chest Clinic, and November 1961, a month in which further new patients were added to the visiting list, and thus like those in August 1961, had not had time to conclude the correct reason for the test being done, are revealing, as these two months probably show most accurately the normal trend of "treatment taking" at this clinic. It will be noted that in both months there were more unsatisfactory treatment takers than there were satisfactory treatment takers and the proportions of the patients tested were much the same, allowing for the fact that many patients tested in November had already had an opportunity to learn the reason for the tests. In August 1961, 60.5 per cent of those tested were unsatisfactory treatment takers, while the figure for November was 34.5 per cent.

As regards the North Chest Clinic, Table B, which serves a mixed area of the City, including a large new estate, the figures for November 1961, and December 1961, the two months in which testing took place, reveal that the problem of the "unsatisfactory treatment taker" again exists.

Table B shows the over-all position in the City as far as could be ascertained for the months in which testing took place. Table F being the months of November 1961 and December 1961, and including the three Chest Clinics involved shows, that in spite of seven months testing of the patients of the Central Chest Clinic and five months testing of the patients of the East Chest Clinic, the position in Liverpool in December 1961 was that 52.5 per cent of the patients tested were taking their treatment in an unsatisfactory manner.

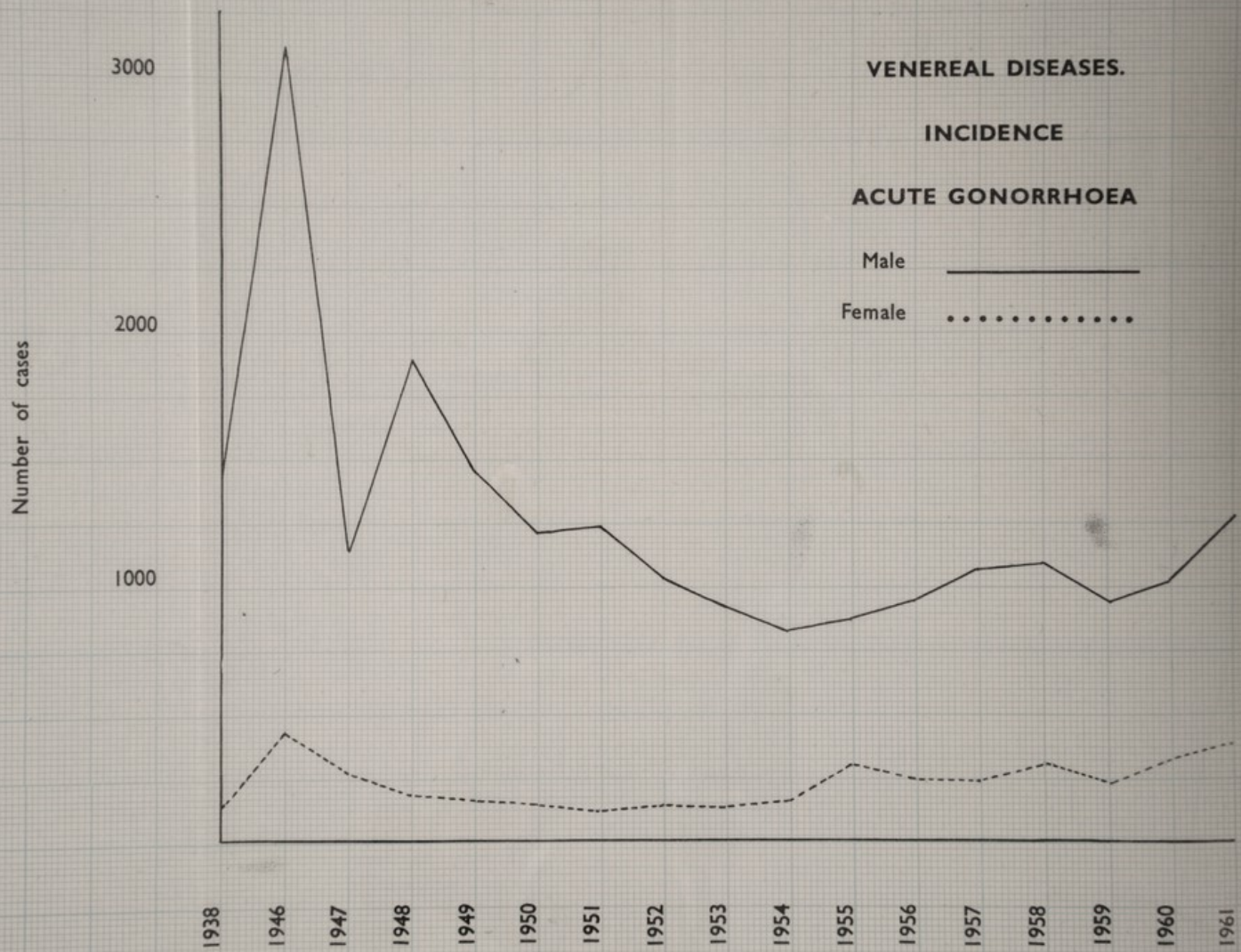
The investigation, quite apart from its main purpose, has greatly influenced the tuberculosis after-care control in the City. Patients on treatment are now being visited very frequently by district nurses and their problems are therefore being discussed virtually on a day to day basis. The administration of this scheme has allowed for all information obtained about the patients by the district nurse to be forwarded through the health department to the tuberculosis visitors. The tuberculosis visitors are now in a position to visit patients when the need is greatest and attend to all their problems in the acute phase, a much more satisfactory method of visiting than any method could be which is based on strict rotation.

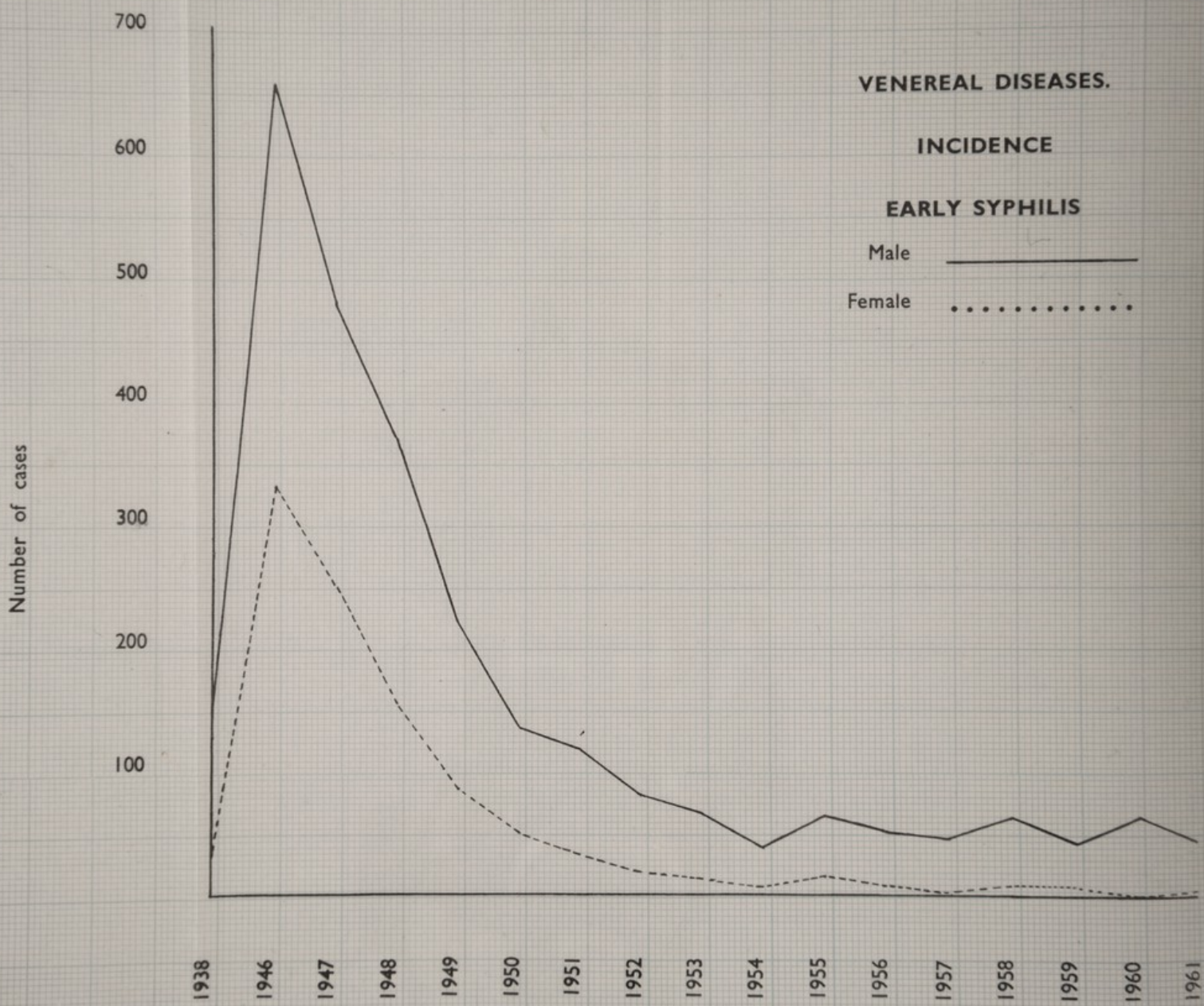
It can, therefore, be said that this investigation has shown that a serious problem does exist, both in the prescribing of PAS and in the present system of absolute dependence on the patient to take the drug in a conscientious manner while unsupervised. It is suggested, therefore, that all patients who have been taking chemotherapy at home for a prolonged period, say over eighteen months, besides spending an initial period in hospital or diagnosis, should, from time to time, during the course of such treatment be re-admitted into hospital for short periods in order that their sense of "therapeutic discipline" may be revived.

With regard to prescribing this drug, it would appear that the present method is unsatisfactory, as it can never guarantee adequate blood levels. The ideal would be that the dose of PAS prescribed should be calculated accurately for each patient. The initial period in hospital might be used to calculate the patient's absorption and excretion rate of PAS so that

when domiciliary treatment is undertaken the adequate dose would be known, or the decision that PAS was an impracticable drug to use in the particular case had been taken.

An initial period in hospital for every tuberculosis patient must, on many counts, be the pattern for the future, and re-admittance into hospital, from time to time, when domiciliary chemotherapy extends over a prolonged period, would prove helpful when any suspicion exists that the treatment is not being taken as the physician has directed.





VENEREAL DISEASES—AFTER-CARE AND WELFARE

Although the treatment of venereal disease is the responsibility of the Liverpool Regional Hospital Board and the Board of Governors of the United Liverpool Hospitals, the after-care and welfare work associated with these diseases is carried out by the local health authority.

Veneral
Diseases
After-care
and Welfare

The staff employed to undertake this work consists of a senior male welfare visitor and a female welfare visitor. In addition, the services of the female welfare visitor attached to the Royal Infirmary V.D. Clinic are available.

The work entails the interviewing of patients, tracing of contacts, writing to and visiting defaulters from treatment, follow-up of patients who have failed to attend following reference to a clinic and generally assisting patients where social problems exist, especially so when these would appear to interfere with clinic attendance. The work embraces also the welfare needs of in-patients of the V.D. wards.

At all times, a close and cordial relationship exists with the medical officers of the various treatment centres, especially Dr. E. E. Prebble, Medical Director of the Liverpool Clinics.

Tables 38 and 39 in the statistical appendix and the following graphs illustrate the pattern of incidence in early syphilis and acute gonorrhoea for the immediate pre-war full year 1938, peak year 1946, and subsequent years to that under review.

There were four cases of early syphilis in females as compared with one in 1960 and 48 cases of syphilis in males as compared with 66 in 1960.

The disparity in male/female incidence is due to the fact that the majority of male cases are seafarers of all nationalities of whom the majority are believed to be infected abroad and, because of this, many have received sufficient treatment to render their condition non-infectious before reaching Liverpool. Were this not so, it may be that there would have been a higher female incidence in Liverpool amongst girls co-habiting with these men.

There was a marked increase in acute gonorrhoea for both males and females in 1961. There were 1,273 male cases, and 364 female cases; an increase of 25.6 per cent and 20 per cent respectively over the 1960 figures. This incidence of gonorrhoea for 1961 is compared with 1960 and 1955 (the first year of increase since 1946) in the following Table:—

TABLE "A"

Incidence of Gonorrhoea	1955		1960		1961	
	Male	Female	Male	Female	Male	Female
Under 15 years ...	—	6	1	2	—	5
15-17 years ...	20	31	27	15	24	27
18-20 years ...	113	63	116	77	180	94
21-25 years ...	237	78	340	122	416	138
26-30 years ...	194	56	227	54	295	56
31-35 years ...	148	30	133	17	155	21
36-40 years ...	71	10	98	8	102	16
41-45 years ...	35	6	33	2	52	3
46 years and over	44	7	38	4	49	4
TOTAL ...	862	287	1,013	301	1,273	364

Incidence of Venereal Disease in Liverpool amongst British West Indians

Incidence of
V.D. in
Liverpool
amongst
British West
Indians

During the past two years there has been much comment as to the probable influence of West Indians upon the incidence of V.D. in those areas having a high British West Indian population. During 1961, an investigation was made in Liverpool, the results being as follows:—

Of the total of 1,273 infections of gonorrhoea, 205 (16.1 per cent) were found in British West Indians. Of this figure, 120 (58.2 per cent) were resident in Liverpool and 86 (41.8 per cent) were seafarers not having a Liverpool address. In the case of the 120 residents, 14 (11.6 per cent) reported with re-infection.

Although, in the United Kingdom as a whole, it has been suggested that 54.9 per cent of the increase noted in gonorrhoea between 1952 and 1958 was

accounted for by West Indians, with the greater part of the increase between 1955 and 1958, this tendency was not observed in Liverpool in 1961.

The Teenager and Venereal Disease

In the lower teenage groups, up to and including the age of 17 years, the incidence of gonorrhoea in males was 24 (1.9 per cent of total cases) as compared with 28 (2.7 of total cases) in 1960.

**The teenager
and venereal
disease**

Females of the same age groups totalled 32 (8.8 per cent of total cases) as compared with 17 (5.6 per cent of total cases) in 1960. Many girls of these lower age groups come to notice following their appearance in Court and detention on remand in custody. This procedure brought to light a number of cases which might otherwise have escaped detection, for 14 (43.7 per cent) of the total of 32 in this group so came under control.

Teenage Liaison

A probation office contacted the welfare officer in respect of a 16 year old girl recently released on licence from an approved school. The mother had approached the probation officer and expressed the fear that her daughter may have contracted venereal disease because of her behaviour following release from the school.

**Teenage
Liaison**

The mother was interviewed and the welfare visitor found that the husband was a seafarer and that the mother was a confirmed alcoholic. The girl was an only child and left on her own for long periods. An undertaking was given to the mother that the case would be investigated and she was requested to ask her daughter to contact the visitor.

Despite misgivings, the girl responded and expressed her gratitude to the welfare visitor for the interest shown in regard to her wellbeing. Although routine tests were negative for both syphilis and gonorrhoea, her clinical symptoms were such as to indicate further investigation and treatment. Following this procedure and a suitable period of surveillance, she was discharged as free from venereal infection.

It is thought that this is a good example of preventive work by the welfare section.

Contact Tracing

Of the 23 notifications of alleged source of infection, one only concerned syphilis; the remainder gonorrhoea.

**Contact
Tracing**

The following case-histories illustrate the duties of the contact tracer.

Case 1

Notification was received from a clinic in a southern seaport, to the effect that a patient who had reported there was found to be suffering from primary syphilis. It was alleged that he contracted his infection from a Liverpool girl six weeks previously.

Although the girl's name appeared to be fictitious, the personal description was more promising. The name and place of encounter—a public house—provided the initial clue in the search for his contact.

Following intensive enquiries, the contact was traced, interviewed and persuaded to attend the special clinic for investigations. These proved that she was suffering from primary syphilis although serologically negative. It would thus appear that in this instance the "alleged source of infection" was, in fact, the man rather than the woman.

Case 2

This concerned a girl of 18 years, said to have infected an American serviceman with gonorrhoea. The address submitted on the notification form proved to be false, but a similarly named street yielded success for the contact was located and identified. She had earlier been informed by the patient of the nature of his condition and alleged she had sought treatment by a private practitioner who had administered three injections.

The contact alleged that no tests had been carried out prior to treatment being given, nor was any follow up to take place. In view of these circumstances the visitor strongly advised the contact to present herself at the special clinic in order to undergo a suitable period of surveillance to establish freedom from infection. She at first refused, claiming to be symptom-free and therefore satisfied as to the efficacy of the treatment she alleged she had received.

Under pressure of further persuasion she finally agreed to attend and so came under control.

Case 3

This concerned a contact said to have infected a serviceman with gonorrhoea. When the girl was traced, it was discovered that at the time of alleged exposure, she was under treatment for early syphilis and, therefore unlikely to transmit gonorrhoea. There was, however, the possibility that her syphilitic condition had not at that date been rendered non-communicable.

The notifying agency was informed in order that the male patient should have the benefit of extended surveillance to exclude syphilis. This liaison was much appreciated by the medical officer.

A total of 74 visits were made, to houses, clubs and public houses. Results are shown in Table 40 in the statistical appendix.

Patient Defaulters

Results obtained in this field are shown in Tables 41 and 42 in the **Patient Defaulters** statistical appendix.

The following case-history is presented to illustrate one type of problem encountered in this branch of V.D. welfare.

The welfare visitor called at the home of a young male defaulter whose 19-year old wife declared that she had discovered that her husband was unfaithful during her stay in hospital following the birth of her son, now nine months old. She had obtained legal advice in regard to a separation, but would have preferred reconciliation with her husband. The welfare visitor offered to intercede.

The husband was unco-operative and evaded the efforts of the visitor to make contact. The wife was satisfied, by the husband's action, that further efforts would be fruitless, and made known to the visitor her resolve to seek accommodation at the lodgings of a girl friend who was also separated from her husband.

It was suggested by the welfare visitor that it might be better for her to go home to her mother, who had ample accommodation, but the girl felt that this might be construed as failure.

The visitor was successful in persuading her to make an approach to her mother, who readily agreed to the proposal. The girl obtained employment; the mother caring for her infant during her daily absence.

Family Investigation

A male patient suffering from secondary syphilis attended the special **Family Investigation** clinic and his active symptoms were such as to require his immediate hospitalization.

When questioned as to his source of infection, he admitted that he was drunk at the time of exposure and unable to recall any details of the person from whom he had contracted syphilis.

Enquiries were made as to his home conditions, since it was apparent that he had been in a highly contagious state for some time. It was found that there were three other members of the household; his father, aged 67 years, a sister aged 35 years, and her 9 year old illegitimate daughter. The risk of infection was explained to the patient and he was asked to agree to a home visit being carried out.

He was very worried lest they found out the nature of his infection, but also anxious that steps should be taken for their protection. He was assured that enquiries would be discreet and he agreed to rely upon the visitor's approach.

When the welfare visitor interviewed the family, the patient's father refused to attend hospital for examination but agreed to the visitor's suggestion that a specimen of blood be taken at the house. This was done and his Wasserman reaction was found to be negative.

Following a series of further visits, the patient's sister was persuaded to attend with her child at the special clinic. Each was found to be symptom-free and with a negative Wasserman reaction.

The end result in this investigation was highly satisfactory in that:—

- (i) the case made full recovery;
- (ii) infection was excluded amongst the three home contacts, and
- (iii) it was possible not to disclose the nature of the infection.

Cases referred by Ante-Natal Clinics

A total of 18 cases were referred by various ante-natal clinics for exclusion of gonorrhoea and/or syphilis. In the case of the latter condition, further investigation was necessary following upon the finding of positive routine serological tests at the ante-natal clinic.

The following table indicates the outcome of investigations:—

TABLE "B"

Venereal Disease—Cases referred by Ante-Natal Clinics

	Congenital Syphilis	Late Latent Syphilis	Gonorrhoea	Negative Tests	Total
Diagnosis following full investigation ...	2	4	1	11	18

Cases referred by Ante-Natal Clinics

Neo-Natal Cases referred

Three cases of gonococcal ophthalmia neonatorum were transferred from maternity units for in-patient treatment. In each instance the mother accompanied her infant, and where hospital discharge was taken against medical advice, the case was followed-up and brought to the special clinic.

**Neo-Natal
Cases
Referred**

In no instance had the mother attended a special clinic during pregnancy.

General After-Care

A number of visits were carried out in respect of babies born of mothers who, having a history of treated syphilis, had received precautionary treatment during pregnancy. In all such cases tested to date, serology has been found negative.

**General
After-Care**

Many unmarried girls are referred for tests for venereal disease prior to booking for admission to Mother and Baby homes. In all such instances, every effort is made to arrange a specific appointment during clinic sessions since it is common practice for a girl to be accompanied by her mother. The same applies in adoption cases.

MENTAL HEALTH SERVICE

Introduction When last year's report on the mental health service was written the Mental Health Act of 1959 had only been in full operation for two months and its effect could not be assessed, though certain trends were mentioned. Now that another twelve months have elapsed it is possible to discuss it more fully and the present report will be largely concerned with the changes which have been and are being made in the department's service as a result. It will be useful, to those not in direct touch with the working of the mental health service, to have first a summary of the main ideas behind the new Act. This will provide a context into which they can then more easily fit the description of the year's work.

Mental Health Act

Briefly the Mental Health Act has set out to do two things: (a) to ensure hospital treatment of mental disorder shall be dealt with, as far as possible, by the same procedure as other illness and that, where this is not possible, the procedure for compulsion shall be made more acceptable than the old "certification". As will be seen the mental health service is closely concerned with this change in hospital admission arrangements.

(b) But perhaps the most important single feature of the Act is its emphasis on community care. It is this which offers the great challenge to local health authorities for they are charged with the responsibility of developing services within the community which, it is hoped, will reduce the extent and duration of hospital care and at the same time bring the man in the street into closer touch and closer sympathy with the problems of those who are mentally disturbed.

Under this heading of community care are the visiting of people in their homes, provision of training, facilities for sheltered work, special care units, short-term residential care, social clubs and hostels. It must not be thought that provision was completely lacking before the Act—many authorities, including Liverpool, had well-developed services but usually with the emphasis placed on the mentally subnormal. The Act has given the impetus to more balanced development, with all forms of mental disorder being catered for. It has also introduced an entirely new service; recognising that many people who are now forced to spend their lives segregated from the community in hospitals could, with a little supervision, take their place in the community, it has given local health authorities power to run

hostels for such people and though none has yet been opened in Liverpool, plans are at an advanced stage and will be mentioned later in the report.

The fact that the Act contains nine parts and 154 sections shows that these two basic concepts have been worked out in great detail.

Important as the work done in relation to hospital admission continues to be, the fact that good progress has been made in Liverpool in community care during the year makes it natural to discuss this topic first.

Community Care.

1. Visiting.

Home visiting is at the heart of community service. Liverpool has 24 mental welfare officers each of whom has upwards of 100 mentally disordered persons under his or her care. In addition another officer acts as liaison officer between the training centres and the parents of those who attend them and another as employment officer.

The number of visits paid during the year was 17,577 as compared with 19,011 in 1960, 12,739 in 1959 and 6,976 in 1950. 3,047 people were receiving care at the end of the year and thus on an average six visits per person were made in the year—of course the actual number of visits to each patient differs widely according to need.

There is not a great deal new to be said about the work. Its more formal and "statutory" character has all but disappeared and mental welfare officers are accepted by nearly all patients and relatives as friends who fulfil a useful purpose in an unobtrusive manner.

A number of rather dramatic case-histories have been quoted in this report in past years to illustrate the visiting work. In contrast it is proposed this year to quote one case which, though it may lack drama, is representative of much of the work—the problems of families where, often, there is no "happy ending" but just a continuing effort to avoid further deterioration. This type of case is the staple diet of the service and perhaps it will serve to emphasise that ordinary people cannot stand aside from these "ordinary" problems—they are everybody's concern.

Let us take John for example. He first came to our notice in 1953 when he was sixteen. He had been right through school and had had several jobs but had been dismissed within weeks. Described as "very shy and

Home
Visiting

The case
of "John"

with an inferiority complex" he had no friends and apparently disliked all members of the opposite sex. He was quite willing to attend a clinic but no improvement resulted. Obviously he was not of high intelligence but could not be described as "mentally defective". In 1954 he went into hospital voluntarily for four months and had deep insulin therapy which effected a temporary improvement. He soon reverted to an aimless life at home, however, alternating between "moods" and cheerfulness, reconciled to the idea that he could not work and limiting his activities to a daily walk. And so life went on for a number of years. Visits encouraged him and his parents but there was little change, the visiting officer observed that "John is treated like a child, accepts this and is content to spend his life having things arranged for him".

After clinic treatment early in 1961 he had "improved beyond recognition" but again the improvement was short-lived. What has effected some apparently more lasting benefit is attendance at an occupational therapy unit and this case is a fair illustration of the value of the committee's new mental health centre. From June last onwards, John has attended regularly, first at Westminster House and latterly at the Johnson Street Centre and though he shows no signs yet of improving in initiative he is at least coming regularly and meeting other people. Like so many other cases this cannot be rounded off neatly with a "complete recovery"—in fact the basic problem is a personality defect and visiting and occupation can only hope to keep John happier and more usefully employed than he would be if he were left solely to the care of his kind but uncomprehending parents. Here again the family background and influence are settled beyond alteration long before the service is brought into contact.

Recruitment of visiting staff

This brief account of one patient cannot but remind the reader that the quality of the visiting officer is all important. Unless he can gain and keep the confidence of the patient and the family he can do nothing.

Sometimes the opinion is heard that the "motherly" (or "fatherly") person who is untrained but relies on commonsense is the best type but, sadly but firmly, it must be said that a "kind heart" without training may do more harm than good in the mental health field; on the other hand so may the graduate who knows all the "jargon" but lacks sympathy.

It is widely recognised that in mental health as in other branches of social service recruitment of staff is now a crucial issue and the pilot courses of training started this year as the result of the Younghusband

Report are being studied with interest. Two officers were seconded to the first course in Liverpool and in the long term the courses may well solve staffing problems. In the short term they cannot do so in a service the size of Liverpool's and the Health Committee, feeling that dependance on mental hospitals as the recruiting ground for staff was no longer producing the best results, decided to appoint trainee mental welfare officers who would in due course hope to take the National Social Worker's Course but who, in the meantime, would be given in-service training.

At the end of the year it was not clear whether this new departure was going to bring in enough suitable candidates.

The Mental Health Act includes, of course, provision for the mentally subnormal as well as the mentally ill and all mental welfare officers have a number on their case loads. It is easier, in fact, to discuss the problems of the mentally subnormal who form a special, fairly easily recognised section of the community for whom sympathy and understanding are steadily growing.

Visiting
the mentally
subnormal

With the passing of the Mental Health Act we are entering into a new era in the care of the mentally subnormal—the old idea that “detention” was generally necessary is going.

The realisation that environment plays a much greater part than had been thought makes the provision of hostels, centres, and workshops by local authorities one of the most important features of the Act; it should be said also that the hospital situation is changing—new hospitals such as Greaves Hall and the extension at Newchurch are designed to bring out the potentialities of the mentally subnormal instead of merely segregating them from the world.

The officer visiting the home has the best chance of educating parents to these new ideas and though, after a time, his visits can often be reduced in number, he should always be available for help and advice.

The moment when parents are told officially that a mentally subnormal child is unsuitable for education at school can be a very distressing one, and a new procedure was introduced during the year to ensure that this information is given in an informal and constructive way. A mental welfare officer delivers the Director of Education's letter personally, explains what it means and tells the parents what the Health Department's facilities are.

Mental health education and publicity in the last few years have made most parents realise that, though their mentally subnormal child may need more than normal care, it is still their child, and neither the Health Department nor anybody else has power to deprive them of their rights as parents. In the past year there have been a few cases where credence was still given to old wives' tales of friends and neighbours that the child will be "taken away". It is one of the most important tasks of mental welfare officers to disabuse parents of such ridiculous ideas and the Mental Health Act, with its emphasis on informality and the place of the subnormal within the community, helps them to do so. 75 children were notified during the year as being unsuitable for education whilst a further 111 were notified as needing some supervision by reason of their mental subnormality on leaving school.

2. *Employment.*

Work of Employment Officer

This description of the visiting work can be concluded with an account of the duties carried out by the mental welfare officer who acts as employment officer. It may be remembered that last year it was decided to allocate a second officer to this work, so great had its volume grown. It was later felt, after a review of patients referred, that there were many on the books for whom no real prospects of employment could be held out and when the second officer left to take another post the single appointment was reverted to.

The difficulties and frustration of this work have been described in detail in previous years and it need only be said that, though they continue, the justification for it cannot be gainsaid when one considers such a case as the following:—

Mr. A is mentally subnormal to a mild degree. He also has periods of mental illness and has had to be admitted compulsorily to hospital twice in the last two years.

Miss B also had several periods in hospital when her condition was diagnosed as "low grade schizophrenia". During her last stay in hospital she met Mr. A, they became friendly, were discharged at the same time and two days afterwards were married by special licence.

As might have been expected they lived a hand-to-mouth existence in rooms. Mr. A was not at first disposed to be helped by the mental health service but asked for help when he had failed to get employment. A job

as car-cleaner was obtained for him but this could only be regarded as the start of rehabilitation. Poor Mrs. A confessed that she was "hopeless", unable to cook and look after the home even though it consists only of one furnished room.

The employment officer has seen that his job has wider aspects and has arranged for Mrs. A to attend the mental health centre, Johnson Street, to receive training in general housewifery. Mr. A, limited as he is in intelligence, is doing his best and is well worth helping to establish a real home—which brings the officer to his other aim—that of giving the couple a chance in proper accommodation. This has not yet been obtained and even when it is there is no doubt that they will require all the guidance they can be given. Their chance of succeeding in life must however be rather poor.

After the review referred to above, the number of persons kept on the employment officer's "live" register was reduced from 536 to 251. Those taken off included people in regular employment, people who had moved to other areas and others who had failed to keep in touch with the service over a long period.

The year was successful in that 81 people were placed in employment (the largest figure since the service started) and only 17 lost employment found for them.

The passing of the Mental Health Act and the attendant publicity seem to have made employers more aware of the problem and more sympathetic and it is a pleasure to thank many of them for their help and courtesy.

3. *Training.*

Last year's report described the plans to open six new training centres at New Hall (formerly Fazakerley Cottage Homes). Three of the centres were duly opened in May and the remaining three in October. The official opening ceremony was performed by the Rt. Hon. J. Enoch Powell, M.B.E., M.P., Minister of Health, on 3rd November. With their opening, the difficulties regarding training of the mentally subnormal, which for long had been such an embarrassment to the Health Committee, have been eased for the time being.

**New Hall
Official
opening**

For a description of the centres and the background to their opening it may be permissible to quote from the brochure issued on the occasion of the Minister's visit, as follows:—

"The six training centres at New Hall form part of Liverpool's scheme for the expansion of mental health services in accordance with the provisions of Mental Health Act, 1959. Long before the passing of the Act, it had become evident that the City's three existing centres did not provide sufficient accommodation for the training of mentally subnormal people and a long waiting list had developed.

In 1958 the opportunity occurred for the Health Committee to acquire part (afterwards extended to the whole) of the Fazakerley Cottage Homes estate which had been in existence for many years as a communal home for deprived children. They grasped this opportunity the more eagerly because the size of the estate enabled them to think in terms not only of training centres but also of the residential hostels which, it was rightly anticipated, the new Act would require local health authorities to provide.

The location falls short of the ideal and transport costs are heavy; moreover, the Committee had a natural wish to provide new buildings. Against this, however, they balanced the fact that on the Fazakerley estate many buildings of excellent construction were available which, if they did not conform to the popular demand of today for a preponderance of windows, were quite suitable (with adaptation) for their new purpose and were set in the framework of a planned estate already in running order with, most important of all, ample open space impossible to obtain elsewhere in the City.

After considering these factors, and bearing in mind their previous long and abortive search for premises and the fact that adapting existing premises would be more economical than building, the Committee had no hesitation in taking over the estate and asking for a scheme to be drawn up, of which the first phase has now been completed by the provision of the six training centres.

Initially the centres are being used wholly for the training of the mentally subnormal but the possibility is not excluded that persons suffering from other mental disorders may attend. Three of them, Oak and Poplar Houses (for youths and men) and Hawthorn House (for older girls and women) have been open since May of this year; the remaining three—Lilac, Laburnum and Cherry Tree Houses—have just been taken over from the contractors and the first children (mainly transferred from other centres) only commenced attendance in late October. It is intended to develop

Cherry Tree House as a nursery centre with facilities also for children with severe physical handicaps or behaviour difficulties and Lilac and Laburnum Houses as junior centres.

Altogether the six centres provide places for up to 350 persons and, with the centres already open in other parts of the City, a total of 550 mentally subnormal people will shortly be accommodated. The waiting list, which has existed for so long, should then disappear and all people suitable for training will be able to receive it. As the other amenities on the New Hall estate are developed, centres will, of course, be able to use them. The facilities for outdoor recreation are doubly welcome after the years of training in centres without any outside space, and the existence of a swimming bath on the premises has already proved of the greatest value.

The training of adults is being given particular prominence. Liverpool's future plans include the opening of workshops for the mentally disordered, and, as a preliminary, the needs and possibilities of those attending the three adult centres are being assessed. Within the last few weeks, arrangements have been made to carry out an industrial process for a Liverpool firm and those engaged on it are attaining a commercially acceptable standard of work.

Recent studies have shown that the abilities of the mentally subnormal have been underestimated and the Health Committee intends to foster in every possible way measures to widen their horizon and increase their independence.

Though the waiting list will be absorbed when the New Hall centres **New Hall** take their full complement, further development will need to be considered in the fairly near future. The Mental Health Act has made attendance at a training centre compulsory for children found to be unsuitable for education in school and placement of such children without any delay whatsoever should be the Health Committee's aim.

The buildings have been adapted under the supervision of the City Architect and Director of Housing, and the design was prepared by Messrs. **Architectural detail** W. T. Harrison & Partners.

The estate consists of 21 separate cottages with a Hall, Swimming Bath, Sick Bay, Warden's House, etc., and was taken over in 1948 by the Children's Committee, for the housing and care of children.

The premises have now been transferred to the Health Committee, and the first stage of development consisting of alterations and improvements to six cottages to permit of their use as day centres, has been completed.

Certain problems and difficulties had to be overcome as a number of cottages had not been used for some considerable time, and had deteriorated, and it has been necessary to carry out remedial work as well as alterations. The six cottages have been modified basically to provide classrooms on the upper floor, with office, dining room, kitchen and cloakrooms on the ground floor. New and improved lavatories have also been installed on both floors.

Meals are prepared and served, but not cooked on the premises, and a central heating plant has been installed to serve the six centres. In addition, a laundry has been built to serve the dual purpose of teaching and laundering for the day centres.

Many alterations have been included to improve the cottages, and to adapt them to their new use. The first floor landings for instance, were narrow and flanked a large open well which, besides being inconvenient, was wasteful of valuable space, and might have proved dangerous. This well was, therefore, covered over by providing a larger landing and special safe balustrading was fitted, and the stone stairs, which were dangerous and badly worn, were covered with a foam-backed rubber, giving quietness and resilience, and covering any hard edges which might otherwise cause injury in the event of a fall or accident.

The central heating plant consists of a low pressure water heating system operating from a boiler in the new boiler house at the rear of the end cottage. Special precautions have been taken to cover all radiators with grilles, and the heating system is completely automatic and thermostatically controlled.

The decor, especially internally, has been chosen to give gay colours and a cheerful bright atmosphere, and all flooring and fittings have been installed with this in mind. Wherever possible, surfaces have been made to be easily cleaned, to achieve a high standard of hygiene.

Externally, many old shrubs and dead trees have been cleared away, and the gardens have been set out to the best advantage for the use of the new occupants. Large areas have been provided at the rear of the day centres for play space and exercise, and wherever possible outhouses have been converted into workshops for use in teaching and occupational therapy."

Not all the progress envisaged has yet been realised—the waiting list has been only partially absorbed and the general revision of training arrangements throughout the city has by no means been completed. On the other hand progress in a scheme of sub-contracted work for adults has been more rapid than could have been anticipated. **Recent Development**

The attendance at the end of the year was as follows:—

Centre	Optimum accommodation		Numbers attending	
	Age 16 and over	Under 16	Age 16 and over	Under 16
New Hall—				
3 adult centres	180	—	153	—
3 junior centres	—	170	—	62
Princes Road	—	80	1	42
Dovecot	—	60	10	43
Garston	—	60	10	40
TOTAL	180	370	174	187

Waiting list : 16 and over 29
Under 16 79

Two factors are slowing down development at present—the proportion of inexperienced supervisory staff is high and admission of children must keep step with the number of officers capable of dealing with them; secondly, the committee's plans to open small special care units at each junior centre are held up through lack of the special transport essential if children, who are handicapped physically as well as mentally, are to attend.

It will be seen that a few "over 16's" remain at the three older centres but the committee's policy is to concentrate all adult training at New Hall and it is intended to effect their transfer in the near future. **Adult Training**

The original accommodation plans for New Hall were, in fact, in process of being revised at the end of the year as it had become evident that insufficient adult places were available. Under the new plan three of the New Hall centres will be grouped together as industrial units as a temporary measure until a workshop can be built; a fourth building will be used as an adult training centre. This means, of course, that the number of children's places at New Hall will be reduced for the time being. The industrial units will remain open all the year round and the staffing structure will be changed to meet the new conditions.

Sub-Contracted Work

The work scheme has created so much interest that some description of it should be given. It is concerned solely with simple processes involving materials supplied by outside firms. It must be remembered that up to the present most of the adults attending the centres are classified in the severely subnormal group and their keenness and aptitude for the work have been astonishing. The whole of the money received is divided among the workers on a points system which takes all kinds of factors into consideration to ensure that the very backward and the physically handicapped receive their due reward as well as those who are quicker and fitter.

As many people as possible are given the opportunity of taking part. At this stage the object cannot be to provide a full-time job and the best earnings have not yet exceeded 30s. per week, but capacity is growing and it has become necessary to consult the National Assistance Board and Ministry of Pensions and National Insurance about developments which may interest them.

Parents are showing the liveliest interest in the scheme. In a letter of thanks, one of them wrote "Words could not express the joy on my daughter's face whilst I had to stand with eyes closed as she placed her wage packet—as she called it—into my hand", and another: "I would just like to say how thrilled I was, I am sure there must be many parents who feel the same way—just to think your son can really earn just a little for himself, something we thought could never happen".

Children's Training

As regards training of children the year has been less satisfactory. The postponement of the opening of the New Hall junior centres, for financial reasons, until late in the year meant that overcrowding continued at the older centres and the reduction of the waiting list was held up. At the end of the year the process of transfers and building-up from the waiting list was still going on.

The Medical Officer gratefully acknowledges the work of the Dorothy Keeling Special Care Unit, a voluntary centre financed by the Liverpool Society for Parents of Mentally Handicapped Children. In the absence of special care facilities at the training centres this Unit has performed a useful service in caring for lower grade and physically handicapped children.

Residential Training

Finally, on the subject of training, another new development should be mentioned. During the year the committee accepted responsibility for the cost of maintaining two blind and mentally subnormal children in residential

homes which give training specially adapted to meet this double disability. In two other cases part of the cost of residential training has been met.

Very careful consideration of need must be given before responsibility is accepted in such cases and the committee made it clear that they were not willing to accept such responsibility when confronted with a *fait accompli*, i.e., when parents had privately agreed with a voluntary association for the admission of a child and then asked for the Health Committee to accept financial responsibility.

4. *Hostels.*

The important project to adapt thirteen villas at New Hall as hostels for the mentally disordered is still on paper. Ministry approval in principle has been given and at the end of the year quantities were being prepared for the first phase of the scheme. It is hoped that good progress will be made during 1962.

**New Hall
Hostels**

It will be remembered that accommodation is to be provided for about 150 residents with, among other amenities, a social club, shop and tea-room, occupational therapy unit, swimming bath, gardens and bowling and putting greens.

The other part of the committee's hostel plan is to provide scattered homes, to be built by the Housing Committee on Corporation estates. It has been agreed that the New Hall scheme should have priority as it affords opportunities to classify and protect patients; the intention is, in fact, that patients shall have a period in New Hall before selection for scattered homes.

**Scattered
Homes**

5. *Mental Health Centre.*

It is a great pleasure to record the opening of the mental health centre in Johnson Street. Though this is a smaller building than had originally been planned (as in due course the intention is to incorporate a mental health centre into the projected Civic Centre) it is a visible indication of the committee's agreement with the Mental Health Act's emphasis on the importance of community care.

Opening

Unfortunately, financial and constructional difficulties delayed the opening until December so that a full assessment of its activities must wait until next year's report. Nevertheless, enough progress had already been made to show that the need for it undoubtedly exists.

A modest enough start has been made with two weekly sessions of occupational therapy and an evening club once weekly but in the very near future daily sessions will be held under the tuition of two full-time occupational therapists. About twenty patients are attending regularly, nearly all of them referred by mental welfare officers.

It will be wise to go slowly with the organisation of this centre but at the moment its most useful function would seem to be to rehabilitate patients for a limited period, giving them organised training to fit them for work—rather than to exist solely as a social club.

The fact that the officers of the mental health service are in the same building makes possible very close liaison between all the officers concerned and the patients attending, with very happy results.

6. *Hospital waiting list and short-term care for the mentally subnormal.*

Mental subnormality is now one of the classifications of people who come within the provisions of the Mental Health Act but it is reasonable to continue to discuss their needs as regards hospital care separately because many have to remain in the community for a considerable period before a place is given.

**Waiting
List**

Table 45 in the statistical appendix shows that 64 people (35 of highest urgency) were on the waiting list for extended hospital care at the end of the year. Sixty were admitted to mental subnormality hospitals during the year but during the same period 57 new cases were added to the waiting list.

On the whole, the position, which has caused the committee anxiety over the past years, shows a good deal of improvement as compared with say five years ago:—

Year	Waiting list at end of year			No. on waiting list more than 3 years
	Top urgency	Others	Total	
1956	68	47	115	53
1961	35	29	64	8

Regional Board hospitals and voluntary associations have continued to give valuable help in taking mentally subnormal people for short periods and, in fact, nearly every request for this facility has been met. Hospitals provided places for 69 people, and voluntary homes, etc., for 95, of whom 75 were accommodated at Orchard Dene. **Short term care**

Attention has been paid to children on the urgent waiting list for hospital care and all these have had at least one period of short-term care during the year; but the facility is equally appreciated by parents who wish to keep a mentally subnormal child (or adult) at home—every encouragement is offered to give them some relief from what can be a heavy burden in some cases, however willingly it is borne.

Hospital Admission Procedure.

We turn now from the community care work with its heartening year's progress to the other broad section of the mental health service work—the part played in the admission of mentally ill people to hospital under the compulsory procedure. It must be recorded that there is less cause for satisfaction here—not because of any deficiency in the service but because the changes made by the Mental Health Act do not yet seem, in Liverpool at least, to have fully achieved their object.

The Act emphasises, of course, that mentally ill people should, whenever possible, enter a psychiatric hospital with no more formality than if they were being admitted for a physical illness. The department is not normally concerned with such informal admissions and in fact has no information as to their number. **Informal Admissions**

But the Act also recognises the continuing need for compulsion in some cases and it is the manner of dealing with some of these cases under the changed procedure that gives rise to criticism on the part of the officers carrying out the work. Briefly, what was previously detention by an "order" made as a result of lay and medical opinion together, is now detention purely by "medical recommendation". This being so, mental welfare officers who formerly had discretionary powers in regard to the admission of patients in an emergency, now act merely as agents to carry out the recommendations of medical practitioners. **Compulsory hospital admissions**

Admission of
old people

It is suggested that, as a result, less care is being taken than formerly to ensure that old people are not unnecessarily subjected to detention and this contention would certainly appear to be borne out by available figures:—

Years	No. age over 70 admitted under compulsory procedure	Percentage of total compulsory admissions	Procedure
1955 	44	5.3%	Old procedure.
1960 (10 months) ...	32	5.1%	"
1960 (2 months) ...	17	11.6%	Mental Health Act procedure.
1961 	100	9.3%	"

An instance of what can happen may be given:—

A general practitioner referred a woman aged 78 for compulsory removal to hospital. The woman was confused and the doctor considered that she was unable to care for herself and that her mental condition warranted her admission to hospital as an emergency. She was escorted to a psychiatric hospital by a mental welfare officer on whose application she was admitted.

On the following day the medical superintendent of the psychiatric hospital asked that a mental welfare officer should take the patient out of the hospital and return her to her lodgings since she was not a suitable case for his hospital. It was also stated that the patient's general practitioner agreed with this proposal, but when a mental welfare officer discussed this with the general practitioner he stated that he had not been asked about this and if the patient was not correctly placed in a psychiatric hospital it was up to that hospital to have her transferred to other hospital accommodation. The mental welfare officer thereupon refused the request to take the patient out of the hospital to her lodgings where, it should be remembered, there was no one to look after her.

Later that day it was learned that the patient had been sent home by ambulance and the mental welfare officer immediately notified the general practitioner who completed a further emergency medical recommendation on which the patient was admitted to another psychiatric hospital. On later enquiry it was found that the old lady was transferred to a non-psychiatric hospital some days later.

No one is likely to disagree that this was, to say the least, a rather unnecessary pantomime. It can be argued that the general practitioner should not have recommended admission to a psychiatric hospital but, remember, decisions under the Mental Health Act relating to the need for compulsory admission to a psychiatric hospital are taken initially by a medical practitioner and it would seem that the general practitioner in this particular case was at least ensuring that the patient received hospital care. One might argue, of course, that she should have been admitted in the first instance to other hospital accommodation but such accommodation is not always easy to obtain and it would seem that the first psychiatric hospital to which she was admitted might very well in the circumstances have kept this old lady informally until arrangements were made for transfer to other hospital accommodation as was done by the second psychiatric hospital. It should not be forgotten that under the new legislation there is now no rigid classification or designation of hospitals, and, although most people may emphasise that this means psychiatric patients may be admitted to any hospital, surely it can also mean that non-psychiatric patients may be admitted to psychiatric hospitals. In the particular case quoted, therefore, it would seem that no great harm could have been done if this patient was in fact not a psychiatric case but yet admitted to the first psychiatric hospital, and if only from a purely humanitarian point of view that hospital should not have dealt with her in the way described.

Apart from old people it is found that, taking *all* age groups into account, compulsory admissions have increased under the new Act, as the following figures show:—

Year	Patients referred to Mental Health Service	Compulsory admissions to Psychiatric Hospitals		
		Emergency	Other	Total
1957	1,247	773	33	806
1958	1,353	865	19	884
1959	1,324	851	28	879
1960 (10 months)	1,000	620	12	632
1960 (2 months) ...	186	135	15	150
1961	1,217	944	129	1,073

Increase in
Compulsory
admissions

782

This increase can only be described as startling. It would be strange if an actual increase in acute mental illness coincided with the start of the new Act and an explanation must be sought elsewhere. To some extent, it may perhaps be found in the fact that medical recommendation, even though it has the effect of compulsion, has not the objectionable feature of "certification"—thus the increase in numbers may not be the retrograde step which it appears to be at first sight.

It must be remembered, however, that even though there is no "certification" in the old Lunacy Act sense, each of those persons dealt with compulsorily under the Mental Health Act is losing his or her liberty and may have little or no choice in the matter, and during a period of compulsory observation the patient can be discharged only by the responsible medical officer or by the hospital managers; he cannot be discharged by his relatives nor can he discharge himself.

The figures quoted above could mean, therefore, that more people are losing their liberty because of mental disorder under the new legislation than under the old. But these figures do not in themselves show the number of re-admissions and it is probably more true to say that this is not a true total increase but results from an increase in the number of re-admissions since almost half of all admissions to psychiatric hospitals are, in fact, re-admissions.

Early discharge of patients

It has been stated that it is better to have psychiatric patients in hospital for short periods of treatment and to discharge them as soon as possible rather than to retain them in hospital for longer or lengthy periods and that several re-admissions are better than one longer period in hospital.

This is now the fashionable pattern of hospital care but is it really so good as it is generally made out to be? We would not wish to see a return to the days when psychiatric hospitals served largely a custodial function and patients remained for several years almost as a matter of routine, but are we being any more humane or really enlightened in praising our present system where a desire to discharge patients as quickly as possible may be resulting in repeated re-admissions and causing unknown stress on relatives. This must surely have some effect on the relatives and it has been our experience that relatives visit the Mental Health service in some distress asking for help with a patient who, they claim, should not have been discharged from hospital. Questioning sometimes

elicits the fact that the relative had discharged the patient believing that he must be "cured" because he seemed better and was behaving in hospital. One must wonder whether hospital medical officers do enough to persuade relatives in such circumstances that they should not order discharge.

It can be argued, of course, that by such means relatives will learn their lesson the hard way and will not be so anxious to order the patient's discharge in the future. This might well be so but one finds very often that it is not always so easy to get the patient back into hospital again except under compulsory powers.

Not every patient is, however, discharged by relatives in this way—many, if not most, are discharged by the responsible medical officer and it may be that a number of patients are discharged earlier rather than later because of pressure on the medical officer to provide for more patients. This would seem to contradict the argument that the figures already quoted represent an increase in re-admission rather than a true increase in the number of individual patients.

An increased demand for in-patient psychiatric treatment must of necessity result either in an increase in facilities for in-patient treatment (i.e. beds) or some other provision such as day or night hospitals or, in an effort to provide for as many patients as possible, the early discharge of patients.

As has been indicated above the latter system of early discharge may not always be as worthwhile or good for the patient and his relatives as it is often stated to be and we may yet be faced with the problem of patients needing re-admission at increasingly frequent intervals until they eventually have to be retained as more or less chronic patients. At this time, of course, this idea is mere conjecture, but if this were to happen then the suggestion that our hospital accommodation can be halved over the next fifteen years may need careful re-examination. Such reduction in hospital population is partly dependent on increasing facilities being provided by the local authority but it is to be hoped that merely to fulfil this plan local authorities are not going to be saddled with patients who ought really to be in hospital care. Apart from the question of whether such a scheme is really in the best interests of the patient, his relatives and the community, the financial burden that it will place on local as opposed to central government, will bear close examination.

It would be interesting to see whether other local health authorities are experiencing similar trends in carrying out their duties and perhaps the Ministry may find it useful to make comparisons in collating the reports of various Medical Officers of Health. Certainly doubts will arise in the public mind if it is felt that informal admissions are not being used as widely as the Act intended or if old people are thought to be under unnecessary compulsion in psychiatric hospitals.

**Admission of
mentally
subnormal
patients**

What has been said so far relates to the mentally ill. The situation regarding the mentally subnormal is quite different—nearly all admissions are now informal, apart from those under criminal proceedings. In 1961, of 60 admitted, 44 were informal and twelve the subject of a Court Order in criminal cases. Everybody welcomes this change from the former state of affairs when even quite small children were detained by a cumbersome legal process.

**Work of the
Mental
Welfare
Officers**

Lastly, a further word should be said about this aspect of the mental welfare officers' work. If they are not convinced that the taking away of their statutory power has yet resulted in improvement, they have co-operated loyally and closely with the consultants, general practitioners and relatives with whom the Act has brought them into close touch.

Happily the very violent patient seems, temporarily at least, to be on the decrease but it is salutary to consider the following case and remember that even experienced officers must be constantly on their guard and, even so, cannot always escape the consequences of a patient's unpredictable behaviour.

Mr. W, a mental welfare officer, was at the home of a 36-year-old man, in process of carrying out an emergency medical recommendation to take him to hospital when the man, previously quite calm, suddenly ran upstairs and threw himself out of the bedroom window. Mr. W, following, managed to grasp his ankle and hold him suspended in mid-air until other people came to his assistance. The patient was pulled back into the room, fought to get away and jumped over the banister but was stopped at the front door by police who had meanwhile been called by people in the street who had witnessed the incident. The officer, after accompanying the patient to hospital, was exhausted and after receiving attention from his doctor was admitted to hospital with suspected internal injuries. Fortunately he has made a complete recovery. Mr. W, it may also be mentioned, is 63.

A new duty undertaken by mental welfare officers was attendance at mental health review tribunals. Evidence was given in eleven cases, all subnormal patients.

It is perhaps inevitable that there should be a contrast in tone in the **Conclusion** two main sections of this report. The picture of progress in helping mentally disordered people to fit into community life is a positive one, whilst the new method of taking a person's liberty away, however well designed, only has the negative virtue of being less disliked than the old. If the report has suggested that the new design does not yet entirely fit the community's needs it is hoped that such criticism as has been made will be found to be constructive and helpful.

AMBULANCE SERVICE.

Increase in ambulance demand

There has again been a substantial increase of both patients and mileage during the year. The total number of patients carried by the service numbered 240,855, an increase of 10,845.

The year has been characterised by the establishment at all the major hospitals in the City, with the exception of Alder Hey Hospital, of hospital transport officers. The arrangement has been agreed whereby the cost of such service is shared equally between the hospitals concerned and the local authority. Already, this arrangement has resulted in many difficulties being straightened out and it is hoped that it will lead to a marked increase in the efficiency of the service.

Features which have caused concern to the service and sometimes difficulty and distress to patients include arrangements whereby patients who first had attended distant hospitals (usually following an accident) continuing to do so although they live in a different part of the City. Although it is appreciated that at times, for medical reasons, it may be necessary to continue to do this for a short time, whenever possible it is hoped that, in the future, such patients will be transferred to the care of more convenient locally situated hospitals.

Operations

Operations

The operation of a section of the ambulance service from the Speke depot has proved a great asset both economically and efficiently. It operates an admission and emergency service between the hours of 7 a.m. and 11 p.m., and a general service from 8 a.m. to 5 p.m. To still further improve the service in the south end, the Garston accident ambulance service was extended from a sixteen hour service 7 a.m. to 11 p.m. to a 24-hour service.

Staff

It will be recalled that in the report for 1960 efforts were being made to encourage every member of the staff to become qualified in first aid and it is satisfactory to report that 96 per cent of the operational staff are now fully qualified. In addition, six driver/attendants were successful in obtaining the intermediate certificate of the Institute of Certified Ambulance Personnel and are continuing their studies with a view to taking the final examination in April, 1962.

Vehicles

Vehicles

The vehicle fleet now totals 70, consisting of 40 ambulances, 25 dual purpose vehicles and 5 sitting case cars, and at the 31st December, 1961, the ages and mileages of the vehicles were as follows:—

Age of vehicles in years	Under one year	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	Over 10
	7	12	7	1	6	5	10	4	6	6	6
Mileage of Vehicles	Under 50,000	50,000 to 75,000		75,000 to 100,000		100,000 to 150,000		150,000 to 200,000		Over 200,000 Miles	
	32	11		4		15		5		3	

During the year seven new vehicles were purchased (five stretcher case ambulances and two sitting case cars).

It will be appreciated that the increased number of patients reflected on the mileage which reached the highest figure yet recorded of 1,014,826 miles, an increase of 10,022. The outstanding feature of this increase in mileage is the reduction in fuel consumption which has been brought about by the addition of diesel vehicles to the fleet to replace petrol type vehicles.

Comparative statistics for 1960/61 are as follows:—

					1960	1961
Diesel Ambulances ...	...	...	...	...	25.8 m.p.g.	24.4 m.p.g.
Petrol Ambulances ...	...	...	...	...	12.4 m.p.g.	13 m.p.g.
Dual Purpose Ambulances...	...	...	...	...	17.8 m.p.g.	17.2 m.p.g.
Sitting-case Ambulances ...	...	...	...	...	21.9 m.p.g.	24.9 m.p.g.
Vehicle Mileage ...	...	...	...	...	1,004,804	1,014,826
Fuel—Diesel ...	...	...	...	...	6,100 gallons	8,493 gallons
—Petrol ...	...	...	...	...	57,966 gallons	51,644 gallons
Oil ...	...	...	...	...	1,153 $\frac{7}{8}$ gallons	967 $\frac{7}{8}$ gallons

The annual average mileages for the fleet are as follows:—

Type of Vehicle			Average Annual Mileage		Percentage increase/ decrease on 1960
			1960	1961	
Ambulance	Petrol	...	11,173	14,075	+ 25.9%
	Diesel...	...	19,652	15,185	— 22.7%
Sitting-case	Ambulances	...	16,891	15,081	— 10.7%
Sitting-case	Cars	...	6,856	13,817	+ 101.5%

Total petrol consumption during 1961 decreased by 6,309 gallons or 10.8 per cent to 51,644 gallons and the diesel fuel consumption increased by 2,393 gallons or 39.2 per cent to 8,493 gallons.

Stretcher case ambulances ...	Petrol	13 miles per gallon
	Diesel	24.4 " " "
Sitting case ambulances ...	Petrol	17.2 " " "
Sitting case cars... ..	Petrol	24.9 " " "

The expected mileage of the diesel engine is far greater than the life of a petrol engine and it was realised that the diesel engine would out-live the ambulance body. To strike an equality with engine and bodywork it was felt that, as a considerable amount of research had been done in the fibre glass field, a fibre glass body could be the answer. Orders were placed, based on a specification suitable to the service and two vehicles of this type were delivered during the year.

Communications

Communications

Details of the emergency calls received during the year are as follows:—

Accident/Emergency Calls—1961

Month	(A) Calls	(B) False calls with good intent	(C) (Malicious) False calls
January ...	1,025	27	1
February ...	919	30	2
March ...	1,042	59	12
April ...	1,024	52	13
May* ...	1,777	65	7
June ...	1,694	66	4
July ...	1,682	73	4
August ...	1,646	64	7
September ...	1,687	55	2
October ...	1,668	69	6
November ...	1,603	84	13
December ...	1,919	85	7
Total ...	17,686	729	78

Please note the following points:—

- (1) The total of Column (A) is the full total of all Accident/Emergency Calls.
- (2) Column (A) includes, therefore, the totals in both Column (B) and Column (C).
- *(3) From the month of May, 1961, the totals of maternity cases removed day by day were incorporated in the totals of Emergency cases.

The transport of infectious patients continues to be dealt with by a separate staff and vehicles operated from the Westminster station and the total number of infectious cases carried during the year are as follows:—

1961 INFECTIOUS PATIENTS

Month	Admission	Hospital to Hospital Transfers	Discharges	Out-Patients	TYPE		Total
					Sitting Cases	Ambulance Cases	
Jan.	242	—	64	6	128	184	312
Feb.	207	2	53	13	106	169	275
Mar.	206	25	55	4	110	180	290
April	213	24	42	4	84	199	283
May	240	29	61	5	122	213	335
June	221	31	81	5	162	176	338
July	215	34	67	17	134	199	333
Aug.	190	27	52	9	104	174	278
Sept.	221	28	77	15	154	187	341
Oct.	232	22	73	7	146	188	334
Nov.	221	19	94	2	188	148	336
Dec.	157	26	59	1	118	125	243
Total	2,565	267	778	88	1,556	2,142	3,698

OCCUPATIONAL THERAPY

Type of Work

During 1961, the work of the Occupational Therapy section has expanded despite the difficulty of shortage of staff. One of the domiciliary staff, who was working in the northern part of the city, married and moved out of the district and to date it has been impossible to replace her. As the other therapists are already working to capacity the patients in the northern area have been neglected for many months. Work in the other areas has proceeded in the normal manner with the therapists visiting mental, physical and tuberculosis patients. The number of mentally subnormal cases has been reduced with the opening of the new training centres at Fazakerley, but the number of psychiatric patients on the books has increased. The aim of the therapy for the psychiatric patients is invariably re-socialisation. As many of them find it very difficult to mix and to communicate with others, this work can best be done in groups away from home, but many months of domiciliary therapy may be required before the patient even gains confidence to travel to a centre on his own.

Mental Health Centre

In December 1961 the new Mental Health Centre in Johnson Street was opened for mentally ill patients. Two therapists have been engaged to work in the new centre and commenced duties early in 1962. Until such time as they take up full-time duties the centre has been opened on two afternoons a week only and run by the head occupational therapist and a therapist from the Rehabilitation Unit. It so happened that there was a period of colds and flu' among patients at the unit, and as the numbers were depleted a member of the staff could be spared to help at the new centre. It is anticipated that by February, 1962, the Johnson Street centre will be running to capacity, providing a wide variety of activities for these patients. The object is re-socialisation and re-settlement into employment if possible but it must be appreciated that many of the people, though capable of some employment under supervision, will never be able to work in open industry and the problem of their future on a long term basis calls for very serious consideration.

The Unit

The Occupational Therapy Unit at Rumney Road has proved a great success and during the year 103 patients have attended either daily or two or three times weekly. Ages vary from 11 years old to 80 and mental and physical patients are treated side by side. There is a wonderfully friendly spirit among the patients. Self help is one of the aims of the unit, and

many patients who first come convinced that they "can't do anything", soon find that, with the right facilities and when taught to do things a new way, there are many things they can do. An outing was organised in June and the patients attending the unit were taken by coach to Loggerheads for lunch and to Prestatyn for tea. Two ambulance attendants accompanied the party to lift the severely handicapped in and out of the coach and their assistance proved invaluable. Some of the patients had not been further than home or hospital for many years and all thoroughly enjoyed the outing. At Christmas a party was held in the unit and after tea the patients joined in games, in some of which even the most disabled could join. The evening finished up with songs and carols.

During 1961 the unit was fortunate in receiving a very handsome piano from the Merseyside Hospitals Council.

Aids for the disabled were constantly in demand and bath seats are **Aids** proving especially useful both for the handicapped and the elderly who find it extremely difficult to get in and out of the average bath. A number of handrails and bath safety rails have been supplied through the welfare section to give further assistance. Eating, toilet and dressing aids are among the most important supplied as these three functions are the chief needs of those who wish to be independent.

Consultation with the City Architect and Director of Housing has resulted **Housing** in the plans of three houses and a flat being adapted for the needs of wheelchair patients. The houses are still under construction but the patient has moved into the flat. While enabling him to move about the flat, which would have been impossible without the adaptations, it is by no means ideal as the space is so limited. Another patient who moved into an adapted flat in April lives in a wheelchair, and since his wife died in August he has managed on his own very satisfactorily.

A woman who had been in bed at home for eleven years following a **Cases** stroke was referred by the welfare section. After consultation with her doctor it was agreed that an effort be made by the therapist to get her walking again. A walking frame was supplied by the home nursing section and the patient gradually started to walk about the room, and eventually out to her kitchen. The doctor visited regularly and kept a check on the effect of the exercise on her heart, and gradually she was allowed to do more and more. A special trolley was supplied to enable her to move

things about the house without effort, and various aids were given to assist her in the kitchen. Eventually she was able to attend the Occupational Therapy Unit once a week.

A boy of fourteen suffering from spina-bifida lives with his invalid mother and young sister who also suffers from the same disease and is unable to walk. The boy was getting too heavy for his mother to lift and was referred to this section to see if a hoist could be supplied. As they live in a prefabricated bungalow space is very restricted and it was felt that the commercial hoist would be too cumbersome. A mini-hoist suspended from a track fastened to the joists of the ceiling was designed and installed, and with a nylon sling attached the mother is able to lift the boy from his bed into his chair and back again without effort. The child receives home teaching twice a week and now also attends the Occupational Therapy Unit twice a week where he is learning woodwork and deriving benefit from the social contact with the other patients.

A man in his early forties was visited at the request of the hospital physician. He was described as being "hopelessly crippled". His speech was incoherent and his replies to questions were made by spelling them out on a letter board. Basketry was started at the second visit, the activity being intended to use the small amount of voluntary movement in the patient's right hand. The left hand was inclined to be held in a flexed position and extension was encouraged by the movements necessary in shaping the basket. The patient's hands improved amazingly and he spelt out "I didn't think I would be able to do it". When strengthening movements were needed a wooden stool frame was sandpapered, polished and seated with seagrass, and to help in the recovery of writing ability the patient is now copying embroidery designs which he will use in further activities. Eating aids were supplied but hand movements have improved so much that these are no longer needed. A walking frame has enabled this man to move about the house on his own. Practice in all these activities is still being maintained with stress on speech and writing. Intelligent and enthusiastic co-operation from his wife has helped considerably in the treatment of this case.

A young man suffering from muscular dystrophy was referred for attendance at the rehabilitation unit twice a week. At first he found standing very tiring but gradually his muscle power increased and he was able to stand doing woodwork all day and his attendances at the unit were increased

until he was doing a full week. His case was brought to the attention of the visiting Disablement Resettlement Officer and an assessment course at the Industrial Rehabilitation Unit was arranged. This course was successfully completed and the patient is now awaiting a place in Remploy.

A wheelchair sports club was started in the Occupational Therapy Unit on Wednesday evenings. This club is open to anyone who has an indoor self-propelled wheelchair, and the activities include table tennis, darts, skittles, ball and table games. Some of the patients are transported with their wheelchairs by ambulance while others come in their own motor vehicles.

Wheelchair
Sports Club

Westminster
House

WELFARE SERVICE

Residential Accommodation.

The provision of residential accommodation for elderly persons needing care and attention still remained the major problem confronting the Welfare Service Section of the department. At the beginning of 1961 the number of persons on the waiting list for admission to accommodation was 248 and at the end of the year the number was 214 which was made up of 49 males and 165 females including one married couple.

The planning for the future included the construction of an extension to "Brookfield" to provide accommodation for about thirteen additional residents, and the building of three new hostels, one in the West Derby area and one in each of the grounds of Westminster House and Croxteth Lodge. Plans in regard to these two latter projects were approved by the Ministry of Health and it is proposed to make a start on the new buildings in the year 1962/63.

In May, "Brookfield" at Huyton, was completely closed in order to enable a start to be made on building the extension and the residents, furniture and equipment were transferred to very convenient accommodation at Fazakerley which had been vacated by the Children's Department. A few residents were also admitted from a home in the south end of Liverpool which had been given up by the Women's Voluntary Services. Building operations were also started on the home in the West Derby area.

Towards the end of the year the department's search came to an end for suitable premises which might be used as a holiday home, when it became possible to purchase at Birkdale, near Southport, a large house known as "Beachways" which had been used as a nursing home. The building will accommodate 50-60 residents, but the main purpose will be to provide holiday accommodation for residents from the various homes in Liverpool. The purchase of "Beachways" together with the new buildings, when completed, will go a long way towards easing the difficult position arising from the long waiting list.

Westminster House

Continuing the Council's policy of upgrading Westminster House a start was made on the modernisation of House 8. Considerable unexpected difficulties were encountered in regard to the foundations of the building which delayed completion of the work but good progress had been made towards the end of the year.

Reference was made in the previous report to a complete overhaul of the kitchen arrangements at the establishment. In November government sanction was received to borrow a sum to purchase kitchen equipment which would be necessary to modernise the kitchens and this will be installed early in 1962.

The final stage was reached in the reorganisation of the administrative staff when a non-residential administrative officer was appointed who took up his duties in September.

Following on the pilot scheme in October, 1960, when a small number of Hostels residents were provided with a week's holiday at Llandudno a full scheme was drawn up under which 246 residents had a holiday at Llandudno during the quieter parts of the season between the following April and October. This was a very successful venture and all the residents who went keenly enjoyed the change. The amenities which were provided included bus outings to places of interest in North Wales. Half day trips from Liverpool to Southport and Chester or a whole day outing to Fleetwood or North Wales were also organised as in previous years.

The experiment which was tried at the previous Christmas of inviting into the residential establishments a number of elderly and lonely people living outside was repeated with success. In addition a number of gifts were received from members of the public which were distributed to needy persons living in their own homes, especially those living alone. Through the further generosity of the Merseyside Hospitals Council pianos, television or radio sets were installed, or replaced, at some of the establishments.

Apart from the residents maintained in the Council's own establishments, financial arrangements are in force with a number of voluntary organisations for the reception into their homes, under agreed terms, of a number of elderly persons needing care and attention. Admissions of persons under these arrangements are made subject to prior approval by the department. Table 51 indicates the extend to which the department utilises the exceedingly helpful facilities which are available.

During 1961, 340 aged persons were X-rayed prior to entry into old persons' homes. Five were shown to have healed or quiescent tuberculosis, and there was no case of active tuberculosis.

Chest
X-Ray

Central Office Staff.

One of the suggestions made in the report of the Younghusband Committee was that welfare assistants might be appointed to the staffs of welfare departments who could be young persons intending to follow a career in welfare work. They would be given in-service training and would undertake, under supervision of senior staff, the routine visiting of persons requiring care. Three such officers were appointed during the year and their services have proved to be very useful especially in releasing senior staff for more responsible case-work. One member of the staff was given special leave for two years to attend a full-time course for social workers at the Liverpool College of Commerce.

Temporary Accommodation.

Statistics in regard to admissions and discharges are shown in Table 52.

The maximum number of persons accommodated at any one time was 110 (three men, 25 women and 82 children) and the minimum was 43 (one man, fifteen women and 27 children). The daily average accommodated throughout 1961 was 71 (nineteen women and 52 children). The average length of stay of all families was fifteen days the longest stay being 40 weeks. Towards the end of the year work was started on a programme of painting and decoration in order to improve the premises.

Domiciliary Welfare Service.

The following is a selection from among the many problems dealt with during the year by the staff of social welfare officers.

1. A family occupying a Corporation-owned house had been a problem for several years to the rent collection department. The family consisted of husband and wife and seven children between the ages of two and eleven years. The husband was in regular employment and frequent visits were made to the family with the object of seeing that the rent was paid, but whilst the wife made some improvements in her home (partly with the aid of furniture from the department, which had received it as a donation) and the appearance of the children she did not appreciate the fact that rent has a high priority in the household budget. The family is still under supervision.

2. The house of an elderly couple had been clean and tidy up to the death of the wife. Thereafter the health and outlook of the surviving partner began to deteriorate and he was visited regularly. The man seemed

to spend a good deal of his time in the local public house and sold household effects so that he could gamble with the proceeds. Various agencies tried to help the widower but without success. When a further deterioration set in he was removed to hospital under a compulsory order and while he was an in-patient the house was cleaned up and new bedding, etc., obtained. On discharge mobile meals and home help were supplied but the old man cancelled these services and conditions became as bad as ever. During the cold spell at the end of the year the social welfare officer found on visiting that the house was flooded out due to a burst pipe and there was no light, fuel or food in the house and little bedding. The man was admitted to residential accommodation but died there, unfortunately, two weeks later.

3. An elderly widow had been in and out of hospital several times for psychiatric treatment, and when seen by the social welfare officer it was clear that she could not look after herself or cope with everyday household affairs. Eventually she took to her bed because she was afraid of falling. At first a daily visit was necessary to wash and cheer her up and also to prepare enough food to last until the next day. The old lady eventually agreed to have a home help whose daily visits were of considerable assistance. The offer of residential accommodation was declined initially because the old lady wished to preserve her independence, but she came to realise that, for her, the alternative to a home for aged persons was loneliness and renewed inability to cope. She was eventually admitted to residential accommodation and made good progress until she had a fall and subsequently died in hospital.

4. An old lady, the sister of a deceased doctor who had practised in the City many years ago, lived alone in a large house which was thick with the dust and litter of years. The last of a prosperous and long-lived family for several years the old lady had been living the life of a recluse. A friendly neighbour used to bring a mid-day meal but she died and then the old lady became dependent upon the mobile meals service. She would not allow a cleaner to tidy up the house and during very cold weather, water was escaping from a burst pipe for two days. The flood was only discovered on a chance visit by the social welfare officer who called in the services of a plumber. The old lady was very fit for her age and would not consider giving up her house or spending money on improvements so that the department could do little beyond exercising some supervision.

5. An elderly lady was discovered living alone in a flat and in a very dirty and neglected state. She was aggressive and refused all offers of help. After several visits the social welfare officer gained her confidence and mobile meals were supplied for a time, but after a month the old lady cancelled them and declined to allow a home help to enter the house. During the summer the woman became ill and she had to be removed to hospital under a compulsory order. After some months in hospital she was able to return home. In the meantime the flat was cleaned and painted and a new bed and bedding obtained. Following discharge the old lady has become more co-operative and is grateful for what has been done for her. She allows a woman to go in regularly to clean and take her meals.

6. A middle aged woman handicapped by Parkinson's disease was living with a family who were largely indifferent to her needs; and it was thought that if granted a flat she could not manage alone. Having been allocated a flat this lady is now contented and happy. Unable to do much housework herself a kindly home help keeps the home neat and clean and the mobile meals service ensures that she gets hot meals on three occasions a week which she would not otherwise obtain. A friend has given her a radio set from which she derives a good deal of pleasure. This lady is able to go out for walks and can do some light shopping; but she is excessively shy and probably because of this is unwilling to attend a handicraft centre but arrangements are in hand for home visiting by an occupational therapist.

7. An elderly woman had been living in a house from which the tenant had entered residential accommodation. The landlord obtained possession of the premises, and water, gas and electricity were cut off, but the occupant declined to leave. The social welfare officer could not make personal contact and the old lady would only communicate by notes in which she stoutly insisted on remaining in the house. On the day of eviction there were prolonged discussions with the old lady but when a police officer arrived she became satisfied and agreed to leave for an old persons' home which she had often refused to consider. Her furniture was placed in store in case she obtained alternative accommodation but it later appeared that she had settled in the home and was likely to remain.

8. An old lady of 86 years lived alone and when first visited was crippled with arthritis and could only move from bed to chair with great difficulty and severe pain. Because of these conditions she was becoming depressed

and rapidly losing the will to live. A daily home help was provided who helped her to dress and walk to her chair; and a private help was secured to assist in the going to bed process. The district nurse visited daily and arrangements were also made for visits by the occupational therapist. A ramp and a rail were fitted between the bed-sitting room and the kitchen; a trolley and various gadgets were supplied which enabled the old lady to learn to walk again and she was able to reach the kitchen and make tea. The mobile meals service supplied dinners on three days a week.

The house had gas lighting only but it was wired for electricity and switches put in convenient places. As a result of this attention the old lady gained a new lease of life, became happy and pleasant, had a new feeling of accomplishment and became able with the aid of two sticks to make the journey along a lengthy hall to open her own front door again.

Removal to Suitable Premises of Persons in need of Care and Attention.

During 1961 it was necessary to remove compulsorily from their homes fifteen persons under the provisions of the National Assistance Acts, 1948 and 1951. They were either suffering from grave chronic disease, or were aged, infirm, etc. and were living in insanitary conditions or a combination of these circumstances existed. All were not able to devote to themselves or were not receiving from other persons proper care and attention. Orders were obtained in fourteen cases for removal to hospital and in one case to residential accommodation. Eight of the patients subsequently died (one after having returned home), six were still in hospital or residential accommodation at the end of the year, and one had been discharged home and was still under supervision.

Mobile Meals.

Many areas of the City are now being covered by this extremely valuable service; and the social workers all stress highly that it is a service which is a contributory factor in preventing deterioration in the condition of an old person to the stage where hospital or residential accommodation is indicated. The service is now based on Westminster House, New Grafton House and Holt House, and the situation is constantly under review to see if it is possible to make further provision in areas where there are waiting lists for the meals. About 1,180 meals are delivered weekly, the number of recipients being in the region of 410. The department continues to have the exceedingly useful help of the Women's Voluntary Service whose members act as servers of the meals.

Rest Centres for Elderly Persons.

Paradise
Street

River View

Sheil Park

Woolton

The three centres which have been organised at Paradise Street, River View and Sheil Park are as popular as ever and they continue to provide light refreshments and recreation for a large number of elderly persons. For some little time the Liverpool Old People's Welfare Council had been considering the establishment of a rest centre and club for old people in the Woolton area where there is a strong community feeling; and when a suitable site was secured the City Council agreed to provide the necessary site works for a prefabricated building. Grants have been promised towards the cost of the building itself from the King George VI Foundation and voluntary organisations in the district. It is hoped that work on the actual site will begin during the spring of 1962.

Registration of Disabled Persons' and Old Persons' Homes.

At the present time 28 homes are registered with the authority, seventeen by voluntary bodies and the remainder by private individuals. During the year three new homes were opened to accommodate 42 residents and three homes which had accommodated 50 residents were the subject of voluntary closures. Regular inspection of all the homes is carried out by officers of the department in order to see that satisfactory standards are being maintained.

Welfare of Handicapped Persons.

The four centres which were established at Garston, Mill Street, Knotty Ash and Walton Village are still operating with undiminished popularity and staff enthusiasm. About 95 members had a very enjoyable day outing to Morecambe during the summer; and at Christmastime what has now become the annual party was held again in the premises of the Liverpool Adult Deaf and Dumb Benevolent Society. The loan of the premises by the society was very much appreciated.

100
Walton
Village

The following organisations still make good use of the premises at 100, Walton Village for social and recreational purposes:—

Infantile Paralysis Fellowship (Merseyside Branch).

Liverpool Hard of Hearing Club.

Liverpool Spastic Fellowship (Day Centre).

Invalid Tricycle Association (Liverpool Group).

Further improvements were carried out at the premises during the year including the laying of thermoplastic tiling on the floor of the main room and the provision of electric heaters.

During the year 228 persons were referred because their vision was so defective that they might be regarded as blind or partially sighted. They were examined by ophthalmic surgeons and 163 were found to be blind, 53 partially sighted and 12 not blind. Results of examinations of this nature during the last three years are as follows:—

Year	Number Examined	Registered as Blind	Registered as Partially Sighted	Not Blind
1959	214	143	63	8
1960	234	148	67	19
1961	228	163	53	12

Statistical tables in regard to registered blind and partially sighted persons are contained in the appendix.

Blind Employment.

The following are details in respect of the numbers of blind persons who were engaged at the 31st December, 1961, in various trades operated in the two workshops for the blind in Liverpool:—

Workshops for the Blind, Cornwallis Street :—

*Basket making	...	...	...	12
Brush making	...	...	...	22
Mat making	...	...	...	29
Upholstery	...	...	...	6
				— 69

Catholic Blind Institute, Brunswick Road :—

Basket making	...	...	...	1
Mat making	...	...	...	4
Machine knitting	...	...	...	2
				— 7
			TOTAL ...	76

*Includes one employee, partially sighted.

The following numbers of blind persons were engaged in sighted industry:—

Agents, collectors, etc.	...	...	...	...	...	4
Basket making	...	...	...	...	...	1
Domestic workers	...	...	...	...	...	6
Fitters or Assemblers	...	...	...	...	...	15
Gardener	...	...	...	...	...	1
Inspectors	...	...	...	...	...	3
Labourers	...	...	...	...	...	2
Masseur	...	...	...	...	...	1
Musicians and Music Teachers	...	...	...	...	...	2
Machine tool operators	...	...	...	...	...	34
Packers, etc.	...	...	...	...	...	12
Piano Tuner	...	...	...	...	...	1
Placement Officer, etc.	...	...	...	...	...	3
Shop Assistant	...	...	...	...	...	1
Shopkeepers	...	...	...	...	...	3
Solicitors	...	...	...	...	...	2
Storekeeper	...	...	...	...	...	1
Teachers and Instructors	...	...	...	...	...	3
Telephone Operators...	...	...	...	...	...	9
Typists, etc.	...	...	...	...	...	5
Upholsterers	...	...	...	...	...	2
						<hr/> 111 <hr/>

The corresponding total the previous year was 110, so that the employment of blind persons in sighted industry is still being maintained at a high level.

The following persons were employed in the scheme for Home Workers and their earnings supplemented by the City Council:—

Braille Copyist	...	...	...	...	...	1
Chair seater	...	...	...	...	...	1
Hawker	...	...	...	...	...	1
Machine knitter	...	...	...	...	...	1
Musicians and Music Teachers	...	...	...	...	...	4
Shopkeeper	...	...	...	...	...	1
						<hr/> 9 <hr/>

Sir Robert Jones Workshops.

Sixty-six severely handicapped persons are employed at this workshop and five are undergoing instruction. Most of the workers are employed in the trade of book binding, but eight are in the printing department and ten in the section dealing with the renovation of Christmas cards. The establishment is grant-aided by the local authority to the extent of approximately £1,080 annually.

Deaf and Dumb Welfare.

The two voluntary bodies in Liverpool concerned with the welfare of the adult deaf and dumb, of whom there are approximately 600 on the register, namely, the Liverpool Adult Deaf and Dumb Benevolent Society and the Catholic Deaf and Dumb Society of St. Vincent de Paul, continue to make their valuable contribution. Financial aid is afforded by the City Council to an amount of approximately £3,920 per annum. Residents of other local authorities, who also contribute proportionately to the numbers involved, are included in the arrangements. A consultative committee consists of representatives of the Merseyside local authorities and the voluntary bodies.

Epileptics.

The total of epileptics who are receiving residential care at the cost of the local authority is 79. Details are shown in Table 59 in the appendix.

Parking of Vehicles.

The attention of the drivers of invalid vehicles was drawn by press notice and in other ways to the issue of a badge for display on vehicles and which, without conferring any legal rights or privileges, would help the police to assist the drivers in parking and to exercise discretion in their favour when possible. By the end of the year badges had been issued to 114 individuals.

Protection of the property of persons admitted to hospital or residential accommodation and Estates of Deceased Persons.

During the year the number of visits and revisits made in connection with the protection of the property of persons admitted to hospital or residential accommodation, and also in connection with the affairs of deceased persons whose funerals were undertaken by the department was 1,721.

The amount of cash recovered and placed for safe keeping with the City Treasury was £1,619.

Action taken included the securing of the premises, notification to the police of the absence of the occupant and the reception into safe custody of valuables such as jewellery, securities, documents, etc. During wintry weather other important precautions included the drainage of water tanks and the shutting off of main water supplies where this was possible without interfering with supplies to adjacent houses.

Reference has been made in previous reports in regard to apparently poor people who on their death were found to have considerable assets. One such case occurred during the year when a man of about 84 years, died at home and the department was called upon to see to the affairs. His personal household effects consisted of an old iron bed, some bedding in the shape of rags and an old trunk. The items were valueless but among the effects was a bank book showing a considerable credit balance and entries at regular intervals, possibly by way of income from investments; and in addition evidence of further assets in a safe deposit. The case was reported to the Duchy of Lancaster so that the department did not learn of the exact size of the estate.

Of the total cases of all kinds which were dealt with 61 were referred by the police, which included 38 persons who had been found dead at home or elsewhere, and 23 who had been taken ill outside and removed to hospital.

Problem Families.

Since 1957, 53 requests have been made from various sources, e.g. Corporation departments, voluntary organisations, etc. to hold case conferences to discuss the best means of helping problem families. The problems involved were those arising from lack of parental control, poor budgetary arrangements, inadequate housing, rent arrears, danger of family break up, etc. Ready answers to the problems were not always available at the initial meetings and from time to time it has been necessary to have further discussions where tentative solutions have been suggested as an interim measure.

HOUSING POINTS SCHEME

During 1961 a total of 4,288 general medical cases, 484 pulmonary tuberculosis and 22 non-pulmonary tuberculosis cases, applied for assistance in rehousing, there being a decrease of 223 (4.0 per cent) in the number of general medical cases, a decrease of 16 (3.2 per cent) in the cases of pulmonary tuberculosis and an increase of one (4.8 per cent) in the non-pulmonary tuberculosis figures for 1960. Statistics General

903 general medical cases were awarded points; 123 of these were recommended to the City Architect and Director of Housing for special priority rehousing. Medical

1,911 general medical cases applied for transfer during the year. Of these 860 (45.0 per cent) were recommended to the City Architect and Director of Housing. 102 tuberculosis cases were also recommended for transfers. Of Transfers

A further 191 applications were received in respect of non-medical cases and reports concerning 508 grossly overcrowded families were forwarded to the City Architect and Director of Housing. Overcrowding

The allocation of points is designed to enable the Medical Officer of Health to give assistance in those cases which, for reasons of health, should receive some degree of priority in rehousing. There are two forms which this assistance may take:— Method of Allocation of points

1. Additional points may be awarded and added to the applicant's basic points. For general medical cases a maximum of two points can be given and for tuberculosis cases up to five points. In many cases this brings the applicant into the allocation group and he is assured of rehousing.

2. Prior to October 1961 all general medical cases of special urgency had been submitted to the Allocation (Special) Sub-Committee and tuberculosis priority cases were being rehoused under a scheme whereby six per cent of municipal housing accommodation available for letting or re-letting had been reserved specifically for the rehousing of tuberculosis patients. However, in October, 1961, owing to the heavy slum clearance programme and other commitments, the Housing Committee decided to allocate without further recourse to the Allocation (Special) Sub-Committee 45 houses for November and December, 1961 for the rehousing of cases recommended by the Medical Officer of Health, with a further allocation of 180 houses for the year 1962. Special Priority Cases

In all cases recommended for special priority, the City Architect and Director of Housing notifies the Medical Officer of Health whenever an offer of accommodation is made to the patient. This is followed a little later by a notification of acceptance or refusal on behalf of the patient. If the offer has been declined, the City Architect and Director of Housing is notified whether or not the refusal is justified on medical grounds. If this is so, then an offer of more suitable accommodation is made as soon as possible.

As examples of the type of case assisted during 1961, particulars are given of the following six cases:—

**Six
Represent-
ative
Typical
Cases**

(1) A young married couple with one daughter suffering from phenylketonuria were living in overcrowded conditions in one room where it was impossible to give the child her special diet owing to the lack of facilities. They were granted the tenancy of a two bedroom house.

(2) An elderly man, who was suffering from myocarditis, arteriosclerosis and intermittent claudication was no longer able to carry out his duties, as a publican and was forced to vacate licensed premises. He and his wife were allocated a one-bedroom flat.

(3) A married couple, both old age pensioners, were living in a large house which they could no longer manage. The husband had undergone a colostomy operation and his wife was suffering from auricular fibrillation and myocarditis. The landlord was approached regarding an exchange of tenancy but he refused to co-operate. They were accommodated in a ground level aged persons flat, thus releasing a large house for a young family.

(4) A man, severely handicapped by cervical spondylitis and war injuries to both legs, was living with his wife, who suffered from chronic asthma, in a house which they had to vacate as the landlord was selling the property. This man wore a plaster cast and side iron, had a deformed hand and was also blind in one eye. A small one bedroomed flat was provided for their needs.

(5) A woman with three children became a widow under tragic circumstances. The family had to give up their home as they could not afford the mortgage and were split up among various relatives. The mother and one of her sons were suffering from pulmonary tuberculosis. Accommodation was found for this family in a three-bedroom house.

(6) An elderly man, who was suffering from pulmonary tuberculosis could not return to his lodging when he was discharged from hospital as his landlady had died. His only daughter lived with her child in one room and could not, therefore, offer him accommodation. They were all accommodated together in a two-bedroom flat.

In all the general cases a medical certificate (Form H.1) submitted by medical practitioners serves as the starting point of the enquiry. Most tuberculosis cases are also initiated by Form H.1, the remainder being first brought up by the tuberculosis visitor. All cases are investigated in the first instance by a public health inspector who completes a report on the housing conditions. This report includes such details as the size of the family, type of house, and number of rooms occupied, extent of overcrowding, condition of house and state of cleanliness, w.c. accommodation, etc. This visit may be supplemented by a report from a health visitor or medical officer.

In tuberculosis cases a report is also submitted by the tuberculosis visitor, giving such details as the type and extent of the disease, state of infectivity, family history of tuberculosis, etc. Extra housing points may be awarded as already indicated, while those cases which appear to be sufficiently urgent are visited personally by the Principal Medical Officer (epidemiology) or Assistant Medical Officer (tuberculosis) with a view to including them in the special tuberculosis priority scheme. Special care is taken to ensure that the Housing Department is notified of any additional points granted for medical conditions.

Where an applicant is a sub-tenant in one of the new Liverpool housing estates outside the City boundary and is on the City housing register, contact is made with the local authority concerned and a housing report and medical certificate obtained. The case is then assessed in the usual manner.

**Residents
Outside City
Boundary**

For housing applicants who already live in Corporation property and for medical reasons request a transfer, a close liaison exists with the Housing Department. A letter of recommendation from the Medical Officer is usually sufficient to obtain the necessary transfer.

Transfers

MEDICAL EXAMINATIONS

Medical examinations of Corporation employees have continued to be carried out by assistant medical officers of the Health Department during 1961, and a final assessment of each case is made by the Principal Medical Officer (Epidemiology). These examinations consist of three classes:—

1. For entry into the Corporation service.
2. For entry into the superannuation scheme.
3. By reason of extended medical sickness.

Statistics

During 1961, 2,942 medical cases (an increase of thirteen per cent over the 1960 figure of 2,603) were dealt with by this section from all departments of the Corporation—2,342 medically examined within the department and 188 by consultants at Rodney Street whilst the medical staff were engaged on the poliomyelitis immunisation campaign; 313 were arranged but later cancelled, and 58 reports obtained from hospitals and other sources. In addition, 41 candidates were examined on behalf of other local authorities. Of the examinations undertaken, 846 were for new appointments, 1,198 for admission to the superannuation scheme, and 486 for extended sickness. Included in the above figure is a total of 27 Mersey Tunnel workers who had their usual periodical check because of the nature of their work in the polluted atmosphere of the Mersey Tunnel. For full details, see Table 61.

It was decided, after examination, both by consultation with the candidate or patient's own doctor and/or hospital, that 182 (144 in 1960) were permanently unfit for work and should be retired; 36 (48 in 1960) were unfit for entry into the superannuation scheme, and 11 (8 in 1960) candidates were unfit for new appointment to posts. This totals 229 persons (9.05 per cent of the total examined) who were declared unfit during the year, an increase of 0.35 per cent over the proportion declared unfit in 1960. A list of their medical conditions is enumerated in the following table:—

CARDIOVASCULAR SYSTEM

Hypertension	43
Coronary Thrombosis	18
Varicose Veins	6
Mitral stenosis	4
Angina pectoris	4
Myocardial degeneration	2
Congestive cardiac failure	1
Aortic incompetence	1
Rheumatic endocarditis	1
Auricular fibrillation	1
Pericarditis... ..	1
Anaemia	1
Intermittent claudication	1
Arteriosclerosis	1
Thrombophlebitis	1

SKELETAL SYSTEM

Osteoarthritis (generalised)	8
Rheumatism	5
Prolapsed intervertebral disc	4
Rheumatoid arthritis	2
Muscular dystrophy	2
Kyphosis	1
Tuberculous hip	1
Cervical osteoarthritis	1
Spondylolisthesis	1
Contracture of left hand	1
Sciatica	1
Injury to back	1
Amputation of right leg below knee	1

GENERAL

Diabetes	3
Gross obesity	1
Chronic pyelitis	1
Effect of war injury	1
General debility	2
Nephritis	1
Typhoid Carrier	1
Bilateral inguinal hernia	1
Renal Calculi—Urinary infection	1

CENTRAL NERVOUS SYSTEM

Anxiety State	9
Cerebral thrombosis	6
Disseminated sclerosis	6
Cerebral haemorrhage	4
Psychoneurosis	4
Paranoia	2
Chorea	1
Sub-arachnoid haemorrhage	1
Migraine	1
Epilepsy	1

EAR, NOSE AND THROAT

Chronic Otitis Media	1
Menieres Syndrome	1

GENITAL SYSTEM

Hysterectomy	1
Post-mastectomy lymphangitis	1
Prostatectomy	1

RESPIRATORY SYSTEM

Chronic bronchitis and emphysema	41
Asthma	6
Bronchiectasis	3
Tuberculosis	2

ABDOMINAL SYSTEM

Peptic Ulcer	4
Duodenal Ulcer	2
Carcinoma of stomach	1
Carcinoma of liver	1
Carcinoma of oesophagus... ..	1
Anorexia nervosa	1

It will be seen that 43 cases of hypertension (44 cases in 1960 and 33 cases in 1959) were the main reasons for the declarations that the patients were unfit; 41 cases of chronic bronchitis and emphysema (54 cases in 1960 and 42 in 1959), and 18 cases of coronary thrombosis (14 cases in 1960 and 11 in 1959) being second and third respectively. No cases of carcinoma of the lung were discovered whereas in 1960 five cases were found. Two active cases of tuberculosis were found, both in an early stage, and both have responded well to treatment. An interesting finding was the discovery that one of the prospective employees in the Water Department was an active typhoid carrier. This finding was of extreme importance as this man was to

be engaged on an open water main. It was possible, at a later date, to arrange for him to be employed in a department where there was no possibility of his carrier state being a source of infection to others.

Throughout the year there has been a most cordial relationship between the candidate or patient's general practitioner, the hospitals and the examining medical officers. In all cases, before an approach was made to a hospital for a confidential report, the consent of the general practitioner and the patient was obtained.

ENVIRONMENTAL HEALTH CONTROL

The training scheme has again been successful in providing qualified inspectors for appointment within the department. The scheme ensures a supply of inspectors to fill vacancies which arise due to retirements and resignations. Eleven assistant inspectors obtained the Certificate of the Public Health Inspectors Education Board qualifying for appointment as public health inspectors and nine qualified inspectors obtained the Meat and Other Foods Certificate of the Royal Society of Health.

The Liverpool Show provided an opportunity to draw the attention of visitors to problems of special importance and having regard to the conversion of firegrates in smoke control areas, different types of suitable firegrates and fuels were displayed at the Show. Advice was also given to visitors on various aspects of smoke abatement.

A total of 40,447 requests were received for inspectors to visit premises which necessitated a total of 94,963 visits before the matters could be considered satisfactorily concluded. Altogether a total of 323,822 visits and inspections were carried out under the various enactments and 22,851 notices were issued under the Acts and Byelaws.

During the year 141 prosecutions were taken and the penalties which were imposed amounted to £353.

(See Table No. 71, Statistical Appendix.)

It was necessary to carry out work in default of owners to 328 houses involving expenditure of approximately £3,000, which will subsequently be recovered.

The Liverpool Corporation Act, 1955, empowers the Corporation to clear drains after giving 48 hours' notice. 1,288 notices in respect of choked drains were issued and it was necessary for the Corporation to clear 116 drains in default of the owners. The cost will be recovered in accordance with the Act.

Rodent infestation is frequently associated with defective drains and in connection with rodent infestation, percolations of water and subsidences, 1,564 drainage systems were tested. Notices were issued in respect of 741 drainage systems which were found to be defective and 46 choked or defective public sewers were referred to the City Engineer and Surveyor's

Department for action under the provisions of Section 24 of the Public Health Act, 1936. The costs incurred will be subsequently recovered from the owners of the property involved.

Special Sub-Committee

The weekly meeting of the Special Sub-Committee has enabled immediate action to be taken to clear choked drains and remedy other urgent defects. This procedure constantly reduces the period of time during which tenants could suffer discomfort.

Departmental References

Other departments have co-operated by forwarding 11,786 references in respect of matters requiring the attention of inspectors and 5,868 references were forwarded to other departments.

Infectious Disease Enquiries

Inspectors visit houses to make enquiries following notification of certain infectious diseases and the table indicates the number of investigations:—

Number of visits to premises relating to cases of infectious disease			
...	...	...	1,475
Number of enquiries regarding contacts of infectious disease			
...	...	...	455

Food Poisoning

Investigations have continued in connection with ingestion disease enquiries when the inspectors have obtained information about contacts and modes of infection. 4,122 specimens from 2,740 persons were submitted for bacteriological examination and 686 specimens from 552 persons proved positive.

Common Lodging-houses

During the year two additional applications were received for registration as common lodging-houses. One application was in respect of premises to be used for the rehabilitation of homeless men, and the premises were found to be satisfactory.

Prior to the second premises being registered, it was necessary to take legal proceedings against the owner for keeping a common lodging-house without being registered as the keeper in accordance with the requirements of Part IX of the Public Health Act, 1936. The applicant carried out the necessary improvements and repairs and subsequently the application was approved, and the premises registered.

In accordance with the requirements of the Act, fourteen applications were received for renewal of registration; eleven of the premises were found to comply with the Act and Byelaws and certificates of registration were granted for a period of thirteen months.

Two applications were granted for a conditional period of six months. In one case there is no means of escape in case of fire, and in the other premises the standard of cleanliness is unsatisfactory and a number of structural repairs require attention. The remaining application was refused as the premises are unsatisfactory due to extensive structural disrepair and the absence of means of escape in case of fire.

The applications received from eleven of the keepers of such lodging-houses for renewal of registration as keepers were granted for a further period of thirteen months and two for a period of six months. The public health inspectors made 417 visits, both by day and night, resulting in 61 notices being given in respect of byelaw infringements.

A total of 6,050 beds were examined and 37 were found to be verminous and the occupants and bedding were cleansed by the local authority under the supervision of the public health inspectors.

During the year the owners of two licensed seamen's houses and one unlicensed house discontinued their business and closed the premises. There are now nine seamen's lodging-houses in the city of which five are not licensed under the Byelaws. Accommodation is provided for British, Chinese, Arab, Somali and Indian seamen. The total accommodation available is 807 beds, and public health inspectors made 172 day and night inspections. Byelaw infringements were noted and the appropriate action taken to comply with the requirements of the legislation. During the visits to the premises 2,569 beds were examined and only five beds were found to be infested with vermin. In each case the appropriate cleansing was carried out under the supervision of the public health inspectors.

Under the terms of licences issued from the Home Office, inspectors supervised the exhumation of three bodies during the year and the remains of two persons were shipped abroad.

The Docks and Inland Waterways Executive, North Western Division, are the proprietors of the Leeds and Liverpool Canal, the only canal having direct communication with Liverpool. The length of the waterway within the city (exclusive of the locks communicating with the Dock Estate) is approximately three miles.

Liverpool is one of several registration authorities for boats used as dwellings plying on the canal. The details of the boats registered by the authority are indicated in Tables A and B.

Number of
Boats

TABLE A

Boats on the register 1st January, 1961 ...	352
New boats registered	Nil.
Boats removed from the register ...	211
Boats on register 31st December, 1961 ...	141

211 boats ceased to be used as dwellings during the year and were removed from the register.

Type of Boat

TABLE B

Number and type of boats registered :—

Motor propelled boats	70
Steam propelled boats	25
Motor towed boats	31
Steam towed boats	15
Horse drawn	Nil.
	<hr/> 141 <hr/>

No. of Boats
Inspected

199 inspections of canal boats were made during the year and the places of registration of the boats were as follows:—

TABLE C

Number of boats visited	124
Registered at Liverpool	84
Registered at Runcorn	Nil.
Registered at Manchester	Nil.
Registered at Leeds	Nil.
Registered at Northwich	1
Boats not registered and not used as dwellings	39

All boats were "wide" boats, 51 being motor propelled, six being steam propelled, 49 motor towed and eighteen steam towed.

Six contraventions of the Act and Regulations were found on five boats, four of which were registered at Liverpool and one at Northwich, the contraventions being shown in the following table:—

TABLE D

Contraven-
tions

Nature of Contravention	Reported	Remedied
No. of Certificates not on board	2	2
Leaking decks	1	1
Defective stove or stove pipes	1	1
Registration, lettering and numbering not legible or incorrect	2	2
	6	6

Five written notices with respect to the contraventions were sent to the owners concerned and all have been complied with. No information was laid during the year against either owners or masters for infringements of the Act or Regulations.

The inspectors of the Port Health Authority made 83 inspections of canal boats in the docks during the year. Two contraventions were found, both of which were subsequently dealt with. The figures are included in Table D.

No case of infectious sickness was reported as having occurred during the year on any canal boat visiting the district.

The number and sex of persons found in occupation of canal boats used as dwellings are included in the following tables:—

TABLE E

Population of canal boats: Men	248
Women	Nil.
Children	Nil.
	248
Distributed as under	
Males over 14 years	248

Inspections of trial holes were made on 28 filled-in sites to ascertain whether the ground was free from faecal or offensive animal or vegetable matter, and that the sites were suitable for building purposes.

The provision of sewerage facilities in the city is reasonably adequate. The present provision at the two main sewage disposal works is not adequate but a new sewage disposal works is, in one case, under construction, and in the other case an extension scheme has been approved in principle by the Ministry of Housing and Local Government.

HOUSING AND SLUM CLEARANCE

Although the term "Slum Clearance" continues to be used, one associates with it the dark, dingy "court" and "back-to-back" type house with trough water-closets used in common and a water supply provided by means of a standpipe for several dwellings. Today, the vast majority of houses which are being represented as unfit for human habitation are the older terrace-type and although completely lacking in modern amenities, include many well-maintained properties, as regards their unfitness under the statutory standard laid down in Section 4 of the Housing Act, 1957. The effect of this has in some measure been reflected at public inquiries during the year, by the number of owners objecting to the inclusion of their properties in Compulsory Purchase Orders as unfit for human habitation. Many of the objectors retain Counsel and other experts to present their case and this calls for detail and accuracy in the reports and evidence submitted by the local authority.

Notwithstanding the many problems which have to be overcome, among which the critical shortage of land is still foremost, the tempo of representations has been maintained and over 12,000 houses have now been made available for clearance in the post-war period.

There are, however, over 14,000 unfit houses for demolition still to be dealt with, and this prodigious task will call for even greater effort for some years to come from all those concerned in this vital service.

Slum Clearance Progress

During the year 2,110 houses were surveyed as to their suitability for representation as unfit for human habitation and, of these, 744 were represented in nine Clearance Areas during 1961.

Compulsory Purchase Orders made

Ten Clearance Areas in which were included 248 dwellinghouses were made the subject of Compulsory Purchase Orders and one Clearance Area containing eighteen houses was made the subject of a Clearance Order.

Orders submitted for confirmation

2,168 houses included in a further 33 Clearance Areas are still pending further action. There were eleven Clearance Areas included in six Compulsory Purchase Orders and one Clearance Order, involving a total of 266 houses, submitted to the Minister of Housing and Local Government for confirmation.

Public Inquiries

Four public inquiries were held in respect of six Compulsory Purchase Orders and a hearing was held in respect of one Order. Of the remainder of the Orders submitted for confirmation, two were unopposed.

Eleven Compulsory Purchase Orders and one Clearance Order were confirmed during the year, involving a total of 411 dwellinghouses. **Orders confirmed**

Although 1,190 families were rehoused during the year from dwellings included in confirmed Orders, there is still a considerable lapse of time between the confirmation of Orders and rehousing. During this period, particularly difficult problems arise in maintaining a tolerable standard of accommodation for the occupants. **Rehousing**

The Housing Act provides for action to be taken in respect of an individual unfit house and this procedure is mainly used to deal with these dwellings situated on land which is not zoned for housing redevelopment. 167 dwellings occupied by 254 families were represented to the Demolition and Closing Orders (Special) Sub-Committee as unfit for human habitation. **Individual Unfit Houses Section 16 H.A. 1957**

Of the houses represented during 1961 and those remaining from the previous year, the Committee considered the condition of 163 and resolved for Demolition Orders to be made in respect of 91 houses and Closing Orders on the remaining 72. **Demolition and Closing Orders made during the year**

The owner of one house which was the subject of a Closing Order carried out works of repair and made application to the Committee for Revocation of the Order. This was granted in accordance with the provisions of the Housing Act. **Revocation of Closing Orders**

Of those houses subject to operative Orders and from which the occupants have been rehoused 66 were demolished and 82 closed. **Demolition and Closing of Individual Houses**

Individual rooms and parts of premises occupied as separate dwellings which are unfit for human habitation are represented under the Closing Order provisions of Section 18 of the Housing Act, 1957. The Committee considered the condition of 75 such lettings during the year and resolved to make Closing Orders in each case. At the close of the year ten representations had still to be considered. Following upon the making of Closing Orders under the provisions of Section 18, 81 families were rehoused and the rooms closed. **Basement Rooms and parts of premises used as separate dwellings Orders made**

With the tremendous number of prospective house purchasers today, constant reference is made to the housing survey register in order that some guidance regarding the life of the property may be given. **Property Enquiries**

**Rent Act
1957**

The Rent Act, 1957, has been operating since the 6th July, 1957, and since that date some 29,000 visits have been made in connection with 7,981 applications for certificates of disrepair, 1,105 applications for cancellation of Certificates of Disrepair, 3,134 applications by tenants for Certificates for non-remedying of defects specified in the Undertakings given by Landlords and 2,081 applications by Landlords for certificates as to the remedying of defects specified in their Undertakings.

As a direct result of this action, considerable improvement has been recorded and many more houses are now well maintained and in good order and repair.

**Notice to
Landlord of
intention to
issue certifi-
cate of
disrepair**

During the year, 343 applications for Certificates of Disrepair have been received and in all cases the premises concerned were visited and inspected. In 323 cases a report was submitted to the Special Sub-Committee of the Health Committee who resolved, where applicable, to issue a notice (Form J) to the landlords of the local authority's intention to issue a Certificate of Disrepair in respect of the tenant's application, the remaining applications being withdrawn.

**Number of
Undertakings
received**

Following this action 233 Undertakings (Form K) were received from landlords within the statutory period and 90 Certificates of Disrepair (Form L) issued where no action was taken by the landlord to comply with the Act. In six cases the owners remedied the defects as specified in the Form J, within 21 days of the issue of the notice.

**Landlord's
failure to
comply with
Undertakings**

Under the provisions of the Act, owners have a period of six months in which to remedy all the defects specified in their Undertakings and at the expiration of this period the tenant can reduce the rent while the defects remain unremedied. In addition the tenant can, if he wishes, apply to the local authority for a Certificate (Form P) to the effect that the repairs have not been satisfactorily completed. Similarly, the owner can also apply for a Certificate (Form P) to the effect that all the defects specified in his Undertaking have been remedied satisfactorily.

During the year, 67 applications (Form O) were received from tenants and in all cases Certificates (Form P) were issued. 214 applications (Form O) were received from landlords and in 207 cases the appropriate certificate was subsequently issued. The remaining seven cases had not been determined at the end of the year.

Certificates can be cancelled either by the County Court on the application of the landlord that the defects as specified are wrongly included, or by the local authority when the defects have been remedied, subject to the tenant's right of appeal to the County Court on the grounds that the defects have not been satisfactorily remedied.

**Cancellation
of Certificates
of Disrepair**

During the year, 81 applications (Form M) were received from owners for the cancellation of Certificates of Disrepair and in all cases tenants were advised of the local authority's intention to cancel. As a result of these intimations 35 objections were received from tenants. Following an inspection of the premises concerned the department was satisfied that in 63 cases the Certificates should be cancelled.

If the owner does not accept the local authority's decision he has a right of appeal to the County Court. If the appeal is upheld the Court shall order that the Certificate shall cease to have effect from the date specified in the Order. Since the Act became operative, this procedure has not been necessary as in all cases owners have been fully satisfied that their applications have been submitted prior to the defects being remedied in a satisfactory manner, and in every case, further works have been carried out to the satisfaction of the tenants concerned and the local authority.

This year again showed that the public are aware of the provisions provided by Parliament to help owners improve their houses and so lengthen the time the properties will remain habitable. Some enquiries were rejected in view of the premises being in districts in which Clearance Area action is contemplated within 15 years.

**Improvement
Grants**

The Housing Act, 1961, which came into operation on the 24th November, provides for a dwelling which has been improved by means of an Improvement Grant to have the rent increased by $12\frac{1}{2}$ per cent of the owner's share of the cost, as against 8 per cent which was the previous maximum increase allowed. The effect of this new provision has not yet been noticed due to the short period of time that it has been in operation, but as this incentive becomes more widely known, it is quite possible that the number of enquiries will increase, and so help in some small measure to reduce the immense housing problem.

During the year, 799 premises were inspected following enquiries for Improvement Grants and of 251 formal applications for Discretionary Grants, 245 were approved. There were also 142 formal applications for

Standard Grants, all of which were approved. It is pleasing to note that 139 more enquiries were received this year than in the previous year, and with the advent of the new provision previously mentioned, it points to more applications being made during 1962. The difference between the number of premises inspected and the formal applications is due in several cases to the suggested alterations not being eligible for a grant and some owners find themselves unable to bear the costs involved.

Loans on Mortgage

The local authority continued to consider applications from prospective owner-occupiers of dwellinghouses situated within the city boundary, and the high rate of interest payable on the loans proved no deterrent. In addition to the relevant financial aspects of each application, regard as to the standard of fitness, as laid down in the Housing Act, 1957, has to be considered, together with a general survey of the district concerned, prior to the approval of the loan. Any defects of repair found to exist at the time of the inspection have to be remedied before a loan is made.

The scheme came to a temporary halt in September and remained closed during the remainder of the year. During the first 8½ months, 710 houses were inspected following applications for loans on mortgage, this figure comparing very favourably with the previous year, being a reduction of only 154 inspections.

Overcrowding

Many families are still living in overcrowded conditions although the local authority is building as many new dwellings as possible. There is generally a lack of amenities in the majority of the houses where overcrowding exists. This results in washing and cooking facilities as well as sanitary accommodation being shared by several families. Where serious overcrowding is found to exist, a report is forwarded to the City Architect and Director of Housing requesting his consideration being given to the rehousing of the family concerned, and during the year 508 such cases were dealt with.

Cellar dwellings

Action to restrict the use of basement rooms as separate dwellings is taken under the provisions of the Liverpool Corporation Act, 1921, Section 469. However, many of these cellar dwellings are found to be completely unfit for human habitation and such cases are represented under the provisions of Section 18 of the Housing Act, 1957, and the cellars closed.

The total number of dwellings owned by the local authority at the 31st December, 1961, excluding temporary bungalows, was 73,518. The number of houses built in the last three years under the Housing Act, 1957, Part V, is 5,339 and the number of houses built under the provisions of the Housing Subsidies Act, 1956, is 8,759.

During the year, nine Clearance Areas in respect of 744 dwellings housing 2,969 persons, were represented under the provisions of Section 42 of the Housing Act, 1957.

Seven Orders in respect of 266 houses containing 1,522 persons were made and twelve Confirmation Orders in respect of eleven Compulsory Purchase Orders and one Clearance Order, comprising 411 dwellings and 1,791 persons, were received from the Minister.

Houses owned
by the Local
Authority

Summary

Provision
Inspection

Co-operation
of shop-
keepers

Difficulties
in enforcement

Inspection
of shops

Provision
Inspection

SHOPS ACT

Administration of the Shops Act, 1950 and Young Persons (Employment) Act, 1938.

Enforcement The enforcement of the Shops Act, 1950, and the Young Persons (Employment) Act, 1938, is carried out in this City by the officers of the Health Department. This work forms part of the various responsibilities associated with the inspection of shop premises for the purposes of other legislation, and thereby enables all matters to be dealt with by one inspector.

Routine Inspections Shops and similar premises are inspected during the routine inspection of all premises on each district, and infringements are carefully considered by the senior inspectors and subsequently dealt with either by informal action or formal notice. The more serious or recurring infringements are considered with a view to possible legal proceedings. Considerable works of maintenance and improvement have been carried out in many shops as the result of the department's action, and the need for the regular supervision of these premises is all too apparent.

Co-operation of shop-keepers There is considerable co-operation on the part of most shopkeepers, who readily and systematically ensure satisfactory compliance with the Shops Act. There are those, however, who do very little during the period between inspectors' visits.

Difficulties of enforcement The problems associated with the enforcement of the shops law remain as before. There is no indication of any parliamentary action to revise this legislation, and the High Court decisions of recent years have given very little assistance in the clarification of these problems.

The most unfortunate aspect of this situation is the inability of inspectors to placate those who have good reason to complain of the inequitable provisions relating to closing hours and the escape of street traders from the restrictions enforced upon shopkeepers.

It is appreciated, however, that the legislators are not entirely at fault for the delay in the framing of new law. Previous efforts have been frustrated by the almost impossible task of producing something practicable and enforceable, because of the strongly divided opinion of the many parties concerned. It is extremely difficult to visualise an acceptable compromise which will produce a satisfactory solution.

A number of complaints have been received from shopkeepers regarding **Complaints** the non-observance of the closing provisions of the Act. These were dealt with by special observations and subsequent warning or court proceedings.

Attention has also been given to street trading, but only limited action is **Mobile Shops** possible owing to insufficient powers affecting the hours of trading by mobile shops.

A total of 41,238 inspections of retail shops of all classes, cafes, clubs, **Inspections** hairdressers, warehouses, pet shops, also places of entertainment, have been made during the year. These are in addition to the routine and special visits to shops on the early closing day, at night, and on Sundays, which totalled 41,923.

Welfare Measures.

The various staff welfare provisions of the Act, together with the requirements for meal intervals, assistants half-holidays, compensatory time off in lieu of Sunday employment, and the supervision of the hours of employment of young persons (under 18 years of age), have been given careful attention during the routine and special visits to shops. The infringements reported have been of a technical character, and have been dealt with by either warning letters or notices.

Hairdressers and Barbers.

Work in connection with the provisions of Section 42 of the Liverpool **General** Corporation Act, 1955, and the Byelaws made thereunder, in respect of hairdressers has been confined to the registration of new businesses, the transfers to new owners, and the periodical routine inspection of the premises and facilities.

Special attention has been given to the use of dwelling houses for hair- **Dwelling** dressing purposes and in the instances reported, the businesses have been **Houses** closed voluntarily by the persons concerned.

During the year 40 new registrations and 21 transfers of ownership were dealt with, and the total number of hairdressers and barbers on the register at the end of the year was 694. 1,243 inspections were made and 159 infringements were dealt with by warning letters.

Places of Entertainment.

Inspections There are now 48 cinemas, theatres and other places of entertainment in the City compared with 57 last year. Evening visits were made to all premises and 17 defects were found and satisfactorily dealt with by the managements.

A new form of family entertainment will be introduced to this City in 1962, when one cinema company opens its new ten pin bowling centre. This form of entertainment is increasing and, undoubtedly, former cinemas and other premises in the City will be modified to meet the public interest.

Pet Animals Act, 1951.

Licensing There were 63 licences issued during the year to persons carrying on business as dealers in pets. 216 visits were made to these premises and 58 infringements were dealt with by informal action. The Liverpool Fire Service dealt with fire precautions and their recommendations in a number of cases were made special conditions of the licences.

FACTORIES INSPECTION

Under Section 128(3) of the Factories Act, 1937, the Medical Officer of Health is required to furnish H.M. Inspector of Factories each year with information relating to the administration of the Act by the district council. The prescribed particulars are given in the statistical appendix (Table 68).

The administration of the major part of the Factories Act is the responsibility of H.M. Inspectors of Factories, but certain duties are allocated to district councils. In the case of factories where food is processed, additional responsibilities are laid upon local authorities under the Food and Drugs Act, 1955, and Food Hygiene (General) Regulations, 1960, with the object of preventing contamination of the commodities which are handled. Close co-operation is maintained between Her Majesty's inspectorate and this department and this association is an advantage when industrial problems arise which affect both parties.

**Co-operation
with H.M.
Inspector of
Factories**

Systematic visits have been made during the year to factories in the City to ascertain if the appropriate requirements of the Act were being complied with.

**Visits to
factories**

It is 160 years since the first factory legislation appeared and since that time, experience and need has given rise to a series of acts, amendments and regulations culminating in The Factories Act, 1961, which comes into operation in April, 1962. Although the growth of factory legislation has been slow and protracted it has been amended to meet the inevitable changes and problems engendered by industrial expansion over the years due to research and technological progress.

**The
development
of factory
legislation**

Food Factories.

A pre-requisite for the maintenance of a sound standard of hygiene in any organisation which depends primarily on the individual is co-operation and teamwork between the various departments where food is handled during its preparation, packing, storage or sale. This can only be achieved by educating each employee in the importance of clean food handling and by careful and close supervision by those in charge.

**Employees
part in food
hygiene**

In the initial stages of the clean food campaign, some six or seven years ago, managements, as a whole, took considerable interest in the subject and adopted a variety of measures to see that their employees were made aware of the necessity for supplying the public with clean food.

Training of new employees

The passing of time and the appreciable labour turnover in the food industry tends to lead to a situation where the majority of food handlers will not be trained in basic hygiene requirements unless a special effort is made to educate new entrants in this respect. The department has focused its attention on this aspect of food hygiene during the year and every effort has been made to impress upon executives in food factories that knowledgeable and well trained workers are a factor of utmost importance in the production of clean and safe food.

Preserved Meat Premises.**Registration**

The Liverpool Corporation Act, 1936, requires the registration of persons and premises where preserved meat and sausages are manufactured and although 16 registrations have been approved during the year, no recommendation was made unless the premises had been examined and found to be satisfactory for the purpose.

This is an important feature of the work of the department as it is a well established fact that cooked meats, sausages and meat pies have often been the offending food in outbreaks of food poisoning. Frequent visits are made to this type of food factory to ensure that every precaution is being taken to produce these commodities under hygienic conditions.

Outworkers.

The Factories Act, 1937, requires employers of outworkers to submit returns twice a year, giving the names and addresses of persons who undertake this work and the premises in which they operate are examined to ensure that environmental conditions are satisfactory. Details of the returns are as follows:—

Number of outworkers	...	...	...	...	...	...	448
Number of outworkers returns received from other authorities							4
Number of outworkers referred to the Medical Officer of Health of districts outside the City				...	...	...	50

Industrial Nuisances.

Activities associated with industrial processes are often potential sources of nuisance such as effluvia, dust, noise and excessive steam.

Effluvia

Complaints of obnoxious odours during the year were attributed to one of three sources, viz.: (1) the processing of animal waste; (2) activities and manufacture in other industrial premises and (3) unknown causes.

There is no foolproof method of operating the plants which process animal waste so that emissions of foul vapours will never occur. Mechanical breakdowns, a momentary lapse on the part of a careless employee or temporary failure in water pressure may give rise to effluvia being released into the atmosphere. The incidence of complaints, however, so far as the abattoir is concerned has been appreciably less during the year and it is to be hoped that this improvement will be maintained. These businesses warrant the special attention of the department and 1943 visits were made during the year to ensure that they were being conducted and operated in a satisfactory manner. **Processing of animal waste**

Some odorous gases, which cause annoyance and discomfort to local residents, are released into the atmosphere during certain processes which can be readily detected. The following examples of this type of nuisance have been dealt with recently. Odorous volatiles during paint spraying of motor vehicles, asphalt melting and chemical reagents used in the manufacture of various materials. **Other industrial Effluvia**

In all these cases the emissions were checked by the adoption of technical measures including the installation of specialised ventilation equipment and absorbents or the use of industrial scrubbers and washing apparatus.

Complaints are received occasionally of obnoxious smells the source of which is unknown by local residents. In some cases the smell has only occurred on one or two occasions whilst in others it has been detected at irregular intervals. The tracing of nuisances of this character is often difficult and frustrating and inspectors may have to keep lengthy observations, extending over many weeks, in efforts to pin-point the source. Atmospheric conditions have an important influence on this type of nuisance and meteorological factors such as temperature inversion and humidity may have to be considered during investigations. **Unknown sources**

Noise.

Public reaction to excessive or unreasonable noise is revealed in a marked increase in the incidence of complaints received by the department during the past year or two.

The publicity which has been given to The Noise Abatement Act, 1960, in the Press and other fields has been responsible to a great degree, but there is little doubt that people are becoming more and more aware of the fact that noise causes a good deal of irritation and discomfort and in some cases claim that it is prejudicial to health. **Public reaction to noise**

Source of noise

The sources of noise are legion and examples of complaints dealt with during the year included barking dogs, dance bands, milk delivery vehicles, factory machinery, circular saws, high-speed fans, mortar milling and electric sirens summoning employees to work. Many of the complaints referred to noise which was unnoticeable during the daytime, but which became apparent in the quiet hours of night, when the background noise of traffic had diminished.

Industrial noise nuisance

The abatement of noise nuisances arising from a variety of industrial activities has been achieved in all cases by the co-operation of the firms concerned and there seems to be a genuine desire on the part of managements to comply with the text and spirit of the Act.

Effect of noise on individuals

Noise is a factor which does not affect individuals in the same way and what may be a pleasant or stimulating sound to one group of persons may be resented and even annoying to others. This was illustrated when a complaint was received that music of a dance band in a private club irritated people living in the vicinity. In this case the club officials decided to keep the windows closed and to provide other means for ventilating the dance room during its evening functions.

Dust.

The assistance of this department is occasionally sought when some industrial activity causes excessive dust to rise and enter neighbouring dwelling houses or settle as a film on windows. Although the cause and source of the trouble is invariably readily ascertained, an effective and immediate remedy is not always practicable.

The demolition of buildings is an example, as this work is always accompanied by dusty conditions, particularly in windy weather. This type of nuisance is fortunately only temporary and not likely to recur. Certain types of business, however, such as brick crushing and cement mixing have given rise to problems in the department which can only be effectively solved by requiring the removal of the plant to locations where the inevitable dust will not be troublesome to residents. Other complaints dealt with during the year concerned the careless handling of sacks of flour at a warehouse, metallic dust from alloy works and microscopic deposits from paint spraying in a large factory.

Agriculture (Safety, Health and Welfare Provisions) Act, 1956.

It is the duty of the local authority to enforce the provisions of this Act which relate to sanitary accommodation for employees who are engaged on certain agricultural activities. In view of the fact that there are no extensive farming areas within the City the administration of the Act presents little difficulty.

During the year 68 visits were made to farms, piggeries, nursery and market gardens and all were found to be satisfactory.

Offices.

In the Annual Report last year, reference was made to a new Act—The **The Offices Act, 1960**—which provided for the protection of office workers so far as their health, welfare and safety was concerned. The Act, which was to come into operation on the 1st January, 1962, was mainly a framework requiring the drafting of practicable and workable regulations to make it a useful and much needed piece of legislation, enforce a reasonable standard of working conditions for a deserving section of the community and bring them into line with the privileges enjoyed by workers in industry.

The purpose of the Act, however, has not been achieved as regulations have not been made and although it was the stated intention of the Government to supersede The Offices Act by introducing a measure of a comprehensive nature on the lines of The Factories Act to apply to clerical and other non-industrial workers, this had not been tabled in the House by the end of the year. **Failure to implement the Act**

The inspection of 5,775 offices and workplaces during the year showed **Inspections** that many employees are carrying out their tasks under most unsatisfactory circumstances and are anxiously awaiting official recommendations and standards which employers will be obliged to implement. Architects and others responsible for design and accommodation in business premises have also expressed a desire for early decisions on these matters so that they can plan ahead with confidence.

Workplaces.

Although clerical and shop workers form the majority of non-industrial employees many thousands of persons earn their livelihood in premises which do not come within these categories.

This group includes warehouses, store sheds, building and contractors' yards, furniture repositories and various types of receiving depots. The conditions under which people are employed in premises of this character leaves much to be desired and existing legislation does not provide the essential powers of enforcement to rectify such matters as inadequate heating, poor lighting, lack of washing and meal facilities and first aid, etc.

Efforts to persuade employers to take some action have been successful to a degree, but experience shows that there is a definite need for powers to secure basic health requirements in this type of employment.

Bakehouses.

Changes in the baking trade

There has been a significant trend in the baking trade during recent years as several old-established and family businesses have been absorbed by large combines and although this has resulted in the closing of a number of bakehouses, some of the smaller concerns have been able to retain their identity, but are operating under the direction of the new owners. The policy of concentrating the production of particular lines of bakery products in large factories appears to be gaining favour.

Effects of mass production

From an economic and hygienic point of view there are several advantages of mass production in large units as the organisation in these factories is usually of such a character that specialists can be engaged to supervise and direct particular aspects of the work and matters such as the quality of products, cleaning programmes and hygiene are under the control of trained and qualified personnel.

The effect of this arrangement is reflected in the fact that defects and unsatisfactory conditions are seldom observed in this type of bakery during inspection and on those rare occasions when an inspector finds it necessary to point out some fault or omission the matter is invariably rectified without delay.

The small bakehouse

On the other hand, the manager or occupier of a small bakery is in personal contact with his employees and can give close attention to detail and keep efficient supervision. In this class of bakehouse, however, restricted floor and storage space is often an obstacle in keeping the premises in a clean condition and a gradual deterioration in hygienic conditions is a constant hazard. Periodical visits of inspectors serve a useful purpose in drawing the attention of proprietors to such matters so that they are checked before getting out of hand. Warning letters are usually sent in

Prosecutions

cases where infringements are observed, but in two cases where this action was disregarded, summary proceedings were instituted and fines amounting to £35 in one case and £30 in the other were imposed by the Stipendiary Magistrate.

Licensed Premises.

The reconditioning of many of the older public houses has proceeded steadily during the year and has given the proprietors an opportunity to modernise bars and equipment. The ornate and pretentious fittings and furniture designed in Victorian days are gradually being replaced by structures and articles presenting plain and streamlined surfaces which are easy to keep clean.

Many improved types of beer engines have been installed recently, but the adoption of the system of conveying the liquor from the casks to the service bar by means of compressed air or gas has not found favour in this area. This method has certain hygienic advantages particularly when carbon dioxide is used as the propellant, but some risk of contamination is incurred when unfiltered compressed air is employed.

The serving of contaminated drinking vessels is inexcusable and is a risk which can be readily eliminated by the simple process of thorough cleansing on every occasion after use. The practice of washing numerous glasses without frequent changes of water in the bar sink must not be permitted and is checked by the inspectors during incognito visits to public houses during the busy hours of the trade.

It is not essential for utensils to be sterilised in complicated washing machines and it is appreciated that the use of steam heat and very hot water is usually impracticable at peak periods of service before closing time. There are, however, a number of effective sterilant detergents which do not affect the liquor if used carefully and can be used with confidence in bar sinks.

During the year 1,267 visits were made to public houses for the purpose of securing satisfactory environmental and hygienic conditions.

Improvements
in Public
Houses

Beer
dispensing

Drinking
utensils

Inspections of
licensed
premises

Employment Agencies.

These agencies are licensed annually under the Liverpool Corporation Act, 1927. Periodical visits are made to ensure that the conduct of these businesses are satisfactory and that the provisions of the bye-laws are being observed. At the end of the year 31 licences were in force permitting agencies of this character to operate within the City.

Rag Flock and Other Filling Materials Act, 1951.

The provisions of this Act control the cleanliness and standard of filling materials used in the making of new upholstery, bedding and toys. Manufacturers of these articles are required to be registered and premises where the filling known as "rag flock" is made, stored or sold, have to be licensed. The number of firms operating under these conditions are:—

Licensed to manufacture rag flock...	...	1
Licensed to sell rag flock	... ..	8
Registered for use of filling materials	...	81

Samples of filling materials which are taken for testing in accordance with the terms of the Act must conform with the standard of cleanliness laid down by the regulations.

The following 30 samples taken during the year were submitted to the prescribed analyst who reported that the standard was complied with in each case.

Filling materials				No. of samples
Rag Flock	...	...	...	18
Coir fibre...	...	...	...	3
Layered flock	...	...	...	4
Woollen felt	...	...	...	3
Woollen flock	...	...	...	2

Radio-Active Waste.

The assistance of the department has been sought in connection with the disposal of solid radio-active waste which accumulated in the physics laboratory of the University, the Radium Institute and the Liverpool College of Technology. An arrangement has been made with the Radiation Officer of the University to collect the waste material from the three institutions and this is conveyed under supervision to Otterspool tip where it is buried at predetermined points under several feet of compacted refuse where it will remain undisturbed for many years. The waste which is treated in this manner is only mildly radio-active. Material which contains long-lived and highly active isotopes is transferred by the University to the Atomic Energy Authority for appropriate disposal.

ATMOSPHERIC POLLUTION

- First large domestic Smoke Control Area** The clean air campaign in this city was given further impetus this year by the decision of the Minister of Housing and Local Government to approve the policy of the City Council in confirming the No. 10 Smoke Control Order 1960 which includes a large number of domestic premises in the south end of the city.
- Central Area Smoke Control Progress** Two further areas in the City Centre, Nos. 11 and 12 Smoke Control Orders, were confirmed and there are now 400 acres included in operative orders situated in the central area of the city, in respect of 5,497 premises.
- Smoke Abatement by Industry** The improvement in atmospheric pollution by the co-operation of industrial management continues and renewal of unsuitable plant together with modification of existing plant is progressing.
- Statistics** There are now eleven operative smoke control areas and a further area confirmed but not yet operative, involving 34,031 premises. The eleven operative areas are situated in the central part of the city and the remaining area is in the southern part and comprises many domestic premises.
- Corporation owned boiler plants** Modernisation of boiler installations under the control of the City Council continues and a new oil-fired installation has taken place at Steble Street Baths which now completes the modernisation of twelve plants.
- Shipping** Observations on shipping have been maintained and the improvement evident in the latter part of last year continued. This has resulted in a reduction in the number of warning letters issued and 1,065 observations were carried out during the year.
- Domestic Problem** The designation of Smoke Control Areas approved by the City Council in its programme for 1959-1963 continues, and a survey of a further area has been completed this year.
- Clarence Dock Power Station** The Clarence Dock Power Station, although still a problem in this city, is improving by adaptations. The new techniques which were found successful last year have been applied to a further number of boilers and the close co-operation between the public health inspectors and the engineers at the station is now showing some results although a complete solution is almost impossible having regard to the need for large scale renewal of boiler plant.

The Clean Air Act is now in its fifth year and whilst it is still comparatively new, it has provided the spur for an immediate attack in the industrial field, and progress in the domestic sphere. There is no doubt that, surveying the progress made by industrialists to their steam raising plant in this city during the past five years, the large percentage of pollution in the atmosphere today is the result of the continued use of the open coal burning domestic grate. **Clean Air Act**

Smoke Control.

Three Smoke Control Orders were confirmed this year by the Minister of Housing and Local Government. Two of these, Nos. 11 and 12 are situated in the central area whilst the third—No. 10—covers 7,292 acres in the south end of the City. As expected at the time of the public inquiry into the Council's proposal for the No. 10 Order the date of operation has been extended and is now 31st October, 1963. This does not appear to be a serious problem but if delays like this continue to occur, the completion of declaring the whole of the city as a Smoke Control Area will be seriously retarded. **Confirmation of Smoke Control Orders**

The survey of the second domestic area has been completed and includes the remainder of Allerton and part of Church Ward, affecting 4,616 premises and covering 999 acres. **Smoke Control Programme**

Special Problems.

The closing of boilers at two of the hospitals occurred this year when a new installation came into use at the Liverpool Maternity Hospital. This boiler plant incorporates a district system of heating and steam supply to four adjacent hospitals. **Crown property hospitals**

Steam locomotives continue to give rise to smoke emissions, but as the diesel electrification extends, the problem decreases. **Railways**

A total of 137 visits were made to industrial and commercial premises and dwellinghouses to investigate complaints of smoke nuisance. Advice was given on technical difficulties, and new installations were examined to ensure that they complied with the specification submitted for approval. It was also necessary to examine plant for which approval had not been sought. 27 warning letters have been sent during the past year in consequence of the inspector observing smoke in excess of the permitted maximum. **Smoke Abatement**

Routine observations on the river continued and from 1,065 ships observed 697 minutes of excess smoke were recorded.

Domestic Smoke

There are approximately 200,000 dwellinghouses in this city in which about half a million tons of coal are burned each year. This presents a formidable problem. The domestic areas are responsible for pollution at low level thus preventing the dispersal of solid matter.

Atmospheric Pollution Measurement.

Warren Spring Laboratory

The investigation of atmospheric pollution measurement continues with close co-operation by the Warren Spring Laboratory—Atmospheric Pollution Division.

The quantity of solid suspended matter and gaseous impurities are measured by various types of instruments which are situated over a wide area of the city.

National Survey of Atmospheric Pollution

Liverpool was selected as a member of a team of local authorities whose aim is to measure pollution in similar localities. The city has four stations now in operation and a fifth station is to be set up shortly.

Inspectors' Visits.

Survey

A total of 4,120 visits have been made in connection with the Smoke Control Survey.

Special Complaints

137 visits were made by inspectors in response to complaints of excessive smoke emission.

Advisory visits

Advice was freely given to engineers in industry and occupiers of dwellings on 529 occasions.

New Installations

69 new furnaces were installed during the year of which details were submitted for approval in 55 installations. Of these 53 were approved without modification and the remaining two were approved after modification.

Height of Chimneys

It was necessary to examine 86 plans to ensure that the proposed chimney height was sufficient. In twelve cases the chimney height was increased after consultation.

RODENT CONTROL

The drive to eradicate the rodent pest from buildings, lands and sewers in the city was continued throughout the year with satisfactory results. It is significant to note that no major infestations were reported during the year.

Systematic survey of lands and buildings in the dockside and central areas and in other places where rodents are likely to be found was again carried out.

The surveys continue to reveal that many sites that were subject to recurring infestation are still trouble free since they were disinfested some years ago. The marked improvement brought about is in no small way attributable to the value of block control applied by the staff to remedy all infestations found, however slight; also to the respective treatments prescribed and applied, and to the subsequent measures taken to prevent infestation.

Although there is a considerable reduction in the number of rats in sewers since the work was centralised in 1953, the very wet conditions in some sewer manholes makes the effectual baiting of bench or tray impracticable. A large amount of experimental work was again undertaken to provide a solution to the problem. A special type of bait container has been designed with a view to overcoming the difficulty and is being used with success. It can be readily fitted in the best possible position in the sewer manholes at very little cost. By its use many comparative large poison takes were recorded where previous baiting had failed.

**Infestation
in Sewers**

It is considered that the best way for the public to destroy rats and mice is to seek practical assistance from the rodent control staff without any undue delay.

The department received the fullest co-operation from other Corporation departments in the destruction of rats and mice, and the district operatives carried out treatments as and when required on a variety of sites. These included public buildings, schools, school meal centres, abattoir and markets, public baths, parks and public gardens, Mersey Tunnel, controlled tips, sewage farms and housing development sites.

**Co-operation
of Corporation
Departments**

Co-operation was also readily received from hospital management committees for treatment of hospitals in the city as and when required, and also from Electricity and Gas Boards for premises and sites under their control. Mention should also be made of the co-operation readily given to the department by British Railways staff when required to deal with infestation of lands under their control.

**Food
premises**

The possibility of food contamination by rats and mice always exists where they are present, and routine surveys were carried out at food factories, warehouses, retail food shops and catering establishments as a preventative measure.

Continuous attention to defective drains and sewers together with the remedying of defects found, in conjunction with systematic treatment of lands, buildings and sewers has done much to remove the health dangers from rodents and the risk of food contamination by them.

Complaints

Complaints relating to rats and mice to the total of 6,441, an increase of 717 from the previous year, were received and promptly investigated.

Precautions Against the Spread of Disease.

**Action
against
Plague**

It is satisfactory to report that all the rodents submitted to the public health laboratory for examination during the year were found to be free from plague.

**Precautions
against
Weil's
Disease**

Rats are carriers of the organism *leptospira icterohaemorrhagiae* causing Weil's disease, and in order to safeguard not only the public but the sewer worker, who is required to enter sewers where he may become in contact with the organism, specimens of rats caught in sewers and on the surface continued to be submitted for examination.

During the year, 22 rats (eight from sewers and fourteen from lands and buildings) were submitted for examination, and three of these (i.e. 13.6 per cent) were found to be positive carriers of *leptospira icterohaemorrhagiae*. One of the effected rats was caught in a sewer in the south end of the city, and the other two were caught in a dwellinghouse in Netherfield Ward into which the rats had apparently escaped from a defective drain, and which was subsequently repaired. Special measures were taken to remedy infestation in the areas effected.

Systematic Survey.

The rodent control staff examined 24,846 sites during the year in connection with systematic survey and investigation of complaints. A further 63,561 visits were made entailing operational work and re-examination of buildings and lands during or following treatments. Public health inspectors also made, in conjunction with other matters, 132,912 inspections under the Act.

Rodent Infestation.

During the year 4,471 sites were found to be infested: 2,550 by rats, 105 by rats and mice and 1,816 by mice only, the majority very slightly, and the details are shown in the statistical appendix.

Infestations-
Buildings and
Lands

The main sites affected were warehouses and factories within the dockside wards, but with a continual fall in severity, the central areas still maintaining their remarkable decrease in rodent infestation as a result of the action taken year by year.

There was further indication during the year of the transportation of rats and mice conveyed when goods were delivered to premises, but on a reduced scale. Infestations brought about in this way, although believed to be few in number, would account for ship rats being found some distance away from the dockside districts. In some cases premises that had been successfully treated were subject to reinfestation by this means, particularly by mice.

Where evidence indicated that rats or mice had been conveyed to premises in this way enquiries were made relating to the consignor so that appropriate action could be taken at the source by the local authority concerned.

The rat infestations found within the middle belt of the city were again principally very slight and for the most part were external infestations confined to yards and public passages.

As part of the investigations to trace the source of these infestations by the common rat, references to the total of 1,329 were sent to the public health inspectors relating to the drains of such sites, 1,019 for dwelling-houses and 310 for business premises. Drainage tests were subsequently applied and defects were found in 490 and 141 cases, respectively, and the necessary action was taken to have these remedied.

The importance of the effectual sealing of disused drains, especially at the connections to the sewer, on sites where buildings are being demolished must be stressed.

It is also essential for drains undergoing construction or repair to be temporarily capped when the work is to be left incomplete, especially overnight, as a precautionary measure against the egress or ingress of rats either from or into the sewers. Where infestation occurred on such sites the necessity of temporary sealing the drains was pointed out to the persons responsible.

The outer districts of the city were again subject generally to very slight rat infestation, mostly by rats living in their natural habitats in banks or brooks, ditches and other lands and attracted to near-by premises, particularly gardens, in search of food which is often supplied quite unintentionally by persons throwing out bread for birds.

Development of agricultural land for new housing estates may cause a disturbance of rats from their customary habitats and result in their visitations to sites of premises under construction and to occupied dwelling-houses near-by to seek food and fresh quarters. Sporadic outbreaks of minor infestation occurred from time to time on new estates.

Complaints received are thoroughly investigated, which sometimes necessitates survey over a large area for the detection of rodents. Many of the complaints received related to a stray rat being seen in yards, public passages, gardens, etc., and much time is spent by the rodent control staff in dealing with this type of complaint. The sites affected, however slightly, are treated for rodent destruction without delay as the presence of only one rat in a dwelling-house can be a very disturbing experience for the occupants.

Although rats were again reported in connection with a large number of dwelling-houses, the majority by far were small external infestations. The limited supply of food and facilities for harbourage in such places available for rats necessitates their taking a wide range of movement in search of food and cover, thereby increasing the number of places showing traces of the pests without concentrated areas of infestation.

Occupiers generally throughout the City have now grown accustomed to availing themselves of the services of the department and request assistance on the slightest sign of rats or mice on or near their premises.

Details of infestations and disinfestations are shown in the statistical appendix.

Rodent Disinfestation.

During the year 4,692 buildings and lands were disinfested from rats and/or mice.

**Disinfestation
of Buildings
and lands**

The practice of providing free assistance to the occupiers of dwelling-houses was continued during the year, with a slight increase in the number requiring attention for the destruction of rats and a substantial decrease for mice.

**Dwelling-
houses**

Owners or occupiers of buildings or lands other than private dwellings who desire the department's assistance for the destruction of rats or mice are required to reimburse the local authority for the expenditure incurred. The demand for such assistance is quite appreciable and 2,020 requests, an increase of 70 from the previous year, were received. Many occupiers in addition requested the department to examine their premises at regular specified intervals on a servicing basis in order to maintain expert supervision to detect the slightest indication of rodent activity and give prompt and skilful attention when disinfestation is required. A wide variety of premises in all districts of the City were serviced in this way and the full cost of both the inspection and operational service was charged to the occupiers concerned, the work being in no way subsidised out of the rates.

**Business
Premises**

All of the occupiers concerned readily agreed to the recommendations of the department for the actual destruction of rats and mice and it was therefore not necessary to serve notices for treatments under the Act.

Infestations Remedied.

Of the 4,853 infestations and reinfestations remedied during the year, 4,425 were treated by the department's operatives. Of these 4,404 were cleared by the use of poisons and the remaining 21 were remedied by trapping only. The effectiveness of rodenticides properly applied is apparent when having regard to the large number of infestations which were remedied by one poisoning treatment, being 3,690 out of a total of 4,404. Of the others 565 required two treatments, 110 three treatments and 39 four or more treatments. The remaining 428 infestations were remedied either by the occupiers under the guidance and supervision of the rodent control inspectors or by proofing, which mainly entailed the repair of defective drains under the supervision of the public health inspectors.

*Calculating the kill***Estimated
number of
Rats killed**

It is estimated that at least 18,458 rats in buildings and on lands were destroyed during the year as the result of poisoning treatments. 2,673 dead rats were actually collected after poisoning and a further 327 were caught in traps. The species of rats collected were 1,837 *rattus norvegicus* ("brown" or "common" rat) and 1,163 *rattus rattus* ("black" or "ship" rat). A percentage of rodents collected 303 rats were sent as usual to the Public Health Laboratory for examination and the remainder burnt.

**Destruction
of Mice**

Although there is no reliable formula available for calculating the kill in relation to the poisoning of mice, there can be no doubt that the number destroyed by this method is quite considerable when taking into account the large amount of poison bait actually consumed by mice, namely 9,622 ounces.

Rat Destruction in Sewers.**Sewer
treatments**

With the main object of reducing rat infestation of buildings and lands that may have its source from the sewer, maintenance treatments for the destruction of rats in sewers were again applied during the year with satisfactory results as indicated in the table in the statistical appendix.

There are 25,830 sewer manholes in the City and the total baits eaten or partly eaten by rats during the two maintenance treatments applied during the year were 2,876 and 3,565 respectively compared with 9,329 in the initial treatment in the year 1953. Included in the total of 3,565 takes during the second treatment are 127 takes recorded after treatment of the part or whole divisions not normally treated but dealt with by annual test baiting.

In the outer districts of the City where sewers had been previously found to have little or no rat infestation, and in the divisions in which sewers had been disinfested by maintenance treatments, the annual test baiting was applied as a precautionary measure and details are shown in the statistical appendix. Where evidence of rats was found during the test baiting, treatments were applied to remedy the localised infestation, however slight. Of the 76 divisions wholly or partly test baited, no takes were recorded in 57 divisions containing a total of 8,995 manholes.

SUPERVISION OF FOOD SUPPLY

Close supervision of the City's food supplies has been maintained through- **General**
out the past year by public health inspectors with additional qualifications
as meat and food inspectors. Daily visits have been made to the Wholesale
Fruit and Vegetable Market at Cazneau Street, Wholesale Fish Market,
Queen Square, and St. John's Retail Market, in addition to wholesale
warehouses situated throughout the City.

Investigations into food complaints originating from members of the
public have been carried out with regard to fitness and questions of nature,
quality and substance. In the year under review 3,091 special food com-
plaints made by members of the trade have been dealt with satisfactorily,
in addition to the daily routine calls of inspection at the various City
markets.

All poultry and game entering the wholesale market is inspected prior to **Poultry**
sale to the retail trade. During the past year a total of 2,685 head of high **Inspection**
grade poultry and game at a weight of approximately six tons was rejected
as being unfit for human consumption, due mainly to reasons of decomposi-
tion or refrigerator perish.

Details as to the rejection of these birds are set out below :—

Chickens	...	...	...	...	676
Fowl	...	...	...	...	1,158
Ducks	...	...	...	...	313
Turkeys	...	...	...	...	506
Pheasant	...	...	...	...	24
Partridge	...	...	...	...	8
					<hr/> 2,685 <hr/>

Only a small amount of second-grade poultry was observed on the market
and there were no rejections of these imported birds during the year.

The Wholesale Fish Market continues to supply an extensive retail trade **Fish**
throughout Merseyside and adjacent areas. Evidence of this is that during **Inspection**
the year under review a total of 10,336 tons of fish was handled, in addition
to some 58,138 packages of rabbits, poultry and game. The regular
inspection of fish, poultry, game and rabbits resulted in the rejection of
some 4,590 packages at a weight of approximately 46 tons as unfit for human
consumption. (See Table 80, Statistical Appendix.)

Fruit and Vegetable Inspection

The inspection of fruit and vegetables at Queen Square, the North Market, and the various wholesale storage warehouses situated throughout the City has been maintained during the past year. The daily inspections of fruit and vegetables has resulted in 24,538 packages at a total weight of 488 tons being rejected as unfit for human consumption. (See Table 80, Statistical Appendix.)

A marked increase is to be noted in the quantity of vegetables rejected on inspection and this relates in particular to onions and imported foreign potatoes. Large consignments of the former were dealt with at the commencement of the new season's influx from abroad when old stocks were rapidly becoming unfit and were sorted for disposal and clearance from the warehouses. This is a yearly feature of the onion trade and is mainly connected with the wholesale warehouses and importers.

During the months of April and May it was found that imported potatoes were entering the City in a sloughing and soft condition rendering them unfit for consumption. The reasons for this were found to be due to unsatisfactory storage conditions on board ship and delay whilst in transit.

Canned Goods and Sundries

The daily inspection of canned goods and sundries has been maintained throughout the year at a variety of premises including food factories, warehouses, and shops within the confines of the City boundary. A large proportion of the foodstuffs rejected as being unfit for human consumption have been disposed of directly at a corporation controlled tip. Smaller consignments which were brought to the office for examination were removed by the City Engineer and Surveyor's Cleansing Department and subsequently tipped under their supervision.

There have been seven instances during the year where the food which was examined was found to be unfit for human consumption but suitable for further processing into animal feeding substance, fertiliser, or for soap manufacture. On these particular occasions the foodstuffs involved were released under a signed "Guarantee of Unsound Food" to the respective pig feeders, farmers, or manufacturers for conversion into animal feeding stuffs.

The examination of canned goods and sundries resulted in the rejection of 103,185 cans and packages at a total weight of some 81 tons. (See Table 80, Statistical Appendix.)

A breakdown of the various categories of canned foodstuffs and grocery sundries is set out below :—

				<i>lbs. wt.</i>
Canned Meats	...	...	...	90,822
Canned Fruit	...	...	...	20,699
Canned Vegetables	...	...	...	11,474
Canned Fish, Milk and Soups	...	...	...	16,920
Meat and Dry Groceries	...	...	...	42,803

A total of 10,757 certificates of condemnation were issued to wholesalers and retailers in respect of the rejected foodstuffs mentioned above.

During the year it has been necessary to inspect and carefully examine the entire contents of four retail food premises where damage had been caused by either flooding or fire. In such cases an immediate inspection of the premises is essential to establish the relation of the foodstuffs to the source of conflagration or flooding. These factors are borne in mind during the subsequent inspection of the commodities, and a searching examination is then carried out to sort the sound foodstuffs from those which were likely to have been affected in any degree. Finally, all rejected foods are destroyed and the salvaged items are placed in the custody of the insurance assessors concerned.

During the course of the year, 1,101 visits of inspection were made under the provisions of the Merchandise Marks Act, 1887, to provision merchants, butchers and greengrocers to ensure compliance with the enactment. In cases where infringements were found, these were corrected immediately by the vendors, and routine re-visits showed that the instructions which had been issued were being adhered to in all instances.

Full examinations have been carried out during the last twelve months in respect of foodstuffs which were scheduled for export from this country and which required a certificate of soundness to accompany them to their destination.

55 such consignments were inspected and these were mainly comprised of canned meats and soups, dried and salted fish, and animal carcasses or parts thereof. In each instance the goods which were examined were found to be satisfactory for export from this country, and the necessary certificates were issued.

**Food
Complaints**

339 complaints were received from members of the public during the past year involving a diversity of foodstuffs. The complaints were notified to this department for such reasons as infestation, suspected vermin contamination, mould formations, damage, and extraneous matter within their substance. In many instances investigations involved the inspection of two or three premises with regard to the foodstuffs, the methods of storage, and compliance with the requirements of the Food Hygiene (General) Regulations, 1960. In all cases a satisfactory conclusion was reached and the complainant was notified of the action taken by the department.

**Central
Purchasing
Scheme**

Regular inspections have been made at establishments where food is prepared for human consumption. These premises, which are situated throughout the city and suburbs, are controlled by various departments of the Corporation, i.e., School Meals, Special Schools, Children's Department, and Health Department. Special food complaints and enquiries lodged by the Central Purchasing Department are dealt with in a similar manner to that involving complaints raised by members of the public.

**United
Liverpool
Hospitals
Board**

Visits of inspection were made to hospital premises under an agreement with the United Liverpool Hospitals Board. The purpose of these visits was the checking of requirements, under the Food Hygiene (General) Regulations, 1960, and the examination of foodstuffs prepared for use on those premises.

Observations

It is estimated that during the year under review approximately £83,000 value of unsound foodstuffs, excluding fresh or frozen meat and offal, were rejected upon inspection.

A comparison table of the total weights of foodstuffs, with the exception of the meats mentioned above, rejected over a period of the past four years is listed below:—

1958	...	...	368 tons
1959	...	...	506 tons
1960	...	...	459 tons
1961	...	...	616 tons

The variance in tonnage can be attributed to the fresh fruit and vegetable trades, for it is here that storage, climatic conditions and market trends greatly influence the commodities and their holding properties, and adverse conditions can readily bring about rejection.

The Adulteration of Food and Drugs.

The Medical Officer of Health is responsible for ensuring the safety of food supplies and the public health inspectors specially qualified in food sampling are responsible for carrying out the routine duties to implement the legal requirements of the Food and Drugs Act, 1955 and the various Regulations and Orders made under this Act. Responsibilities under the Food and Drugs Act entail the constant vigilance of the inspectors who procure samples of foodstuffs and drugs and submit them to the public analyst whose duty is to test for adulteration or impurities. Appropriate action is taken in cases where samples are found not to be genuine. In some cases legal proceedings are instituted; in others advice is offered to the vendor and a cautionary letter sent; whilst in other instances the manufacturer or packer is advised of irregularities or technical labelling offences.

During the year 3,939 samples of food and drugs were taken or purchased and of this number 151 or 3·8 per cent were found not to be genuine or otherwise irregular. This represents a decrease on last year's figure which was 5·2 per cent.

The samples obtained included 902 formal and 3,037 informal. An informal sample is one procured without the statutory intimation to the vendor that it is to be analysed. Valuable information as to irregularities is obtained in this way and a variety of food and drug preparations are checked.

Legal Proceedings.

Statutory action taken in respect of fish cakes, canned goods, sugar confectionery and milk resulted in fines totalling £121 with £54 6s. 0d. costs being imposed. The prosecutions included one summons issued against the licensee of a public house for selling gin containing 9 per cent excess of added water. The licensee in turn summoned an employee who was fined £5 0s. 0d. with £4 0s. 0d. costs.

During the year 462 samples of ice cream, ice lollies and frozen confections were submitted for chemical analysis or bacteriological examination. Of this number 337 ice cream samples were examined bacteriologically and 201 were found to be Grade 1; 70, Grade 2; 35, Grade 3; and 31, Grade 4.

Samples in grades 1 and 2 can be classed as satisfactory. In those cases where the bacteriological results were found to be consistently unsatisfactory, visits were made to the manufacturing premises and advice given. Analysis of 90 ice cream samples proved only three to be below standard; all other samples complied with the requirements of the Food Standards (Ice Cream) Regulations, 1959.

Analysis of 35 ice lollies and frozen confections showed no contamination with lead or other metals.

**Bacteriological
examination
of foodstuffs**

In addition to the bacteriological examination of milk and ice cream, during the year 237 samples of other foods were examined for their suitability for human consumption, including examination for food poisoning organisms. The types of food selected were those which were to be eaten uncooked or without further preparation and included meat pies, sausage rolls, cooked meats, cream filled cakes and trifles, shellfish, meat and fish pastes. The results generally were satisfactory, in no case was salmonella contamination reported. The above total includes samples which were examined bacteriologically as a result of complaints made by the general public and enquiries incidental to food poisoning.

**Bacteriological
examination
of Milk**

Regular routine samples were taken from milk processing firms and producers within the city, and the standard of cleanliness and efficiency of pasteurisation is highly satisfactory. The total number of milk samples submitted to the Public Health Laboratory for examination was 2,487, comprising 2,315 heat treated milks, 159 tuberculin tested (raw) milks, and 13 undesignated raw milks.

Two of the 2,315 heat treated milk samples which were examined failed to satisfy the phosphatase test for efficiency of pasteurisation, in both cases the processing plant was situated outside the city area. 137 samples failed the methylene blue test for bacterial quality. 93 of these failures were from samples of heat treated milk procured from automatic milk vending machines, and 42 from samples of milk processed outside the city area. In each case representations were made to the processors concerned and advice given. Eight tuberculin tested milks failed the methylene blue test and the result of guinea pig inoculation of the milks tested for the presence of tubercle bacilli proved negative in every case.

The milk supplied to hospitals and aged persons hostels is regularly sampled at the time of delivery and 131 samples were tested chemically and bacteriologically.

Milk Supply
to Hospitals
and Aged
Persons
Hostels

There were 186 samples taken at these establishments and all proved satisfactory both chemically and bacteriologically.

Milk Supply
to Schools,
Day Nurseries
and School
Canteens

The whole of the city is a specified area in which only heat treated milk or raw milk of tuberculin tested designation may legally be sold to the public, and a small percentage of the daily consumption consists of this raw milk. 159 samples of tuberculin tested milk were taken and 121 were specially tested for brucella abortus infection.

Milk and
Dairies
General
Regulations,
1959

These samples were taken from milk produced within the city and from farm bottled milk from outside areas. The milk from two city herds was found to be infected with brucella abortus. Immediate measures were taken to isolate the infected cows by means of individual sampling. By this means the suspected animals were isolated without delay and with the co-operation of the producers three cows were slaughtered. It was not necessary to send a notice requesting heat treatment of the milk.

All samples taken from city herds were found to be free from mycobacterium tuberculosis.

Bovine
tuberculosis

Liverpool is a centre for the milling of animal feeding stuffs and the manufacture of fertilisers is also carried on. During the year 56 samples of feeding stuffs and fertilisers were obtained for analysis. All samples, with minor exceptions, were found to conform with the manufacturers statutory statement.

Fertilisers and
Feeding
Stuffs Act,
1926

The Act, together with the Poisons Rules, regulates the sale of poisons. It is the duty of a local authority to carry out the provisions of Part II of the Act, which deals with the registration of persons selling Part II poisons. The number of listed sellers on the current register is 722. It was not necessary to take any legal proceedings. Listed sellers are usually owners of hardware stores, chandlers and multiple grocers shops.

Pharmacy
and Poisons
Act, 1933

Part I poisons are sold by pharmaceutical chemists and are controlled by the Pharmaceutical Society.

Milk Supplies

The City's Milk Supply

The duties relating to the supervision and inspection of food and food premises are the responsibility of the public health inspectorial staff and these duties include the administration of the legislation governing the registration of milk distributors and their premises, the issue of licences in support of the sales of designated milk handled by them, and the treatment, storage, distribution and sales of milk effected by them. The work entailed included the issue of 1,951 new registration certificates, and 1,812 licences required in support of the sale of designated milk. A total of 3,504 visits were made.

Milk Distribution

The measures to be taken with regard to securing a clean and wholesome milk supply are most important in view of the vital nature of this valuable food and most careful supervision is essential at every stage from its receipt at the processing plant for heat treatment, bottling and storage, down to the delivery to the consumer, who may be in the home, school, hospital or factory canteen. Public Health inspectors keep a close watch on all the links in the chain of milk handling treatment, storage and distribution. It is incumbent on each inspector to be assured that the requirements of the Milk and Dairies (General) Regulations, 1959, and the Milk (Special Designation) Regulations, 1960, are at all times being strictly complied with.

Registration of Dairies

All milk is produced under the supervision of the Ministry of Agriculture, Fisheries and Food, who register all such producers as dairy farmers, but the handling, treatment, storage and distribution of milk, other than that which is produced and distributed by the registered dairy farmer, is controlled and supervised by the local authority in whose area the premises are situated and they must be both registered and licensed by that authority. This entails a frequent check on all registered premises and routine visitation revealed that 45 businesses had ceased to operate, 50 dairies required to be transferred from one person to another and 89 new registrations were required to be effected. All premises were inspected on receipt of registration application, and when the necessary requirements were completed, they were recommended for approval.

Designated Milk and Licensing

All milk distributed in Liverpool bears a special designation according to its treatment and all milk distributors must hold a licence now called a pre-packed milk licence. Under the Milk (Special Designation) Regulations,

1960, these licences are renewable every five years and not annually as under the previous regulations.

During the year 632 visits were made to pasteurising plants for the purpose of sampling when the installations were in operation. Special attention is paid to the temperature, the functioning of the indicating and recording instruments and the holding times.

There are five high temperature short time pasteurising plants in the city consisting of a number of separate units of capacities carrying from 850 gallons per hour to 2,500 gallons per hour. In addition to the foregoing units, three establishments are fitted with holder or batch type pasteurisers. In each instance the units are coupled to mechanical bottle washing plants filling and capping machines and adequate cold room accommodation.

In addition to the above premises 157 visits were made to three sterilising plants for the purpose of sampling and checking the component parts of each plant. One new ultra-high temperature plant was installed during the year. The processing dairies continue to be well maintained and very effective in operation.

Special attention has again been paid to the sampling of milk from automatic vending machines and during the year 93 samples failed the methylene blue test for bacterial quality. Each machine is fitted with a refrigeration unit and these failures are probably due to the fact that sales from some machines are slow and the filling rotation not sufficiently speedy.

This Act empowers the Liverpool Corporation to grant licences to all persons keeping dairy cows, store cattle and pigs; subject to the premises being of the standard required.

There are 24 cow sheds and 44 piggeries in the city area and 148 visits were made during the year. All infringements were dealt with to the satisfaction of the department.

Milk
Pasteurisation
and
Sterilisation

Distribution
of Milk in
cartons by
automatic
vending
machines

Liverpool
Corporation
Act, 1921,
Sections 475-
483.

Premises used
for housing
of cattle

MEAT INSPECTION

Brief review of the year

The number of animals slaughtered in the City during the year was 561,662. This figure is the highest for the past twenty-one years. A full 100 per cent inspection was carried out on all carcasses at the time of slaughter and dressing.

Condemnations of diseased meat

There were only six days in the year when slaughtering did not take place either at Stanley Abattoir or the private abattoir at Woolton. The number of whole carcasses condemned for diseased conditions as unfit for human consumption was 2,557, together with part carcasses from 11,008 animals. In addition the organs from 111,142 animals were condemned. (See statistical Appendix Table 80.)

The weight of meat and offal condemned was 625 tons.

Sheep carcasses

During the year, the condemnation of sheep carcasses was again high; a total of 1,418 whole carcasses and 4,210 part carcasses. This closely followed last year's pattern—good quality lambs from April till September, then gradually deteriorating till the year end when the breeding stocks are culled and the rams and old ewes slaughtered.

This year some 50 per cent of the rams slaughtered were condemned for oedematous emaciation.

Pig carcasses

Again this year the pig carcass condemnation approximated to last year; 501 whole carcasses rejected (528 in 1960), together with 10,723 part carcasses (10,195 in 1960). This was due mainly to the slaughter of large numbers of swine fever pigs and swine fever contacts. Although tuberculosis in pigs is decreasing, pyaemic infections and swine fever appears to be increasing.

Calf carcasses

Calf carcass condemnations show a striking increase from 295 last year, to 445 this year. Again the main causes for condemnation are pyaemia (joint ill) or acute enteritis. Much valuable veal could be saved from condemnation if calves were properly fed and housed during the first two weeks of life.

Tuberculosis eradication

The number of cow carcasses totally condemned for tuberculosis shows a satisfactory drop from 44 to 12, with part carcass or organs from a further 203 animals.

The tuberculosis eradication measures within dairy herds taken by the Ministry of Agriculture, Fisheries and Food on a national scale during the past ten years have proved an outstanding success.

During the year there was a noticeable increase in the number of bullock carcasses found to be affected with skin tuberculosis, most of the infections being noted on the hind legs, shoulders, or fore legs of Irish stock. Of 32 bullock carcasses condemned for generalised tuberculosis, 30 were from Ireland. Probably the culling of stock in that country in the drive for tuberculosis eradication, as in Britain, is the reason for this occurrence.

This year was the fifth year of operation of the training scheme approved by the Council in 1956. Of 13 trainees prepared for the examination for competency in meat and food inspection, 12 were successful in the examination and awarded the certificate of the Royal Society of Health.

Training Scheme

Private Abattoir.

There is one licensed private slaughterhouse in the City at which 35,795 pigs were slaughtered in a humane, hygienic manner during the year. All the carcasses and offals were inspected at the time of slaughter and dressing.

Private slaughtering

Stanley Abattoir.

The number of animals slaughtered was 527,867, detailed as follows:—

City abattoir slaughtering

Sheep	Pigs	Calves	Cows	Heifers	Bullocks	Bulls
360,004	74,848	15,951	33,346	815	42,806	97

Slaughtering at the City abattoir or at the Woolton slaughterhouse took place on Easter, Whit, August Bank Holidays, and Boxing Day as well as on Sundays throughout the year.

Sunday and Bank holiday slaughtering

The number of animals slaughtered on these days was 139,225 or approximately 24 per cent of the total kill of 561,662 animals.

Diseased Conditions.

The carcasses or offals of 124,702 animals were found to be diseased at the time of slaughter, and this figure is approximately 22 per cent of the total number of animals slaughtered in this City which totalled 561,662. The number of whole carcasses condemned as unfit for human consumption was 2,557 together with part carcasses from 11,003 animals, whilst in addition, organs from 111,142 were condemned as diseased.

Number of carcasses found to be diseased

(See Statistical Appendix, Table 81.)

Condemned Meat and Offal.

Quantity of
condemned
meat and
offal

The total quantity of diseased meat and offal found to be unfit for human consumption at the time of slaughter, together with the meat and poultry rejected on the wholesale meat market was 625 tons. This amount comprised 167 tons of meat and 458 tons of offal. In addition, a further seven tons of canned goods were rejected as unsound. All this meat was voluntarily surrendered, and in no case was it necessary to apply for a magistrates' order for formal condemnation. This reflects the confidence of the wholesale meat traders, farmers and dealers in the fair judgment of the meat inspection staff and provides the highest standard of protection for the meat consuming public served by the Liverpool market.

(See Statistical Appendix, Table 80.)

Custody of Meat Detained for Inspection.

Detained
meat carcasses

All carcasses which are diseased in part, are detained overnight in a special detention cage securely locked up. The following morning each carcass is re-examined and meat suitable for human consumption is cut and released to the meat market for sale.

Disposal of Condemned Meat, Offal and Blood.

Treatment of
condemned
meat offal
and blood

All diseased meat and offal is dealt with in the Council's by-product plant in the abattoir, being rendered down and sterilised to produce inedible tallow and meat meal.

The meat traders as owners or agents of this meat or offal are paid by the Council for the weight condemned as certified by the meat inspection records, payment being made through the Markets Department.

In addition to dealing with all the unsound or diseased meat and offal, the by-products plant handles all the blood from the slaughter units—other than the comparatively small amount specially collected under hygienic conditions, from inspected healthy carcasses for manufacture for human consumption—in a special blood drying plant which produces valuable fertiliser.

Stanley Meat Market.

Stanley Meat
Market

The large quantities of frozen or chilled meat, frozen mutton and lamb carcasses, frozen meat offals "pitched" daily on the market is subjected to inspection, particularly for mould, brine damage contamination or decomposition.

On two occasions during the year, fresh meat from Yugoslavia arrived in bad condition. The meat is packed in special insulated railway truck container cans cooled with frozen carbon dioxide blocks, railed across Europe via sea-ferry to Harwich and subsequently transported to Liverpool by express goods train. **Yugoslav meat**

On arrival here on two occasions, considerable trimming was necessary as the meat was mouldy and partly decomposed. An interesting economic sidelight on this traffic is the fact that the Yugoslav beef is sold quicker than other choicer quality meat on the market, because of its relative freedom from fat.

On three occasions, chilled beef hindquarters from Rhodesia were found to contain a tampon of cotton cloth pushed well into the main aorta artery. On defrosting and cutting, the tampon became a distasteful mass of blood and cloth fibre. Representation by the importing firm to the Rhodesian Veterinary Authorities was made by cable and personal visit, after which the practice was discontinued. **Rhodesian meat**

The Irish dressed meat, pork, lamb and offal has arrived in good condition throughout the year, except on one occasion in September, when dense fog held up transport and delivery of pig carcasses. On this occasion 200 sides of prime pork had to be condemned being slimy and decomposed on arrival at Stanley market. **Irish meat**

In addition to inspection of imported meat, all fresh meat killed outside and brought into Stanley is re-inspected. The value of this re-inspection can be judged from the fact that the firms receiving regular deliveries of carcass meat from outside areas, voluntarily surrendered some four tons of meat found to be diseased when re-examined at Stanley. **Fresh meat**
Condemned meat

The total amount of meat, offal, and poultry rejected by reason of disease, or found otherwise unfit for human consumption in the meat market was 13 tons.

Carcasses and meat dealt with in the meat market, excluding the meat from the 561,662 animals slaughtered in the abattoir and City, was as follows:—

	Beef carcasses	Mutton/Lamb carcasses	Pork carcasses	Veal carcasses	Meat market turnover
Imported frozen/ chilled	36,409	919,701	2,986	2	
Slaughtered outside Stanley Abattoir ...	19,898	174,375	76,723	6,987	

In addition some 198,000 packages or boxes of meat, poultry, or offal were dealt with.

The Tuberculosis (Slaughter of Reactors) Order, 1950.

Bovine reactors (tuberculosis) The number of bovine animals sent into the Stanley Abattoir for slaughter and post-mortem examination under the tuberculosis eradication scheme was 117 (352 in 1960).

A detailed inspection was made in each case, and the nature and extent of the infection reported to the Ministry's officers. As a result of inspection, five carcasses were totally condemned for acute or widespread infection, and portions from forty-four other carcasses. In most other cases, organs only were rejected.

Slaughter of Animals Act, 1933-1954.

Slaughtering licences The Acts require that no person may proceed to stun or slaughter an animal in a slaughterhouse unless he holds a licence granted by the Local Authority. During the year 135 licences were granted by the Council to slaughtermen. In addition, 215 licences were issued to Mohammedans, mainly seamen, for the ritual slaughter of sheep in Stanley abattoir, subsequently destined for the use of ship's crews.

The Food Hygiene Regulations, 1955.

Meat Transport All vehicles working out of Stanley meat market are regularly inspected to see if the requirements of the regulations are observed.

From time to time, minor breaches of the regulations are brought to the attention of individuals or firms and are subsequently remedied. It has not been necessary to take any legal action. In the main the vehicles are quite satisfactory, especially the long distance transport.

Several of these motors are equipped with mechanical refrigeration units and meat is delivered in prime condition to the London markets and to Southampton for victualling the trans-Atlantic liners.

The Slaughterhouse (Hygiene) Regulations, 1958.

Slaughterhouse Regulations These regulations come into force by stages commencing January, 1959, and are designed to secure hygienic conditions in the slaughter of animals, and the handling of meat for human consumption, the cleanliness and hygienic working of operators; effective lighting, efficient drainage, satisfactory construction of slaughtering establishments and equipment used therein.

As detailed in previous reports, improvement work at Stanley has been continuous since that date. Work on alteration and improvement of the Drainage drainage has been completed, and new buildings have been provided for the New stores collection and storage of hides, skins, hooves, and horns.

New fluorescent lighting in the cattle, sheep and pig slaughter halls is almost completed. Much painstaking work has been carried out on this particular problem, and an effective system which enables a true colour appraisal of meat and organs has been found. It will be appreciated that work in the cattle and calf slaughter hall must be carried out in artificial light, and any lighting system must blend in with the natural light which is available. In some previous experiments, the yellow jaundice of calf carcasses was extremely hard to detect, tubercular nodules in lymphatic glands appeared to be green instead of yellow; and haemorrhagic tumours (angiomatosis) did not show up at all; red flesh appeared a brown colour, and sheep carcasses, particularly the fat, appeared to be an off-white grey shade. However, by combined efforts of electricians, research engineers from the various lamp companies, butchers, meat inspectors, and others, the satisfactory outcome of a difficult problem has been achieved. **Lighting problems**

The remaining work specified in the Authority's report to the Ministry will, it is hoped, be completed next year, and some intensive work is at present being undertaken to find an answer to the particular problem of the removal of animal (bovine) stomachs to avoid the risks of ingesta contamination.

Finally, the proposed new chill-room provision will, when completed, enable slaughtering operations to be organised more efficiently and avoid the undue haste so necessary at present, when the weather conditions demand that carcasses are rushed into the chill-rooms with the risk of overloading and breakdown. The welfare of the slaughtering and ancillary workers employed by the Abattoir Utility Company—the slaughtering organisation at Stanley—has continued to receive attention. **Chill rooms**

The provision of and laundering of overalls, caps, and aprons reported last year has, during a peak year of strenuous effort, proved effective. **Protective clothing**

All men engaged at Stanley abattoir and meat market, in the handling of livestock, hides, offal, or meat wear protective clothing, and it is pleasing to record that in matters of hygiene, the co-operation of the wholesale meat trade, the importing firms, the trades unions, and the workers, with my department, is effective and complete. **Co-operation**

It is fair to say that this Liverpool organisation handles livestock and meat with an efficiency which is not surpassed anywhere in the country.

Pharmaceutical Products.

Medicinal products

During the year some 86 tons of liver affected by disomatosis was sent to the pharmaceutical manufacturers for processing into liver extract. In addition, various glands used for the preparation of medicinal preparations, for example, thyroids, ovaries, pituitaries, pancreas, and adrenals taken from sound carcasses, were collected and sent for processing.

Supply of Specimens.

Specimens for laboratories

Supplies of blood, eyes, uteri, spleens, hearts, intestines, pancreas, cysts, tumours, and meat specimens were provided during the year for research work and use in various departments of the Liverpool University and hospital laboratories.

Meat for the manufacture of media was also supplied to a number of hospitals and Public Health laboratories.

Morbid specimens were also set up for the examination of the Royal Society of Health and the veterinary school of the Liverpool University.

Training Classes in Meat and Food Inspection.

Classes in meat and food inspection

The courses of instruction for persons preparing for examinations in meat and food inspection, and food hygiene, were well attended. Seventy students received a grounding in the theory and practice of meat inspection, fish inspection, control of food supplies, milk supplies and the law relating thereto.

During the courses the students visited food preparing factories, milk pasteurising plants, dairies, ships and docks where meat and other foodstuffs are unloaded and handled.

FOOD HYGIENE

In accordance with the instructions of the Health Committee special detailed attention has been given during the latter half of the year to conditions in food premises, and more especially in the distributive trade and street trading.

The result of this intensified action confirms the need for the constant supervision of a considerable number of these establishments, stalls and vehicles. The work already put into the enforcement of the Food Hygiene Regulations, and the court proceedings and other action taken by this department have not yet ensured the maintenance of the required standards of hygiene. **Special Survey**

The problems are undoubtedly associated with the efficiency, or otherwise, of the personnel or proprietors. It has been found in a number of instances, even where shops have been modernized by the installation of new equipment, improved floor coverings and wall surfaces, and more satisfactory personal hygiene arrangements, that day to day cleaning and the general standard of clean food handling has deteriorated during the period between inspectors' visits. **Problems**

This deterioration may not always be of a serious character, but it is nevertheless, a matter for considerable concern, and indicates that sufficient time is not always given to the training of personnel and to the study of hygiene in food establishments.

During the year 27,657 visits were made to retail food shops, cafes, bakehouses, licensed premises, food factories, street traders, etc., and 8,972 infringements were dealt with in respect of these premises and traders. **Inspections of Food Premises**

Whilst concern has been expressed regarding some aspects of the problem of achieving and maintaining a high standard of hygiene in food premises, it must be recorded that the majority of traders and proprietors of various types of food businesses readily co-operate with the local authority, and in many cases conduct their businesses in a manner which obviates departmental action.

Arising out of the action taken in respect of the food trade, a total of 76 informations were laid, and as a result of the prosecutions fines totalling £261 and £62 costs were imposed. **Legal Proceedings**

Clubs

Visits to clubs were made in the course of routine inspections, mainly during the day, but when occasion required, visits were made at night. A total of 432 visits were made to these premises and 340 infringements were satisfactorily dealt with, including the construction of additional sanitary conveniences to meet the requirements of patrons or members.

Cafes

The enforcement of the Food Hygiene Regulations in cafes, and similar premises, is a matter of prior importance to this department. The risks associated with the preparation and storage of food and the service of meals or refreshments in these establishments calls for frequent and careful supervision. A total of 1,649 visits were made and 2,257 infringements reported.

**Ice Cream
retail trade**

There are some 1,850 establishments from which ice cream is sold by retail, and 46 manufacturing premises. New applications for registration during the year totalled 49 vendors and one manufacturer, and there were 122 applications in respect of transfers of ownership.

**Street
Trading**

A special survey was made during the year of street traders in all classes of business by a small team of inspectors. The first part of the survey was mainly concerned with mobile shops, principally in the suburbs of the City and on the housing estates. Many of these traders are functioning from properly designed vehicles, which are well equipped and maintained, but the real problem arises from the larger number of unsatisfactory mobiles which are extremely difficult to locate and, subsequently, to supervise.

There is no legal obligation upon street traders in this City to obtain prior approval from this department before commencing business, but a number of traders seek the guidance of the department and have their vehicles checked before using them. There is also an encouraging response by other street traders to the requirements brought to their notice as the result of inspections made when the vehicles have been located, and much improvement has resulted both in the appearance of the mobile shops and in the general conduct of the food business.

The problem, however, arises from the many itinerant traders who move from one area to another, and have no set trading route or established clientele. Some of them start business with a low-grade second-hand motor van which the trader cannot afford to properly repair or maintain. Sometimes he finds it easier to replace the vehicle frequently, but this expediency rarely resolves the situation and renders enforcement more difficult. The

supervision of this class of business is rendered more difficult by the fact that controlled trading hours for the purposes of the Shops Act do not apply to street trading. However, every effort is made to locate and inspect these vehicles, and to ensure their compliance with the regulations.

The second part of the survey dealt with barrows and similar kinds of stalls, and it will be appreciated that there is a peculiar problem connected with this somewhat traditional form of kerb-side trading. There are serious difficulties for both the inspector and the trader in finding a satisfactory method which can provide conditions for the hygienic display and service of food from flat-topped carts parked in roadways and on cleared building sites.

A total of 3,605 inspections of mobile shops, barrows, etc., have been made during the year, and 573 infringements dealt with either by warning letter or by legal proceedings.

In certain instances the traders have not been located since the initial inspection and it is believed that a number of them have ceased to trade. A person carrying on a tea and coffee business from an old unsatisfactory bus sited in a residential part of the City, voluntarily closed and dismantled his vehicle, when he knew the extent of the department's requirements.

DISINFECTION AND DISINFESTATION

The duties which are controlled by this section are enumerated below:—

1. Inspection of premises for verminous condition.
2. Disinfestation treatment of verminous premises.
3. Disinfestation treatment of verminous furniture, etc.
4. Disinfestation and disinfection stations.
5. Disinfection of infectious premises.
6. City Mortuary.
7. Burials Service.
8. Storage, distribution and collections of Home Nursing Equipment.
9. Mobile Meals Service.
10. Food and General Stores.
11. Poliomyelitis Immunisation—Transport.
12. Milk Bank.
13. Incontinent Laundry Service.
14. Miscellaneous Services.
15. Liverpool Show.

1. *Inspections for Verminous Condition*

As a regular function of this section, inspections of a wide variety of premises continued in a similar degree to that obtaining during earlier years. Although the number of premises treated for vermin maintains about the same average as before, this does not imply that general cleanliness is not showing any improvement, but, on the contrary, that the general public is becoming more aware that vermin in any form constitutes a danger to health.

The categories into which inspections may be divided are:—

(a) The majority of inspections of dwelling houses are made on behalf of the Housing Department and carried out with the intention of obtaining information regarding the verminous condition of furniture and effects belonging to families recommended for rehousing. These inspections are carried out on all housing estates irrespective of their location, inside or outside the City boundaries.

(b) Public interest in the cleanliness of dwelling houses is reflected in the growing number of requests received from owners or occupiers who suspect that premises are vermin infested. If, in fact, these premises are found to be verminous and disinfestation treatment is requested, the cost of such treatment is debited to the complainant.

Frequent requests for disinfestation treatment are received from:—

Hospital Management Committees.

Factory canteen managers.

Proprietors of food manufacturing plants.

The cost of such treatments are borne by the complainants.

2. *Disinfestation Treatment of Verminous Premises*

Following inspections, disinfestation treatment was carried out in the following cases:—

(a) 693 dwelling houses at the request of the Housing Department.

(b) 647 dwelling houses treated at the request of owners or occupiers.

(c) 335 treatments of hospitals, staff canteens, factory premises, etc.
a total of 1,675 treatments.

3. *Disinfestation Treatment of Verminous Furniture, etc.*

The disinfestation of dwelling houses includes the treatment of furniture, bedding and personal effects. The method of treatment is for furniture, bedsteads, pictures, etc., to be treated on the premises but it is necessary for mattresses, bedding and soft furnishings, to be removed to a disinfestation station for adequate treatment. The latter process is carried out with the minimum amount of inconvenience to the occupants of the premises. The furniture and effects of 952 families were treated in this manner during the year.

Welfare Cases

On behalf of the welfare section of the Health Department, an increasing number of dwelling houses and apartment rooms are disinfested and cleared of accumulations of rubbish. These are premises from which the occupants have been removed to hospital or were physically unable to clean their accommodation adequately.

4. *Disinfestation and Disinfecting Stations.*

The stations at Smithdown Road and Charters Street were able to cope with all the infectious and verminous articles collected from premises and ships in the area controlled by the Local Authority and the Port Health Authority.

A small income accrues to the department from the precautionary disinfection of articles which are intended for export and for which the importing country demands a certificate of adequate disinfection.

In this connection the stations dealt with the following items during the year:—

- 7,461 verminous articles disinfested.
- 9,773 infectious articles disinfected.
- 45 infectious library books.
- 4,006 articles disinfected as a precautionary chargeable measure.
- 1,113 tons of miscellaneous goods, the outer wrappers of which are disinfected as a precautionary chargeable measure.

5. *Infectious Premises and Contents.*

The disinfection of premises where infectious disease has occurred is still a primary function of the section and it is the duty of the staff to remove infectious articles to a disinfecting station and to carry out the required terminal disinfection of premises. During the year 762 infectious premises were dealt with in the prescribed manner.

When requests are made for precautionary treatment of premises, where a non-infectious disease has occurred, the department is willing to co-operate, but is obliged to levy a charge for such service.

6. *City Mortuary.*

The control and staffing of the City Mortuary is the responsibility of the section. Two experienced full-time attendants are employed on a rota of early and late duties and are on call should an emergency arise outside their normal working hours. The mortuary is used for the reception from the City or from the river of bodies of persons who have died as a result of accident, violence, etc. During the year 642 bodies were received and 579 post-mortems were held.

Close liaison is maintained with the City Coroner's Officer for the effective functioning of this service.

7. *Burials and Cremations.*

The department maintains an effective service for the burial or cremation of persons who die in the City, where it appears that no suitable funeral arrangements are being made by relatives or friends. Section 50 of the National Assistance Act, 1948, places the responsibility for this duty on the Local Authority and the service is functioning under the control of this section of the Health Department. During the year burials or cremations were arranged in cases involving 143 adults and children.

Although cremation is the policy advocated by the department where religious or other convictions permit, the wishes of relatives or friends are strictly respected and at no time is pressure brought to bear to enforce this policy.

Arrangements are still in being with local hospital management committees for the conveyance of bodies from hospital to hospital. In this connection 68 bodies were transferred during the year.

8. *Home Nursing Equipment.*

The purpose of this service is to provide equipment which may be necessary for the efficient nursing of persons who are ill at home. The demands for this equipment are growing year by year and during 1961, 7,650 visits were made for the purpose of issuing or collecting the various items. The administration of this service is performed by staff of the maternity and child welfare section, but the practical work, involving the storage, distribution, collection and maintenance of equipment, is performed by staff of this section.

9. *Meals on Wheels.*

Meals are provided under this scheme to the homes of persons who are in need of the undoubted benefits to be derived from the provision of a hot cooked meal. The service is maintained by vans from this section, each van being staffed by a departmental driver and a volunteer assistant from the Women's Voluntary Service. During the year, 61,832 visits were made and a corresponding number of meals supplied, six vans being used for this purpose.

10. *Food and General Store.*

This is situated at Gascoyne Street depot, and continues to function in an expanding and satisfactory manner. Food, cleaning materials,

chandlery, medical and general stores are supplied to 179 establishments, principally those under the control of the Health Department, Children's Department and one police establishment.

The value of goods supplied during the year was £26,142 and the establishments supplied were:—

Maternity and Child Welfare Section	...	...	43
Welfare Section	...	...	16
Domiciliary Midwives	...	...	60
Mental Health Section	...	...	3
Education and School Medical Departments	...	...	34
Children's Department	...	...	9
Other Establishments	...	...	14

Staff employed on stores duties are one storekeeper and three assistants.

11. *Poliomyelitis Immunisation.*

This section was heavily involved in the first and second stages of the poliomyelitis immunisation campaign. The principal duties were (a) the equipping of centres, (b) the provision of supplies—vaccine, syringes, and all other items necessary for the smooth running of two successful campaigns. All members of this staff were involved to a greater or lesser degree in the maintenance of this vital service.

12. *Milk Bank.*

The section is responsible for the collection and transport from home to hospital of breast milk required for the feeding of babies who are hospital patients.

13. *Incontinent Laundry Service.*

The inauguration, by the maternity and child welfare section, of a laundry service for incontinent patients created a demand on this section for collection and delivery of bed linen, etc., and the transport necessary for this purpose. It was difficult to forecast the number of staff and vehicles required, but the section was able to cope with each request, although the demands varied between 40 and 60 visits each day. During the year, 9,600 visits were made in connection with this service.

14. *Miscellaneous.*

- (a) The collection and removal of furniture and equipment to and from aged persons hostels.

- (b) Collection, repair and delivery of day nursery equipment and furniture, and repairs to furniture, etc., at the office building, Hatton Garden.
- (c) Transport of equipment on behalf of the mental health service.
- (d) Various transport duties on behalf of the Children's Department.
- (e) The movable property of persons admitted to hospital or to accommodation provided under Part III of the National Assistance Act, 1948, is conveyed, where necessary, to and from store.
- (f) The residents in aged persons hostels are provided with facilities for obtaining books from public libraries. The transport required for this service is provided by this section.
- (g) The transport of port health personnel continues in a satisfactory manner by means of a vehicle from this section.
- (h) A variety of other transport duties necessary for establishments under the control of the Health Department.
- (i) Maintenance of gardens at day nurseries and clinics.

15. *Liverpool Show.*

The department's exhibits continue to attract more attention each year, principally because the subjects displayed are of topical interest, and the increasingly attractive manner in which they are presented.

The equipment used is made and erected by the staff, and the general presentation and layout are controlled by this section. Present intentions are to make further improvements in presentation without incurring any large expenditure, the equipment thus provided being available for future exhibits, not only at the Liverpool Show, but at other exhibitions where health education can play a conspicuous part.

Staff.

The wide varieties of duties listed above is performed by a staff of 52 consisting of:—

Administrative

- 1 Chief Inspector
- 4 Inspectors
- 1 Copy Typist
- 3 Foremen
- 1 Storekeeper

Operational

- 2 Mortuary Attendants
- 1 Mechanic
- 1 Joiner
- 2 Boiler Attendants
- 20 Drivers
- 16 Disinfestors, Disinfectors, etc.

Vehicles.

Nineteen motor vehicles are engaged in the work of the section and are completely maintained by the staff of Gascoyne Street depot. During the year these vehicles covered 191,305 miles and consumed 11,988 gallons of petrol.

CIVIL DEFENCE

Two separate courses were held for newly joined members of the Civil Defence Corps, Welfare Section, on "Evacuation and Care of the Homeless", other members of the Welfare Section who had not completed their initial training on this subject were also invited to attend.

The monthly refresher course for fully trained members of the Welfare Section was continued. The issue of certificates and proficiency badges was made to members of the Welfare Section who qualified during the year. A "Combined First Aid and Home Nursing" course was also held.

Two classes of an "Advanced Course" were held for fully trained members of the Welfare Section, members who had already qualified for the issue of Certificates and Proficiency Badges in "Evacuation and Care of the Homeless" and "Emergency Feeding". At the conclusion of this "Advanced Course", nine members passed the examinations and are entitled to the appropriate certificate and issue of a "Gold Star".

There was no training undertaken by this small section during the year as the numbers did not warrant it.

During the year the members of the Ambulance and First Aid Section responded very well to training covering all aspects of Civil Defence, including elementary rescue and first aid, five training courses were arranged for new entrants and 98 persons attended. Advance training courses were held and there are now 147 persons holding the Silver Star, of whom 68 qualified for the Scarlet Flash.

A large scale exercise was held at Burtonwood Airport to test the Ambulance Section and the hospitals' forward medical aid units. 38 volunteers took part and the lessons learned proved invaluable.

Training also commenced for the peace-time ambulance staff in accordance with the Ministry of Health circular 9/60. The training syllabus covering a period of ten weeks was arranged and 40 ambulance driver/attendants took part.

The total strength of the section on 31st December, 1961 was 1,133.

CREMATION

The Medical Officer of Health continued to act as medical referee to the Liverpool Crematorium. The Deputy Medical Officer of Health and the Principal Medical Officer (Epidemiology) acted as deputy medical referees. The documents, which are statutory, are scrutinised at the central offices of the Health Department before the medical referee gives authority to cremate.

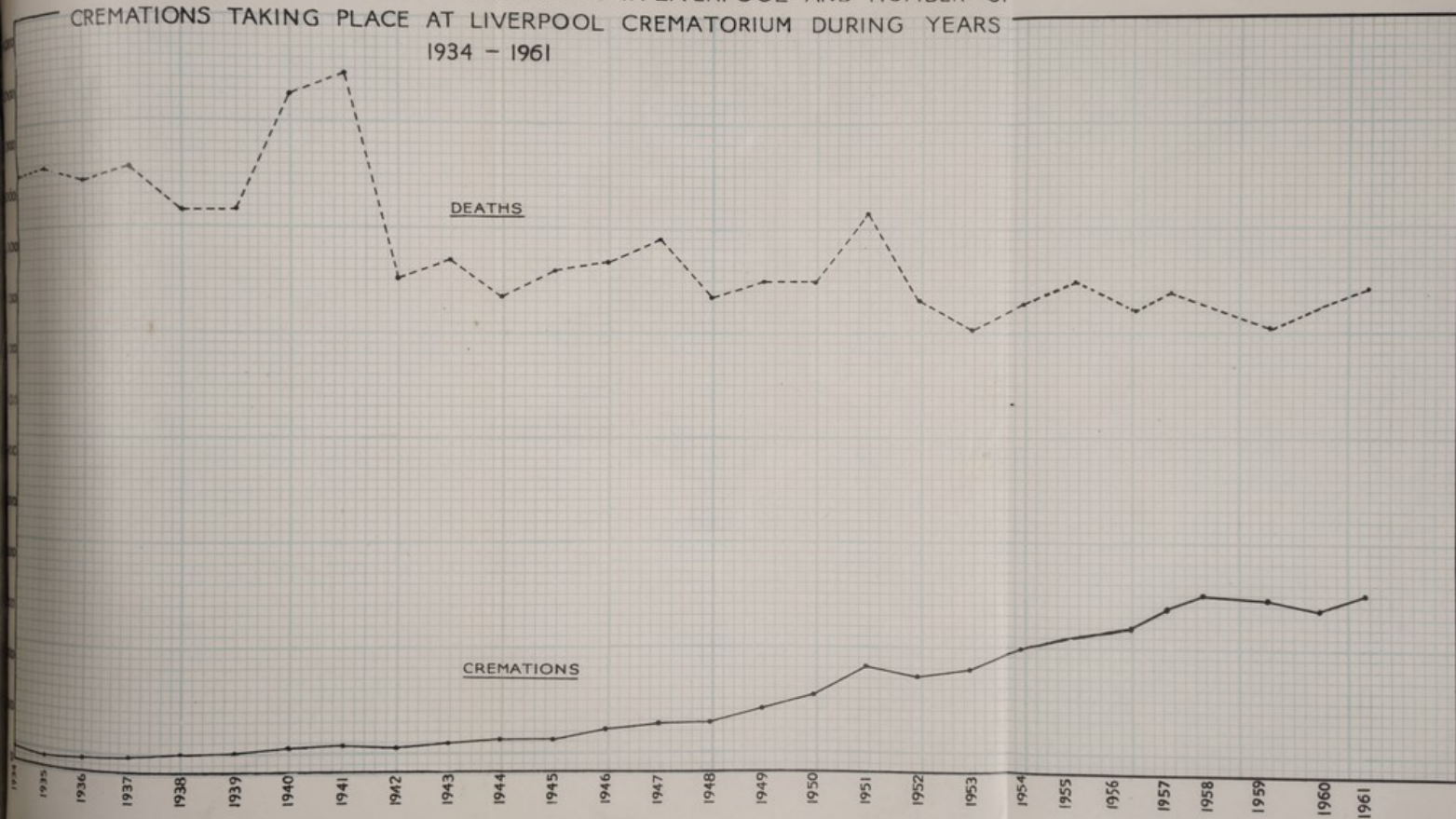
The number of cremations carried out during the year at the Liverpool Crematorium was 3,410, which is an increase of 296 (9.5 per cent) over the number undertaken during 1960. These figures illustrate the ever growing preference which the general public are developing for this means of disposal rather than earth burial.

Quite a large number of cases were handled where the certificates had been issued by coroners throughout the country, and it is noticed that a large proportion of these are received during the summer months, the reason being, it is thought, that there are many more people away from their own homes on holiday, who may not have been under the care of their medical attendant at the time of death. Hence, the action taken by the coroner.

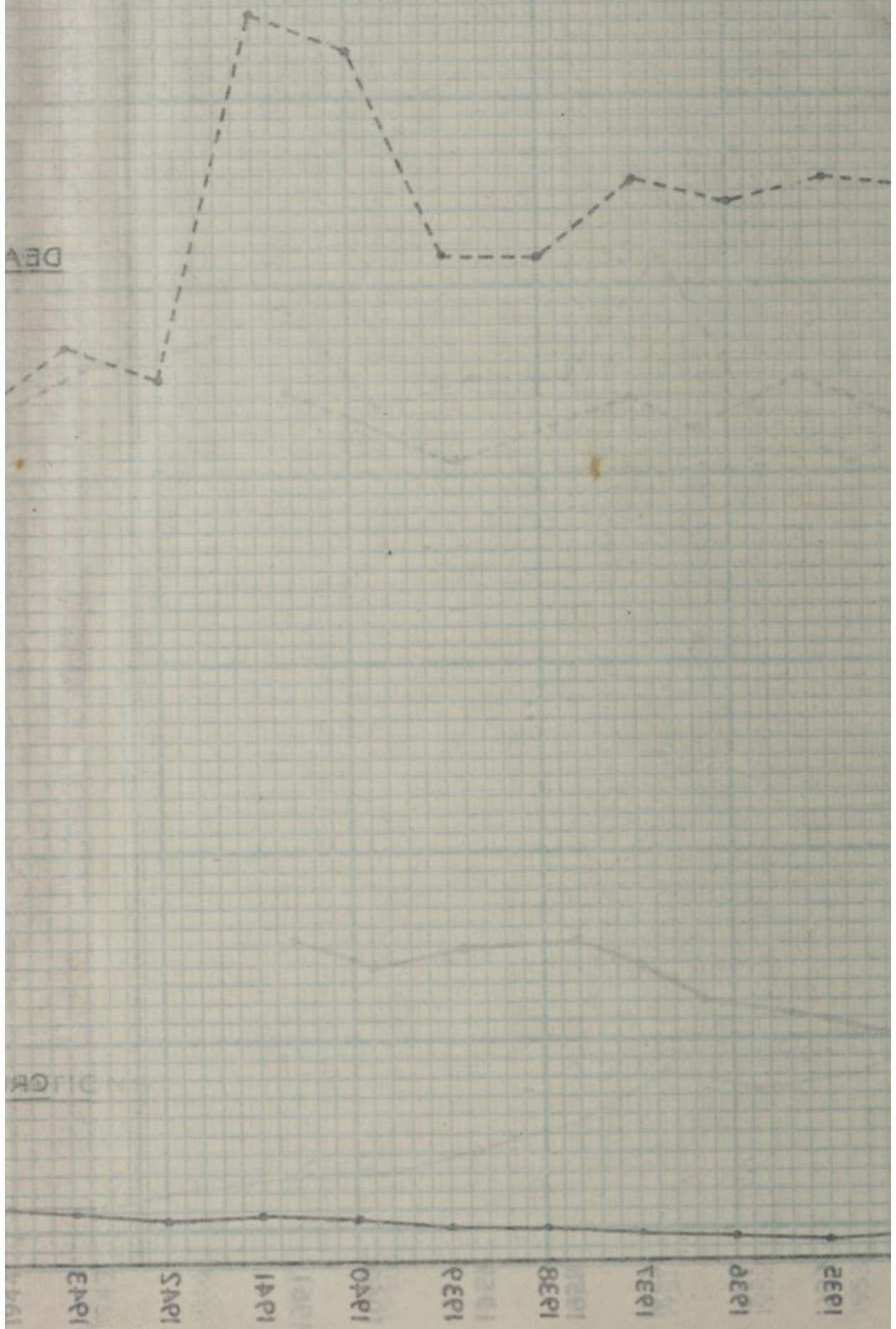
A rather interesting case occurred during the early part of the year when a representative of a Lancashire engineering firm died whilst working in Italy. Documents were received for the cremation to take place here in Liverpool, but they were printed and written in Italian, and no specific cause of death was given. That being so, it was impossible for the medical referee to authorise the cremation to take place until the cause of death was properly ascertained. In order to discover this, the co-operation of the Pathological Department at the University was sought, and the valuable assistance given by Dr. A. H. Cruikshank in issuing his certificate of death allowed the cremation to take place in the usual manner.

It was also noticed that during the year there was a considerable increase in the number of cremations of persons who were members of the Cremation Society. This is a society which was formed in the year 1901, membership of which entitles the member to cremation at any crematoria in Great Britain or Northern Ireland without further expense.

GRAPH SHOWING TOTAL DEATHS OCCURRING IN LIVERPOOL AND NUMBER OF
CREMATIONS TAKING PLACE AT LIVERPOOL CREMATORIOUS DURING YEARS
1934 - 1961



GRAPH SHOWING TOTAL DEATHS
CREMATIONS TAKING PLACE AT
1934



WATER SUPPLY

The water supply in the area during 1961 was satisfactory both in quality and quantity.

During the year 1961 bacteriological examinations were made on 2,981 samples of water from the aqueducts, wells, storage reservoirs, trunk mains and the distribution system. Of the 2,981 samples, 543 were taken within the City from the two wells and from sampling points on mains other than the trunk mains. Of the 543 samples, 99·4 per cent were free from B.Coli and 83·6 per cent were free from coliform organisms.

1,123 were taken from the trunk mains which service the City and other parts of the area of supply. Of these 1,123 samples, 99·6 per cent were free from B.Coli and 91·3 per cent were free from coliform organisms.

In addition, 66 chemical analyses were made and the results were satisfactory.

For plumbo-solvency 280 analyses were made. The average amount of lead absorbed in those samples of water that had passed through test lengths of lead piping was 0·09 part per million. The supplies from both Rivington and Lake Vyrnwy were treated with hydrated lime in order to raise the pH value.

No unusual form of contamination necessitated any special action. The number of dwellinghouses, flats and shops with domestic living accommodation supplied from the public water mains in Liverpool was 206,479. None was supplied by a stand pipe. The population of the City as estimated by the Registrar General for 30th June, 1961, was 745,810.

WATER SUPPLY

The water supply to the area during 1961 was satisfactory both in quantity and quality.

During the year 1961 bacteriological examinations were made on 2,981 samples of water from the aqueduct, with average results of 1.2 per cent positive and the distribution system. Of the 2,981 samples 525 were taken from the City from the two wells and from sampling points on mains after they had passed the main meter. Of the 525 samples 94 per cent were free from bacteria and 96.5 per cent were free from objectionable organisms.

1,122 were taken from the trunk mains which service the City and other parts of the area of supply. Of these 1,122 samples 97.4 per cent were free from bacteria and 97.5 per cent were free from objectionable organisms.

In addition 65 chemical analyses were made and the results were satisfactory.

For chemical analysis 250 samples were made. The average amount of total solids in these samples of water that had passed through the treatment of local piping was 0.05 part per million. The samples from both Livingston and Lake Victory were treated with hydrated lime in order to raise the pH value.

No unusual form of contamination was indicated any special action. The number of disinfectant, salt and other chemicals being consumed was reported from the water meter in Livingston was 175. The population of the City is estimated by the census to be 1,000,000. The population of both parts was 1,000,000.

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Year	Births	Deaths	Population	% of Births
1938	16,170	18.7	712	2.3
1939	15,720	20.6	871	2.3
1940	16,432	21.9	1,050	2.3
1941	16,413	23.1	1,374	2.9
1942	14,794	21.7	1,552	16.7
1943	13,525	25.2	1,302	7.3
1944	13,904	26.4	1,167	6.4
1945	17,040	25.6	1,065	5.2
1946	16,531	26.7	943	5.7
1947	16,110	26.1	889	5.5
1948	15,594	19.6	802	5.2
1949	15,889	20.0	870	5.6
1950	16,021	20.2	875	5.4
1951	16,343	20.5	847	5.4
1952	15,326	19.6	765	5.1
1953	15,544	20.0	801	5.2
1954	15,016	20.9	804	5.3
1955	14,602	20.5	792	5.4
1956	15,015	20.6	810	5.3
1957	15,907	21.1	800	5.4
1958	15,497	22.1	845	5.5

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STATISTICAL APPENDIX.

TABLE 1

BIRTH STATISTICS

	LIVE BIRTHS			STILLBIRTHS		
	Males	Females	Total	Males	Females	Total
Legitimate ...	8,018	7,528	15,546	168	191	359
Illegitimate ...	500	446	946	11	10	21
	8,518	7,974	16,492	179	201	380

Year	Births	Birth Rate	Illegitimate Births	% of Births
1938	16,175	18.7	771	4.8
1942	13,729	20.5	871	6.3
1943	14,432	21.8	1,030	7.1
1944	15,412	23.1	1,274	8.3
1945	14,784	21.7	1,582	10.7
1946	18,528	25.2	1,351	7.3
1947	19,904	26.4	1,151	5.8
1948	17,695	22.3	1,009	5.7
1949	16,551	20.7	943	5.7
1950	16,110	20.1	968	6.0
1951	15,593	19.9	859	5.5
1952	15,839	20.0	876	5.5
1953	16,022	20.3	873	5.4
1954	15,742	20.5	847	5.4
1955	15,268	19.6	785	5.1
1956	15,944	20.6	801	5.0
1957	16,044	20.9	854	5.3
1958	15,662	20.5	799	5.1
1959	15,615	20.6	815	5.2
1960	15,961	21.1	868	5.4
1961	16,492	22.1	946	5.7

STATISTICAL APPENDIX

TABLE 1

Year	Registered Live Births	Registered Stillbirths	Total Births	Stillbirths per 1,000 Live and Stillbirths
1935	17,347	749	18,096	41.4
1936	17,403	708	18,111	39.1
1937	16,728	618	17,346	35.6
1938	16,175	639	16,814	38.0
1939	15,614	631	16,245	38.9
1940	15,016	519	15,535	33.4
1941	13,291	508	13,799	36.8
1942	13,729	552	14,281	38.6
1943	14,432	485	14,917	32.5
1944	15,412	492	15,904	30.9
1945	14,784	431	15,215	28.3
1946	18,528	539	19,067	28.3
1947	19,904	514	20,418	25.2
1948	17,695	479	18,174	26.3
1949	16,551	358	16,909	21.2
1950	16,110	375	16,485	22.7
1951	15,593	396	15,989	24.8
1952	15,839	400	16,239	24.6
1953	16,022	394	16,416	24.0
1954	15,742	400	16,142	24.8
1955	15,268	408	15,676	26.0
1956	15,944	394	16,338	24.1
1957	16,044	409	16,453	24.9
1958	15,662	413	16,075	25.7
1959	15,615	375	15,990	23.4
1960	15,961	377	16,338	23.1
1961	16,492	380	16,872	22.5

TABLE 2

Analysis of causes of Infant Mortality in successive quinquennia 1896-1960,
and the year 1961.

(A.)—Recorded Deaths.

Years.	1 Total Births.	2 Total Deaths Under 1 Year of Age.	3 General Diseases (excluding Tubercu- losis).	4 Tubercular Diseases.	5 Nervous Diseases	6 Respira- tory Diseases	7 Digestive Diseases (including Diarrhoea.)	8 Malforma- tions Premature Birth, Maras- mus &c.	9 External Causes.
896/1900	111,700	21,160	1,508	698	2,476	3,575	6,376	5,698	819
901/1905	118,801	20,353	1,546	644	2,516	3,484	5,187	5,732	565
906/1910	118,313	17,739	1,613	465	2,052	3,146	3,902	5,520	539
911/1915	111,872	15,458	1,309	345	1,432	2,916	3,635	4,953	426
916/1920	99,451	11,510	1,116	202	1,083	2,821	1,872	4,107	179
921/1925	104,217	10,497	1,066	200	573	2,776	1,786	3,764	120
926/1930	95,701	9,002	978	109	401	2,553	1,670	2,981	81
931/1935	88,644	7,904	902	82	368	2,050	1,184	3,125	67
936/1940	80,936	6,226	573	74	519	1,457	698	2,691	84
941/1945	71,648	5,512	341	71	403	1,704	548	2,193	131
946/1950	88,788	5,034	311	47	213	1,109	963	2,226	111
951/1955	78,464	2,626	83	10	28	480	132	1,792	63
956/1960	79,226	2,149	31	—	24	384	82	1,576	30
1961	16,492	467	4	1	5	78	23	344	8

TABLE 2—*continued*.

Analysis of causes of Infant Mortality in successive quinquennia 1896-1960,
and the year 1961.

(B.)—Death Rates per 1,000 Births.

Years	1 Total Births	2 Total Deaths Under 1 Year of Age	3 General Diseases (excluding Tubercu- losis)	4 Tubercular Diseases	5 Nervous Diseases	6 Respira- tory Diseases	7 Digestive Diseases (including Diarrhoea)	8 Malforma- tions Premature Birth, Maras- mus &c.	9 External Causes
1896/1900	*33.4	189	12.7	6.2	22.1	32.0	57.1	51.0	7.3
1901/1905	33.4	172	13.0	5.5	21.2	29.3	43.7	48.1	4.7
1906/1910	32.2	149	13.6	3.9	17.4	26.6	33.0	46.7	4.6
1911/1915	29.3	137	11.6	3.1	12.8	26.1	32.5	43.1	3.3
1916/1920	24.9	116	11.1	2.0	10.9	28.4	18.8	42.0	1.3
1921/1925	25.1	100	10.2	1.9	5.5	26.6	17.1	36.1	1.3
1926/1930	22.1	94	10.2	1.1	4.2	26.7	17.4	31.1	0.8
1931/1935	20.5	89	10.1	0.9	4.2	23.1	13.4	35.3	0.8
1936/1940	19.4	77	7.0	0.9	6.4	17.9	8.8	32.9	1.4
1941/1945	21.3	78	4.8	1.0	5.6	24.1	7.7	30.7	1.3
1946/1950	22.9	56	3.4	0.5	2.3	12.3	10.5	25.1	1.3
1951/1955	20.1	33	1.0	0.1	0.3	6.1	1.7	22.8	0.8
1956/1960	20.7	27	0.4	—	0.3	4.9	1.1	19.9	0.4
1961	22.1	28	0.2	0.06	0.3	4.7	1.4	20.9	0.5

*In column 1 the rates indicate the number of births per 1,000 of the population.

TABLE 3

ANALYSIS OF CAUSES OF MORTALITY.

Deaths from certain Groups of Diseases in each decade from 1871 to 1960, and during the years 1961

Years	(a) Infective diseases (less Diarrhoea and Influenza)	(b) Tubercular diseases	(c) Respiratory diseases (including Influenza)	(d) Digestive diseases (including Diarrhoea)	Total Deaths from (a), (b), (c) & (d)	(e) Cancer	Total Deaths from all causes
1871-1880	27,205	19,869	29,763	14,747	91,584	2,015	147,005
1881-1890	19,748	17,870	32,507	13,186	86,311	2,820	146,195
1891-1900	13,515	16,714	35,819	18,491	84,539	4,223	145,522
1901-1910	13,967	16,054	32,995	18,163	81,179	6,480	150,962
1911-1920	10,417	14,946	36,480	12,282	74,125	7,603	137,223
1921-1930	7,831	12,664	29,447	8,184	58,126	9,852	117,756
1931-1940	6,473	9,413	18,196	5,987	40,069	12,619	115,632
1941-1950	2,645	6,987	15,728	4,328	29,723	13,265	98,347
1951-1960	621	2,063	15,315	2,570	20,569	15,986	90,642
1961	25	86	1,888	229	2,228	1,708	9,262

TABLE 3—*continued*.
Deaths expressed as a percentage of total deaths from all causes (Proportionate Mortality).

Years	(a) Infective diseases (less Diarrhoea and Influenza)	(b) Tubercular diseases	(c) Respiratory diseases (including Influenza)	(d) Digestive diseases (including Diarrhoea)	Total Deaths from (a), (b), (c) & (d)	(e) Cancer	Total Deaths from all causes
1871-1880	19.2	13.5	20.2	10.0	62.9	1.4	100.0
1881-1890	14.1	12.7	23.2	9.4	59.4	2.0	100.0
1891-1900	9.3	10.8	24.6	12.7	57.4	2.9	100.0
1901-1910	8.6	10.6	21.8	12.0	53.0	4.3	100.0
1911-1920	7.9	10.9	27.3	8.9	55.0	5.5	100.0
1921-1930	6.6	10.7	25.0	6.9	49.4	8.4	100.0
1931-1940	5.6	8.1	15.7	5.2	34.7	10.9	100.0
1941-1950	2.6	7.1	15.9	4.4	30.1	13.7	100.0
1951-1960	0.7	2.2	16.8	2.8	22.5	17.7	100.0
1961	0.3	0.9	20.4	2.5	24.1	18.4	100.0

TABLE 4

Deaths from cancer in the United Kingdom, 1950-1954

TABLE 4
MATERIAL MORTALITY

TABLE 4

DEATHS FROM CANCER

Organs Affected	Number of deaths
Buc. cavity and pharynx	23
Oesophagus, stomach, intestines and rectum	527
Larynx, trachea, bronchus and lungs ...	525
Cervix and uterus	62
Breast	134
All other sites	363
Leukaemia and aleukaemia	38
Lymphosarcoma	36
Total	1,708

TABLE 5
MATERNAL MORTALITY.

Year.	BIRTHS REGISTERED.			MATERNAL MORTALITY.	
	Live Births.	Stillbirths.	Total Births.	Deaths.	Rate per 1,000 Total Births.
1930	18,881	774	19,655	75	3.81
1931	18,626	722	19,348	55	2.84
1932	18,149	827	18,976	51	2.69
1933	16,929	680	17,609	60	3.41
1934	17,593	685	18,278	51	2.79
1935	17,347	749	18,096	59	3.26
1936	17,403	708	18,111	64	3.52
1937	16,728	618	17,346	40	2.31
1938	16,175	639	16,814	33	1.96
1939	15,614	631	16,245	29	1.86
1940	15,016	519	15,535	31	2.01
1941	13,291	508	13,799	32	2.42
1942	13,729	552	14,281	34	2.38
1943	14,432	485	14,917	34	2.27
1944	15,412	492	15,904	31	1.95
1945	14,784	431	15,215	23	1.51
1946	18,528	539	19,067	19	0.99
1947	19,904	514	20,418	17	0.83
1948	17,695	479	18,174	14	0.77
1949	16,551	358	16,909	9	0.53
1950	16,110	375	16,485	7	0.42
1951	15,593	396	15,989	10	0.62
1952	15,839	400	16,239	7	0.43
1953	16,022	394	16,416	5	0.30
1954	15,742	400	16,142	8	0.49
1955	15,268	408	15,676	9	0.57
1956	15,944	394	16,338	7	0.43
1957	16,044	409	16,453	7	0.42
1958	15,662	413	16,075	4	0.25
1959	15,615	375	15,990	5	0.31
1960	15,961	377	16,338	5	0.31
1961	16,492	380	16,872	2	0.12

TABLE 6

Requests for Visits to assess Home Conditions for Confinements.

Total Requests	2,320
No contact	142
Home confinement booked	815
Hospital confinement booked	1,363
No. of visits paid by Part-time Midwives ...	3,016
No. of visits paid by Full-time Midwives ...	805

TABLE 7

ANALGESIA

	Year	Doctor present at delivery	Doctor not present at delivery	Total
Liverpool Maternity Hospital				
District Homes				
Gas/Air	1959	43	919	962
	1960	50	1,112	1,162
	1961	60	913	973
Pethidine				
or Pethilorfan ...	1959	26	697	723
	1960	32	720	752
	1961	44	665	709
Municipal Midwives				
Gas/Air	1959	290	3,032	3,322
	1960	259	3,060	3,319
	1961	260	3,045	3,305
Pethidine				
or Pethilorfan ...	1959	350	2,473	2,823
	1960	230	2,480	2,710
	1961	227	2,395	2,622

Weights of Premature Babies cared for by Premature Baby Midwives

	Babies born at home and cared for by Prem. Baby Midwife	Babies born at home and transferred to hospital	Babies born in hospital and discharged to care of premature baby midwife
Less than 3 lb. 4 oz. ...	—	3	—
3 lb. 5 oz. to 4 lb. 6 oz. ...	13	4	10
4 lb. 7 oz. to 4 lb. 15 oz.	30	2	167
5 lb. 0 oz. to 5 lb. 8 oz. ...	44	4	321
5 lb. 9 oz. and over ...	5	1	129
TOTALS ...	92	14	627
Sets of Twins ...	8	2 - 1 of one set	63
Sets of Triplets ...	—	—	2

TABLE 9

MIDWIFERY SERVICE

Hospital Discharges—1961

[illegible]

Puerperal Pyrexias Notified in 1961

Occurring in Hospital	...	...	...	...	...	...	485
Occurring at Home	...	...	...	...	...	...	13
Nursing Homes	...	...	...	...	...	...	Nil
				Total	...	...	498
Uterine infection	...	...	...	...	...	...	139
Urinary infection	...	...	...	...	...	...	135
Respiratory infection	...	...	...	...	...	...	66
Breast infection	...	...	...	...	...	...	19
Perineal infection	...	...	...	...	...	...	9
Tonsillitis infection	...	...	...	...	...	...	2
Pyrexia Unknown Origin	...	...	...	...	...	...	83
Thrombo Phlebitis	...	...	...	...	...	...	5
Reaction to Caesarean Section		...	...	...	...	...	30
Reaction to Blood Transfusion		...	...	...	...	...	4
Allergies	...	...	...	...	...	...	3
Septic Abortion	...	...	...	...	...	...	1
Acute Rheumatism	...	...	...	...	...	...	1
Hodgkins disease	...	...	...	...	...	...	1
				Total	...	...	498

TABLE 11

Reasons for Requests from Domiciliary Midwives for Medical Aid

Mothers				Babies			
Ante partum haemorrhage ...	...	...	86	Skin infections ...	...	...	37
Post partum haemorrhage ...	...	...	58	Asphyxia neonatorum ...	...	...	27
Foetal distress ...	...	...	52	Chest complications ...	...	...	8
Prolonged labour ...	...	...	96	Jaundice ...	...	...	5
Malpresentations ...	...	...	64	Not passed meconium ...	...	...	4
Extra sedation ...	...	...	7	Not passed urine ...	...	...	6
Abortions ...	...	...	22	Lethargic and feeble ...	...	...	6
Ruptured perineums ...	...	...	436	Prematurity ...	...	...	23
Varicosities and Phlebitis ...	...	...	21	Ophthalmia neonatorum ...	...	...	107
Retained placenta ...	...	...	32	Snuffles ...	...	...	11
Pre-eclamptic toxæmia ...	...	...	23	Pyrexia ...	...	...	1
Premature labour ...	...	...	38	Oedema of extremities ...	...	...	2
Pyrexia ...	...	...	76	Haemorrhagic disease ...	...	...	3
Premature Rupture of Membranes...	...	...	47	Monilia infections ...	...	...	5
Mastitis ...	...	...	18	Vomiting ...	...	...	8
Haemorrhoids & Prolapse of rectum	...	...	2	Bleeding from umbilicus ...	...	...	3
Disproportion ...	...	...	15	Cyanosis ...	...	...	15
Cardiac Complications ...	...	...	2	Grunting respirations ...	...	...	4
Suppression of Lactation ...	...	...	7	Congenital malformations ...	...	...	24
Influenza ...	...	...	4	Cerebral irritation ...	...	...	3
Twin Labour ...	...	...	3	Stillbirths ...	...	...	5
Fainting ...	...	...	3	Mastitis ...	...	...	3
Dental abscess ...	...	...	2	Mongoloid features ...	...	...	2
Anaemia ...	...	...	5	Distended abdomen ...	...	...	1
Gastric pain ...	...	...	5	Bruising of face ...	...	...	2
Uterine infection ...	...	...	8	R.H. incompatibility ...	...	...	1
Boils and septic spots ...	...	...	8	Contact with Gastro Enteritis ...	...	...	1
Post maturity ...	...	...	4	Relaxed stools ...	...	...	1
Not passed urine ...	...	...	1				
Placenta previa ...	...	...	1				
Intra Uterine Death ...	...	...	8				
Multiparity ...	...	...	2				
Chest complications ...	...	...	3				
Urinary infection ...	...	...	13				
Hysteria ...	...	...	1				
Depression ...	...	...	2				
Domestic troubles ...	...	...	2				
Rapid pulse rate ...	...	...	2				
Retained products ...	...	...	2				
Displaced kneecap ...	...	...	1				
Conjunctivitis ...	...	...	1				
*Discharging wound L.U.S.C.S. ...	...	...	1				
Inadequate lactation ...	...	...	1				
B.B.A.... ...	...	...	2				
Total ...	...	...	1,187	Total ...	...	...	318
Mothers ...	...	...	1,187	Doctor booked ...	...	...	1,257
Babies ...	...	...	318	Doctor not booked ...	...	...	248
Total ...	...	...	1,505	Total ...	...	...	1,505

*Patient discharged from Hospital

ANTH-NATAL CLINIC

TABLE 12

CONSULTANTS CALLED TO MOTHERS AND BABIES

Mothers	Babies
1 Intra Uterine death	1 Hypothermia
1 Disproportion	1 Paralysis of bowel
4 Prolonged labour	1 Rash
1 Anaemia	1 Hare lip and cleft palate
1 Thrombosis	1 Thrombocytic purpura
1 Urinary infection	1 Hypospadias
1 Severe headache	1 Prematurity
3 Malpresentation	1 Spina Bifida
2 Twin pregnancy	1 Erb's paralysis
5 Post Maturity	1 Cyanosis
1 Premature rupture of membranes	
1 Hydramnious	
2 Oedema	
3 Pre-eclamptic toxæmia	
27 Total	10 Total

7 babies only admitted to hospital

2 mothers and babies admitted to hospital

8 ante natal mothers admitted to hospital

TABLE 13

MIDWIFERY SERVICE—TRANSFER OF PATIENTS

Transferred during Ante-Natal period	Transferred during labour or Puerperium	
Ante partum Haemorrhage 94	Premature labour 37	Prematurity ... 9
Pre eclamptic toxæmia ... 87	Prolonged labour... 73	Prem. Twin Births ... 6
Malpresentations ... 118	Failed forceps ... 1	Cyanosis ... 1
Post maturity ... 93	Foetal distress ... 17	Hypothermia ... 1
Urinary complications ... 4	Retained products 1	
Glycosuria ... 1	Prem. rupture of membranes ... 36	
Diabetes ... 3	Perineal repair ... 4	
Disproportion ... 36	Hemiplegia ... 1	
Multiplicity ... 42	Abortion ... 9	
Multiparity ... 12	Retained placenta 1	
Varicosities ... 7	Thrombo-phlebitis 1	
Anaemia ... 44	Post Partum	
Bad obstetric history ... 12	Haemorrhage ... 5	
Placenta previa ... 11		
Domestic reasons ... 43		
Foetal abnormalities ... 6		
Cervical fibroids ... 2		
Cervical Dystocia ... 1		
Bicarbonate uterus ... 2		
Kahn Test positive ... 2		
Hydramnious ... 7		
Chest complications ... 6		
Cardiac complications ... 3		
Persistent vomiting... 3		
Pseudo-cyesis ... 2		
Severe bleeding after tooth extraction ... 1		
Obesity ... 2		
Syncope ... 1		
Intrauterine death ... 5		
General Practitioner's request 1		
Nervous conditions ... 4		
Sudden attack of blindness 1		
Fracture of thigh ... 1		
For sterilisation after delivery 1		
658	186	17
Total ... 861		

TABLE 14
ANTE-NATAL CLINICS.

	1960	1961
Total number of centres at which ante-natal clinics were held ...	20	20
Number of clinic sessions held per week (Medical)	23	23
Number of new cases attending ante-natal clinics (Doctor's Sessions)	1,521	1,510
Total attendances at ante-natal clinics	9,290	8,872
Total attendances at post-natal clinics	274	243
Total number of new cases attending midwives' ante-natal clinics	1,068	1,596
Number of midwives' clinics	8	12
Number of midwives' clinics at which Health Visitors were in attendance to practice health education	5,150	2,200
Number of centres at which health visitors conducted relaxation and mothercraft classes	14	14
Number of mothers attending relaxation and mothercraft classes	715	682
Total number of attendances of mothers booked for hospital delivery	605	580
Total attendances at classes, held at one centre, for fathers ...	6	7

TABLE 15
CHILD WELFARE CLINICS

	1960	1961
Total number of centres at which child welfare clinics were held...	25	26
Number of clinic sessions per week	62	62
Number of new cases: Under 1 year of age	8,669	9,125
Aged 1-5 years	572	488
Total attendances: Under 1 year of age	75,192	77,744
Aged 1-2 years	9,515	10,760
Aged 2-5 years	14,195	13,423
Total under 5 years	98,902	101,927

TABLE 16
HOME NURSING—VISITS TO PATIENTS

	1961	1960
Total number of visits to patients at home	345,756	257,644
Medical	10,020	257,644
Surgical	1,944	50,460
Tuberculosis	1,479	28,045
Maternity & Child Welfare	1,212	8,013
Infectious	14	134
Others	280	1,460
TOTALS	14,949	345,756

TABLE 17
HOME ACCIDENTS—BURNS

Age Group	Number	Male	Female	Fatalities
0— 5 yrs ...	35	20	15	1
6—15 yrs ...	16	10	6	1
16—29 yrs ...	10	2	8	—
30—49 yrs ...	12	4	8	1
50—59 yrs ...	7	2	5	1 inquest— carbon mon- oxide poisoning
60—69 yrs ...	—	—	—	—
70+ ...	7	2	5	2

TABLE 18
HOME ACCIDENTS—CUTS

Age Group	Number	Male	Female	Fatalities
0— 5 yrs ...	17	13	4	—
6—15 yrs ...	30	17	13	—
16—29 yrs ...	13	10	3	—
30—49 yrs ...	13	8	5	—
50—59 yrs ...	4	2	2	—
70+ ...	2	1	1	—

TABLE 19
HOME ACCIDENTS—FALLS

Age Group	Number	Male	Female	Fatalities
0— 5 yrs ...	124	79	45	—
6—15 yrs ...	35	20	15	—
16—29 yrs ...	32	13	18	—
	(1 sex unknown)			
30—49 yrs ...	47	15	32	1
50—59 yrs ...	41	19	22	2
60—69 yrs ...	67	19	48	1
70+ ...	108	25	83	11

TABLE 20
HOME ACCIDENTS—POISONING

Age Group	Number	Male	Female	Fatalities
0— 5 yrs ...	64	35	30	—
6—15 yrs ...	6	4	2	—
16—29 yrs ...	1	—	1	—
30—49 yrs ...	2	2	—	—
50—59 yrs ...	1	1	—	—
60—69 yrs ...	3	2	1	1
70+ ...	6	2	4	1

TABLE 21
HOME ACCIDENTS—SCALDS

Age Group	Number	Male	Female	Fatalities
0— 5 yrs ...	63	33	30	—
6—15 yrs ...	14	9	5	—
16—29 yrs ...	6	—	6	—
30—49 yrs ...	6	3	3	—
50—59 yrs ...	2	—	2	—
60—69 yrs ...	—	—	—	—
70+ ...	1	—	1	—

TABLE 22
HOME ACCIDENTS—MISCELLANEOUS

Age Group	Number	Male	Female	Fatalities
0— 5 yrs ...	45	26	19	—
6—15 yrs ...	21	12	9	—
16—29 yrs ...	12	2	10	1
30—49 yrs ...	8	2	6	—
50—59 yrs ...	3	1	2	—
60—69 yrs ...	4	1	2	—
70+ ...	3	1	2	—

TABLE 23
Home Accidents — Age Groups

Type of Accident	0—5 years	6—15 years	16—29 years	30—49 years	50—59 years	60—69 years	70+ years
Burns ...	35	16	10	12	7	—	7
Cuts ...	17	28	13	13	4	2	4
Falls ...	124	35	32	47	41	67	108
Poisoning ...	64	6	1	2	1	3	6
Scalds ...	63	14	6	6	2	—	1
Miscellaneous	44	21	12	8	3	4	3

TABLE 24
Home Accidents — 70+ Age Group

Type	Numbers	Male	Female	Fatalities
Falls	108	25	82	11
Burns	7	2	5	2
Poisoning—All Coal Gas ...	6	2	4	1
Miscellaneous	3	1	2	—
Scalds	1	—	1	—

TABLE 25

ANNUAL RETURN OF FOOD POISONING NOTIFICATIONS

COUNTY BOROUGH OF LIVERPOOL, 1961

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Food Poisoning Notifications (Confirmed)	14	7	17	28	66
As referred to Registrar-General	—	—	22	11	33
Other Officers' Assurances	—	—	—	—	—
Total Cases	14	7	39	39	99

TABLE 26

NUMBER OF CASES OF CERTAIN INFECTIOUS DISEASES REPORTED DURING 1961

CHIROPODY SERVICE

Domiciliary Treatments during 1961.

Month	Domiciliary	Outpatient	Other	Total
January	37
February	34
March	45
April	40
May	53
June	50
July	50
August	31
September	49
October	52
November	61
December	44
TOTAL	546

TABLE 27

NUMBER OF CASES OF CERTAIN INFECTIOUS DISEASES REPORTED DURING 1961

	January	February	March	April	May	June	July	August	September	October	November	December	TOTALS
Scarlet Fever ...	32	44	44	21	34	17	22	11	14	22	38	22	321
Measles and German Measles ...	983	733	688	603	532	717	686	341	112	68	39	44	5,546
Diphtheria ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-spinal Fever	2	1	2	1	1	—	1	—	1	—	—	1	10
Poliomyelitis													
Paralytic ...	1	1	—	2	9	7	6	6	13	4	1	—	50
Non-paralytic ...	—	1	—	4	3	—	—	1	4	4	—	—	17
Pneumonia and Influenzal Pneumonia	77	120	20	28	18	17	20	9	13	19	12	30	383
Dysentery ...	12	15	16	22	56	49	32	16	27	33	29	28	335
Whooping Cough ...	52	34	33	50	45	42	22	11	22	14	9	7	341
Food Poisoning ...	5	2	9	4	—	1	11	16	13	7	1	30	99

TABLE 28

ANNUAL RETURN OF FOOD POISONING NOTIFICATIONS

COUNTY BOROUGH OF LIVERPOOL, 1961

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Food Poisoning Notifications (Corrected)					
As returned to Registrar-General ...	16	5	40	38	99
Cases Otherwise Ascertained ...	—	—	50	11	61
Fatal Cases ...	—	—	—	—	—

Symptomless Excretors ... 33

PARTICULARS OF OUTBREAKS

	No. of Outbreaks		No. of Cases		Total No. of Cases
	Family Outbreaks	Other Outbreaks	Notified	Otherwise Ascertained	
Agent identified					
(a) <i>Salmonella</i>					
<i>typhi-murium</i> ...	—	1	16	—	16
(b) <i>Staphylococci</i> ...	—	1	27	—	27
(c) <i>Clostridium</i>					
<i>Welchii</i> ...	—	1	—	37	37
TOTAL ...	—	3	43	37	80

SINGLE CASES

	No. of Cases		Total No. of Cases
	Notified	Otherwise Ascertained	
Agent identified ...	56	24	80
Agent not identified ...	—	—	—

AGENTS

Staph. pyogenes ... 26 *Salmonella organisms* ... 54

TYPE

Sal. bredeney ... 1 *Sal. meleagridis* ... 3
Sal. enteritides ... 3 *Sal. san diego* ... 1
Sal. heidelberg ... 11 *Sal. typhimurium* ... 34
Sal. infantis ... 1

ANNUAL RETURN OF FOOD POISONING NOTIFICATIONS
COUNTY BOROUGH OF LIVERPOOL 1961

TABLE 29

INFLUENZA

Comparison of Mortality and Morbidity in Liverpool in 1951, 1957 and 1961

Week of Epidemic	No. of deaths from						National Insurance New Sickness Claims		
	Influenza			All Respiratory Disease					
	1961	1957	1951	1961	1957	1951	1961	1957	1951
P-4	—	—	—	56	16	38	3,535	3,038	2,958
P-3	1	1	—	60	26	43	6,729	3,979	2,518
P-2	3	—	2	81	17	48	6,320	5,469	1,571
P-1	4	—	16	107	11	60	7,870	10,286	9,806
P	10	6	85	156	39	301	10,457	15,324	22,320
P+1	24	18	202	136	53	476	10,225	15,079	11,447
P+2	26	25	114	104	68	286	6,827	10,871	6,081
P+3	12	21	50	64	52	118	4,499	7,433	3,704
P+4	14	11	—	39	78	89	3,990	5,378	3,792
TOTAL	94	82	469	803	360	1,459			
N.I. TOTALS ...							60,452	76,857	64,197

(P - peak week of incidence—not mortality.)

TABLE 30

Smallpox Vaccinations—1961

						1958	1959	1960	1961
Births	...	...	...	...	...	15,662	15,615	15,961	16,492
No. of Primary Vaccinations	...	...				11,112	9,777	6,654	6,554
No. of Re-vaccinations	...	...	...			4,128	1,179	169	254
						15,240	10,956	6,823	6,808
No. Vaccinated at Clinics	...	...				9,914	5,480	2,980	3,720
No. Vaccinated by General Practitioners						5,326	5,476	3,843	3,088
						15,240	10,956	6,823	6,808

TABLE 31

Diphtheria Immunisation 1952-1961

Where immunised	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
Maternity and Child Welfare Clinics	5,316	4,896	3,920	3,974	4,547	4,479	6,861	5,789	13,091	5,479
Schools	3,307	3,586	3,732	2,943	2,070	3,008	2,316	3,245	3,926	1,332
General Practitioners ...	2,597	2,694	2,973	3,212	3,702	3,713	5,761	5,102	8,929	6,375
TOTALS	11,220	11,176	10,625	10,129	10,319	11,200	14,938	14,136	25,946	13,186

TABLE 32
Whooping Cough Immunisation—1961

Age Groups	0—4 years	5—14 years	Totals
Maternity and Child Welfare Clinics ...	3,677	1,056	4,733
General Practitioners	3,922	2,458	6,380
TOTALS	7,599	3,514	11,113

TABLE 33
Tetanus Immunisation—1961

Age Groups	0—4 years	5—14 years	Totals
Maternity and Child Welfare Clinics ...	3,533	1,821	5,354
General Practitioners	1,039	3,373	4,412
TOTALS	4,572	5,194	9,766

TABLE 34

AGE PERIODS OF DEATHS FROM TUBERCULOSIS DURING 1961

Age Periods.	RESPIRATORY		MENINGES AND C.N.S.		OTHER FORMS	
	Males.	Females.	Males.	Females.	Males.	Females.
0—1	—	—	—	1	—	—
1—4	—	—	—	—	—	—
5—9	—	—	—	—	—	—
10—14	—	—	—	—	—	—
15—19	—	—	—	—	—	—
20—24	—	—	—	—	—	—
25—34	—	3	—	—	—	—
35—44	3	3	1	—	—	—
45—54	15	3	1	—	1	—
55—64	17	3	1	—	1	—
65—over	31	2	—	—	—	—
TOTALS ...	66	14	3	1	2	—

TABLE 35

DEATHS FROM RESPIRATORY TUBERCULOSIS 1948-1961

Years	Cases notified	Case rate per 1,000 population	Number of deaths	Death rate per 1,000 Liverpool	Death rate per 1,000 England and Wales
1948	1,618	2.04	630	0.79	0.44
1949	1,619	2.02	542	0.68	0.40
1950	1,572	1.96	481	0.60	0.32
1951	1,531	1.95	406	0.52	0.27
1952	1,569	1.98	269	0.34	0.21
1953	1,382	1.75	258	0.33	0.18
1954	1,135	1.44	232	0.29	0.16
1955	1,082	1.39	185	0.24	0.13
1956	1,016	1.31	137	0.177	0.109
1957	1,021	1.33	123	0.160	0.095
1958	795	1.04	109	0.143	0.089
1959	1,633	2.15	102	0.135	0.077
1960	439	0.58	81	0.107	0.068
1961	405	0.54	80	0.107	0.065

TABLE 36
DEATHS FROM NON-RESPIRATORY TUBERCULOSIS 1948-1961

Years	Cases notified	Case rate per 1,000 population	Number of deaths	Death rate per 1,000 Liverpool	Death rate per 1,000 England and Wales
1948	228	0.29	85	0.11	0.07
1949	211	0.26	68	0.08	0.05
1950	164	0.20	64	0.08	0.04
1951	160	0.20	43	0.05	0.04
1952	139	0.17	36	0.04	0.03
1953	123	0.16	26	0.03	0.02
1954	147	0.19	12	0.01	0.02
1955	118	0.15	19	0.02	0.01
1956	101	0.13	7	0.009	0.012
1957	96	0.12	5	0.006	0.012
1958	79	0.10	7	0.009	0.011
1959	48	0.06	3	0.004	0.008
1960	44	0.06	3	0.004	0.007
1961	54	0.07	6	0.008	0.007

TABLE 37
NUMBER OF NEW CASES OF TUBERCULOSIS FOR 1961

Age Periods	Under 5 yrs.	5-14 yrs.	15-24 yrs.	25-44 yrs.	45-64 yrs.	65 yrs. & over	Total	Total Respiratory
Respiratory—								
Males	11	14	20	89	118	23	275	} 405
Females ...	8	12	24	55	22	9	130	
Meninges and C.N.S.								} Total Non-respiratory
Males	2	—	—	1	—	—	3	
Females ...	1	1	2	—	—	—	4	
Other Forms								
Males	2	4	5	7	2	1	21	
Females ...	1	1	5	12	4	3	26	

TABLE 38

CASES OF EARLY SYPHILIS, 1938-1961

					Males	Females
1938 ...	...	...	...	...	147	32
1946 ...	...	...	...	...	655	331
1947 ...	...	...	...	...	481	248
1948 ...	...	...	...	...	370	155
1949 ...	...	...	...	...	219	85
1950 ...	...	...	...	...	136	50
1951 ...	...	...	...	...	118	33
1952 ...	...	...	...	...	80	18
1953 ...	...	...	...	...	65	13
1954 ...	...	...	...	...	38	6
1955 ...	...	...	...	...	62	15
1956 ...	...	...	...	...	51	8
1957 ...	...	...	...	...	45	3
1958 ...	...	...	...	...	62	7
1959 ...	...	...	...	...	44	8
1960 ...	...	...	...	...	66	1
1961 ...	...	...	...	...	43	4

TABLE 39

CASES OF ACUTE GONORRHOEA, 1938-1961

					Males	Females
1938 ...	...	...	...	...	1,422	141
1946 ...	...	...	...	...	3,112	422
1947 ...	...	...	...	...	1,134	272
1948 ...	...	...	...	...	1,933	174
1949 ...	...	...	...	...	1,441	159
1950 ...	...	...	...	...	1,204	140
1951 ...	...	...	...	...	1,240	113
1952 ...	...	...	...	...	1,026	133
1953 ...	...	...	...	...	910	128
1954 ...	...	...	...	...	816	148
1955 ...	...	...	...	...	862	287
1956 ...	...	...	...	...	932	246
1957 ...	...	...	...	...	1,059	241
1958 ...	...	...	...	...	1,089	292
1959 ...	...	...	...	...	940	231
1960 ...	...	...	...	...	1,013	301
1961 ...	...	...	...	...	1,273	364

TABLE 40
VENEREAL DISEASE—CONTACT TRACING

	Males	Females
No. of reports of alleged source of infection	—	23
No. of cases traced and interviewed	—	9
No. of cases traced, not interviewed to date	—	2
No. of cases reporting for investigation following interview ...	—	9
No. of cases untraced	—	12
No. of visits carried out (home, lodging, club, etc.)	—	74

TABLE 41
VENEREAL DISEASE—PATIENT DEFAULTERS

	Male	Female	Con- genital	Total
No. of cases written to	1,039	655	35	1,729
No. of letters despatched	1,096	1,302	57	2,455
No. of cases reporting in response	499	448	23	970
No. of letters returned to Dead Letter Office	71	37	—	108
No. of cases traced and transferred	9	15	—	24

TABLE 42
 VENEREAL DISEASE—RESULTS OF HOME VISITS

	Male	Female	Con- genital	Total
No. of cases visited	328	345	8	681
No. of visits made	893	1,243	25	2,161
No. of cases attending following visits	94	185	5	284
No. of cases promising to attend but failing to do so	31	27	3	61
No. of cases removed or not known at address given	102	91	—	193
No. of cases not contacted, no access, away from home, etc.	79	25	—	104
No. of cases who refused to re-attend	14	12	—	26
No. of cases removed and transferred for follow-up	6	5	—	11
No. of cases deceased	2	—	—	2

TABLE 43

MENTAL HEALTH

Persons referred during 1961 from all sources : 2,313

Referred by	Mentally Ill Under 16	Mentally Ill 16 and over	Psychopath Under 16	Psychopath 16 and over	Subnormal Under 16	Subnormal 16 and over	Severely Subnormal Under 16	Severely Subnormal 16 and over	Totals		Grand Total
									Under 16	16 and over	
General Practitioners ...	2	702	—	1	—	1	1	1	3	705	708
Hospitals on discharge from in-patient treatment ...	—	900	—	—	—	36	—	2	—	938	938
Hospitals after or during out- patient or day treatment ...	—	64	—	—	1	—	—	1	1	65	66
Education authority ...	3	—	—	—	18	92	73	—	94	92	186
Police and Courts ...	—	84	—	—	5	8	—	—	5	92	97
*Other sources ...	4	303	—	—	3	5	1	2	8	310	318

* Includes 203 referred by general hospitals (in-patients and receiving wards).

TABLE 44

MENTAL HEALTH

Persons referred for possible compulsory action under Mental Health Act during 1961: 1,217

Dealt with as follows:—

1. Admitted to Psychiatric Hospitals—

Action	Total Number	In Age Groups				
		Under 16	16—59	60—64	65—70	Over 70
Section 29 ...	944	9	711	66	62	96
Section 25 ...	85	—	72	7	2	4
Section 26 ...	13	—	13	—	—	—
Section 60 ...	31	2	29	—	—	—
Informal ...	53	1	38	9	3	2
TOTALS ...	1,126*	12	863	82	67	102

* Of this total 598 (53%) had previously been referred to Mental Health Service.

2. Not admitted to Psychiatric Hospitals—

Action	Total Number	In Age Groups				
		Under 16	16—59	60—64	65—70	Over 70
Admitted to non-Psychiatric Hospitals ...	9	—	4	—	—	5
Referred for Community Care	7	—	5	1	1	—
Referred to Welfare Services						
Section ...	2	—	—	—	—	2
No further action ...	73	2	55	5	3	8
TOTALS ...	91*	2	64	6	4	15

* Of this total 47 (52%) had previously been referred to Mental Health Service.

TABLE 45

MENTAL HEALTH

Mentally subnormal persons on waiting list for hospital care at 31st December, 1961 : 64, comprising:—

Urgency 3 (highest)	...	...	35
Urgency 2	...	...	9
Urgency 1	...	...	14
Urgency 0	...	...	6

These figures can be classified as follows :—

(a) In age and sex groups—

Urgency	Under 6		6—15		16 and over		TOTAL
	Male	Female	Male	Female	Male	Female	
3	3	2	13	6	5	6	35
2	1	2	2	1	1	2	9
1	1	2	3	—	1	7	14
0	1	—	—	1	3	1	6
TOTALS ...	6	6	18	8	10	16	64

(b) Time on waiting list—

Urgency	Over 3 years	2—3 years	1—2 years	6 mths—1 year	Under 6 months	Total
3	5	2	8	6	14	35
2	—	2	3	2	2	9
1	1	2	3	4	4	14
0	2	1	—	1	2	6
TOTALS ...	8	7	14	13	22	64

TABLE 46

Admissions to Hospitals for the Mentally Subnormal during 1961

Hospitals	Informal	Under Mental Health Act			Total
		Section 26	Section 60	Section 72	
Liverpool R.H.B.					
Thingwall Hall	4	—	—	—	4
Greaves Hall	5	2	1	—	8
Newchurch	9	—	—	—	9
The Manor	2	—	—	—	2
Ashton House	9	—	—	—	9
Whitecross	2	—	—	—	2
Ormskirk	2	—	—	—	2
Olive Mount	5	—	—	—	5
Crow Wood	1	—	—	—	1
Manchester R.H.B.					
Calderstones	1	—	6	1	8
Brockhall	3	1	3	—	7
Royal Albert	1	—	—	—	1
Other R.H.B.'s					
Hatfield Hall	—	—	1	—	1
Special Hospitals					
Moss Side	—	—	1	—	1
TOTALS	44	3	12	1	60

NOTE.—It is not possible to quote figures of admission of mentally ill patients as the department does not receive information in many cases.

TABLE 49

RESIDENTIAL ACCOMMODATION—AGED PERSONS

The total accommodation available for use on 31st December, 1961, was as follows :—

Establishment	No. of Beds	Date of Opening
Westminster House	713	5. 7.1948*
Aigburth House	52	16. 7.1953
Altcross House	57	11. 4.1957
Beechley	41	9.11.1950
Brookfield	22	21. 1.1952
Brookside House	41	5. 3.1957
Croxteth Lodge	30	17.12.1956
Holt House	58	24. 9.1953
Lismore	36	10.12.1951
Moreno House	32	14. 1.1949
New Grafton House	108	5. 7.1948*
New Parkfield House	27	18.12.1950
Park House	20	30.12.1949
Ullet Grange	29	13.11.1957
Total	1,266	

* In occupation by the Local Authority prior to 5th July, 1948.

TABLE 50

**PARTICULARS OF PERSONS ADMITTED TO RESIDENTIAL ACCOMMODATION AND
DESCRIPTION OF THE PREMISES FROM WHICH THEY WERE ADMITTED**

	1	2	3	4	5	6	
1961	Vacated Private House	Vacated Corpora- tion House	Flat	Living with Relatives	One Room	Misc. Lodgings Res. Accom. etc.	Total
January ...	6	1	1	4	1	23	36
February ...	11	1	1	8	4	21	46
March ...	5	2	3	9	2	19	40
April ...	5	—	1	10	—	10	26
May ...	7	—	2	9	1	12	31
June ...	1	—	1	5	—	23	30
July ...	6	—	2	7	—	20	35
August ...	—	—	—	17	—	7	24
September	3	—	1	8	4	16	32
October ...	2	1	—	5	—	16	24
November ...	6	1	2	2	4	14	29
December ...	7	—	1	8	—	9	25
TOTAL ...	59	6	15	92	16	190	378

TABLE 51

**AGED PERSONS MAINTAINED IN ESTABLISHMENTS PROVIDED BY OTHER
LOCAL AUTHORITIES AND BY VOLUNTARY ORGANISATIONS
STATEMENT OF ADMISSIONS, DISCHARGES AND DEATHS**

Authority or Organisation	Remaining 31.12.60	Ad- mitted	Dis- charged	Died	Remaining 31.12.61
British Legion Home, Ripon ...	3	—	1	—	2
British Legion Home, Bwlch ...	1	—	—	—	1
Charles Best House, Parkgate ...	6	3	4	—	5
Church Army Home, Bootle ...	4	—	—	1	3
Convent of the Good Shepherd, Liverpool ...	4	—	—	—	4
Maryland, Formby ...	1	—	—	—	1
Methodist Home, Liverpool ...	9	—	—	1	8
Methodist Home, Colwyn Bay ...	1	—	—	—	1
Red Cross Home, Buxton ...	1	—	—	—	1
Red Cross Home, Portmadoc ...	1	—	—	—	1
52/54 Croxteth Road, Liverpool (Old People's Hostels Association) ...	11	6	5	1	11
25/27 Sefton Drive, Liverpool (Old People's Hostels Association) ...	12	2	3	—	11
Salvation Army Home, Bootle ...	9	1	3	1	6
Salvation Army Home, Liverpool ...	12	2	2	1	11
Salvation Army Home, Ripon Lodge ...	1	—	—	—	1
Salvation Army Home, Wicksted Hall ...	1	—	1	—	—
Salvation Army Home, Mowbray ...	1	1	2	—	—
"Stapely" Home for Aged Jews, Liverpool ...	22	12	11	2	21
"Sundale", Liverpool ...	6	1	1	—	6
Turner Memorial Home, Liverpool ...	21	24	21	—	24
W.V.S., "St. Michael's Mount", Liverpool ...	9	—	8	1	—
W.V.S. "Warriston", Liverpool ...	7	3	8	—	2
Sundene Lodge, Waterloo ...	1	—	—	—	1
"Woodlands", Edinburgh ...	1	—	—	—	1
Mutual Aid Homes Ltd., Minehead ...	2	—	—	—	2
Pomeroy House, Devon ...	1	—	—	—	1
Royal Alfred Home, Kent ...	2	2	—	—	4
Pentecostal Home, Wrenthorpe ...	1	—	1	—	—
Fair Lawn, Lytham ...	—	1	—	—	1
Liverpool Home for Aged Mariners ...	—	7	—	—	7
Nazareth House, Ditton ...	—	1	—	—	1
Bootle Corporation ...	3	—	1	—	2
Bristol Corporation ...	1	—	—	—	1
Caernarvon County Council ...	1	—	—	—	1
Cheshire County Council ...	1	—	—	—	1
Chester Corporation ...	1	—	—	—	1
Clackmannan County Council ...	1	—	—	—	1
Cumberland County Council ...	1	—	1	—	—
Glamorgan County Council ...	1	—	1	—	—
London County Council ...	—	1	—	—	1
Portsmouth Corporation ...	1	—	1	—	—
St. Helens Corporation... ...	1	—	—	1	—
Staffordshire County Council ...	1	—	1	—	—
Worcestershire County Council ...	2	—	—	—	2
Essex County Council ...	—	1	—	—	1
Wallasey Corporation ...	—	1	—	—	1
TOTALS ...	166	69	76	9	150

TABLE 52
TEMPORARY ACCOMMODATION PROVIDED AT LOWER BRECK ROAD
UNDER SECTION 21(1)(b) OF THE NATIONAL ASSISTANCE ACT

Remaining 31.12.60	Admitted	Discharged	Remaining 31.12.60
57	907	887	77

TABLE 53
WELFARE VISITORS

The following table includes details of some of the work of the welfare visitors and the property officer during the year:—

Number of personal applications for advice and help	...	1,036
Number of visits paid (including 78 visits to handicapped persons)	...	2,738
Number of revisits (including 817 revisits to handicapped persons)	...	17,194
Number of persons admitted to:—		
(a) residential accommodation	...	378
(b) hospital	...	33
Number of visits and revisits in connection with the protection of the property of persons admitted to hospital etc., and the effects of deceased persons with no known relatives	...	1,893
Requests for assistance, either by letter or telephone, during the year numbered	...	2,898

TABLE 54
REGISTERED BLIND PERSONS

The following table shows the number of registered blind persons in Liverpool.

Age	Males	Females	Total
0	—	—	—
1	—	—	—
2	2	1	3
3	—	—	—
4	—	1	1
5—10	15	12	27
11—15	12	12	24
16—20	9	4	13
21—29	21	23	44
30—39	49	29	78
40—49	61	56	117
50—59	108	98	206
60—64	68	69	137
65—69	63	88	151
70—79	128	288	416
80—84	65	127	192
85—89	25	82	107
90+	8	25	33
TOTALS ...	634	915	1,549

TABLE 55
REGISTERED BLIND PERSONS—NEW CASES 1961

The following table shows by age-groups the number of newly-blinded added to the register during 1961:—

Age Groups			Males	Females	Total
0	...	...	—	—	—
1	...	...	1	—	1
2	...	...	1	1	2
3	...	...	—	—	—
4	...	...	—	—	—
5—10	...	...	—	2	2
11—15	...	...	1	—	1
16—20	...	...	2	—	2
21—29	...	...	3	2	5
30—39	...	...	3	1	4
40—49	...	...	8	1	9
50—59	...	...	5	5	10
60—64	...	...	2	10	12
65—69	...	...	9	6	15
70—79	...	...	14	32	46
80—84	...	...	12	17	29
85—89	...	...	5	16	21
90+	...	...	3	1	4
TOTALS ...			69	94	163

TABLE 56
PARTIALLY-SIGHTED PERSONS

The following table shows the number of registered partially-sighted persons in Liverpool:—

Age Groups			Males	Females	Total
0—1	...	...	—	—	—
2—4	...	...	1	—	1
5—15	...	...	44	23	67
16—20	...	...	15	13	28
21—49	...	...	22	22	44
50—64	...	...	29	23	52
65+	...	...	34	126	160
TOTALS ...			145	207	352

TABLE 57

PARTIALLY-SIGHTED PERSONS—NEW CASES 1961

The following table shows by age groups the number of new cases of partially-sighted persons added to the register during 1961:—

Age Groups	Males	Females	Total
0—1	—	—	—
2—4	—	—	—
5—15	2	1	3
16—20	—	—	—
21—49	3	1	4
50—64	6	4	10
65+	10	26	36
TOTALS ...	21	32	53

TABLE 58

FOLLOW-UP OF REGISTERED BLIND AND PARTIALLY-SIGHTED PERSONS

(i) Number of cases registered during the year in respect of which Section F of Form B.D.8 recommends :—	Cause of Disability			
	Cataract	Glaucoma	Retrolental Fibroplasia	Other
(a) No treatment	19	2	—	56
(b) Treatment (medical, surgical or optical) ...	36	31	2	69
(ii) Number of cases at (i) (b) above which on follow-up action have received treatment	20	29	—	56

TABLE 58
REGISTERED BLIND PERSONS—NEW CASES 1961

The following table shows by age-groups the number of newly-registered blind persons registered during 1961—

Age Groups Males Females Total

TABLE 59

**HANDICAPPED PERSONS MAINTAINED IN ESTABLISHMENTS PROVIDED BY
OTHER LOCAL AUTHORITIES AND VOLUNTARY ORGANISATIONS**

STATEMENT OF ADMISSIONS, DISCHARGES AND DEATHS

Authority or Organisation	Remaining 31.12.60	Ad- mitted	Dis- charged	Died	Remaining 31.12.61
Catholic Blind Institute, Liverpool ...	23	9	7	1	24
Herefordshire County Association for the Blind	1	1	1	—	1
Jewish Blind Home, Surrey	3	1	1	—	3
Royal National Institute for the Blind, West Kirby	1	—	—	—	1
Royal School for the Blind, Leatherhead	3	1	1	—	3
"Angers House" for Spastics, Liverpool	6	—	—	—	6
"Ponds" Home for Spastics	1	—	—	—	1
David Lewis Epileptic Colony	9	1	—	—	10
Langho Epileptic Colony (Manchester Corporation)	19	—	—	—	19
Maghull Homes for Epileptics... ..	56	14	18	2	50
St. Elizabeth's School and Home for Epileptics, Much Hadham	2	—	—	—	2
Ashley House, Bognor Regis	1	1	1	—	1
Amphill Cheshire Home	1	—	—	—	1
Coomb Cheshire Home... ..	—	1	—	—	1
"Honresfeld" Cheshire Home	2	—	1	—	1
Leonard Cheshire Home, Sandbach	—	1	—	—	1
Cotebrook Home for Cripples	2	—	—	—	2
Enham Alamein Village Centre, Hants.	—	2	—	—	2
Ernest Ayliffe Home for the Deaf	1	—	—	1	—
Alexian Bros. Home, Manchester	4	2	—	3	3
Home and Hospital for Jewish Incurables, London	—	1	—	—	1
National Institute for the Deaf, Blackburn	1	—	—	1	—
National Institute for the Deaf, Bath	1	—	—	—	1
TOTALS	137	35	30	8	134

TABLE 60

HOUSING POINTS SCHEME—SUMMARY OF STATISTICS FOR THE YEAR 1961

	Nos. Dealt With	Nos. Awarded Points	Nos. Awarded No Points
RESPIRATORY SYSTEM—			
Upper Respiratory Tract Infections ...	97	—	97
Bronchitis/Emphysema ...	262	154	108
Asthma ...	97	87	10
Bronchiectasis ...	34	34	—
Pneumonia ...	19	12	7
Bronchial Carcinoma ...	—	—	—
CARDIOVASCULAR SYSTEM AND BLOOD DISORDERS—			
Acute Rheumatic Fever ...	13	13	—
Angina ...	14	14	—
Coronary Thrombosis ...	13	13	—
Hypertension ...	41	39	2
Valv. Disease of Heart ...	133	133	—
Varicose Veins/Ulcers ...	11	8	3
Pernicious Anaemia ...	3	3	—
Anaemia ...	32	11	21
DIGESTIVE SYSTEM—			
Gastric Ulcer ...	13	8	5
Diabetes ...	16	16	—
Gastro Enteritis and Colitis ...	26	15	11
Gastric Carcinoma ...	4	4	—
GENITAL URINARY SYSTEM—			
Nephritis ...	5	5	—
Kidney Removal ...	4	4	—
FEMALE GENITO URINARY SYSTEM—			
Urino Genital Carcinoma ...	—	—	—
ENDOCRINE SYSTEM—			
Thyrotoxicosis ...	15	10	5
C.N.S.—			
Disseminated Sclerosis ...	6	6	—
Poliomyelitis ...	9	9	—
Spastic Paraplegia ...	9	9	—
MUSCULO SKELETAL SYSTEM—			
Arthritis ...	59	56	3
Rheumatism ...	20	17	3
Amputation ...	5	5	—
Muscular Dystrophy/Spondylitis ...	1	1	—
MENTAL DISEASES—			
Anxiety State and Nervous Debility ...	197	24	173
Neurasthenia ...	17	—	17
Mental Defectives ...	29	26	3
OTHERS ...	494	167	327
TOTAL ...	1,698	903	795
Transfers—Recommended 860 } TOTAL ...	1,911		
Not Recommended 1,051 }			
ages recommended to Allocation (Special)	123		
Sub-Committee ...	556		
Cases pending completion ...			
GRAND TOTAL ...	4,288		

TABLE 61

**MEDICAL EXAMINATION OF STAFF AND ENTRANTS
TO THE CORPORATION SERVICE**

Department	New Appoint- ments	Extended Sickness	Suitable to Continue	Super- annuation	Total
Airport	9	—	1	6	16
Art Gallery	1	—	1	2	4
Baths	5	—	2	26	33
Building Surveyor's	6	—	—	—	6
Children's	26	2	11	5	44
City Analyst	1	—	1	—	2
City Architect's	28	20	55	135	238
City Engineer's	51	98	41	200	390
City Lighting	3	—	3	26	32
City Treasury	77	1	5	2	85
Education	184	11	65	92	352
Fire Service	12	1	8	1	22
Health	202	7	35	52	296
Libraries	46	—	6	2	54
Magistrates	6	—	—	—	6
Markets	3	—	1	13	17
Mersey Tunnel	9	1	27*	10	47
Museums	2	—	2	—	4
Parks and Gardens	46	2	4	50	102
Passenger Transport	3	—	35	392	430
Police	15	1	1	18	35
Probation	5	—	—	—	5
Town Clerk's	23	1	6	—	30
Water	19	25	6	41	91
Weights and Measures	1	—	—	—	1
TOTAL	783	170	316	1,073	2,342

*These are annual examinations which are regarded as a periodical check.

Unfit for work	182
Unfit for superannuation	36
Unfit for appointment	11
	<u>229</u>

TABLE 62
COMPULSORY PURCHASE ORDERS CONFIRMED 1961

Date Confirmed	Order	Houses	Population
20.1.61	Amity Street No. 1 Clearance Area Compulsory Purchase Order	45	176
7.2.61	Woodruff Street Clearance Area Compulsory Purchase Order	106	456
3.3.61	Dinorben Street Clearance Area Compulsory Purchase Order	47	178
2.6.61	Upper Mann Street Clearance Area Compulsory Purchase Order	22	92
27.6.61	St. Georges Hill No. 2 Clearance Area Compulsory Purchase Order	16	97
12.7.61	Sellar Street Area Compulsory Purchase Order ...	38	169
21.7.61	Devonport Street Clearance Area Compulsory Purchase Order	30	115
4.8.61	Grosvenor Place Clearance Area Compulsory Purchase Order	28	127
10.8.61	Lincoln Street Clearance Area Compulsory Purchase Order	26	138
21.8.61	Steble Street Clearance Area Compulsory Purchase Order	20	111
21.11.61	Abram Street Clearance Area Compulsory Purchase Order	15	69
		393	1,728

TABLE 63
CLEARANCE ORDERS CONFIRMED 1961

Date Confirmed	Order	Houses	Population
17.8.61	Birch Street No. 1 Clearance Area	18	63

*

TABLE 64
CLEARANCE AREAS IN ABEYANCE

Area	Houses	Population
Amity Street No. 2 Clearance Area 1958	14	43
Malta Street No. 1 Clearance Area 1958	35	162
Malta Street No. 2 Clearance Area 1958	12	65
Malta Street No. 3 Clearance Area 1958	7	27
Smith Street No. 2 Clearance Area 1958	4	15
Whittle Street No. 2 Clearance Area 1958	18	61
Melbourne Street Clearance Area 1959	113	461
Radcliffe Street Clearance Area 1959	112	411
Radcliffe Street No. 2 Clearance Area 1959	40	165
Radcliffe Street No. 3 Clearance Area 1959	234	1,013
Smith Street No. 4 Clearance Area 1959	18	73
Baker Street No. 1 Clearance Area 1960	195	681
Baker Street No. 2 Clearance Area 1960	8	33
Baker Street No. 3 Clearance Area 1960	150	453
Berkley Street Clearance Area 1960	97	784
Church Flags Clearance Area 1960	3	7
Greenwood Street No. 1 Clearance Area 1960	192	683
Greenwood Street No. 2 Clearance Area 1960	6	29
Netherfield Road North No. 4 Clearance Area 1960	5	23
Palatine Street Clearance Area 1960	82	296
Plumpton Street Clearance Area 1960	11	65
Plumpton Street No. 2 Clearance Area 1960	10	71
Rankin Street Clearance Area 1960	37	179
Winter Street Clearance Area 1960	21	55
Newlands Street No. 1 Clearance Area 1961	220	869
Newlands Street No. 2 Clearance Area 1961	4	13
Torr Street No. 4 Clearance Area 1961	10	62
Gordon Street Clearance Area 1961	142	666
Kepler Street No. 1 Clearance Area 1961	178	629
Kepler Street No. 2 Clearance Area 1961	3	16
Hibbert Street Clearance Area 1961	177	646
Rose Vale No. 4 Clearance Area 1961	4	33
Blackstone Street Clearance Area 1961	6	35
	2,168	8,824

TABLE 65

PARTICULARS OF SHOPS INSPECTIONS
TOTAL NUMBER OF SHOPS—15,000 (APPROX.)

INSPECTIONS				NOTICES	
					Issued
Retail food shops	...	...	12,461		
Retail non-food shops	...	...	3,454		
Cafes, restaurants, etc.	...	...	1,649	Shops Act, 1950.	522
Fried fish shops	...	...	530	Food Hygiene (General) Regulations, 1960	1,384
Clubs	...	...	432	Food Byelaws	92
Hairdressers	...	...	1,243		
Pet Stores	...	...	216		
Wholesale shops	...	...	19,612		
Wholesale warehouses	...	...	1,410		
Street traders	...	...	658		
Places of entertainment	...	...	174		
Merchandise Marks Act	...	...	2,947		
Special visits	...	...	428		
Half-holiday Closing.					
Visits to shops after 1 p.m.			11,976		
Evening Closing.					
Visits to shops	...	...	28,356		
Sunday Closing.					
Visits to shops on Sunday	...	...	1,591		

TABLE 66

VISITATION OF FOOD PREMISES

The number of food premises subject to visits by public health inspectors for the purpose of securing compliance with the requirements of the Food Hygiene (General) Regulations, 1960, and Local Byelaws are as follows :—

Food preparation premises—

[illegible]

RETAIL FOOD BUSINESSES

[illegible]

TABLE 68

FACTORY INSPECTION

FACTORIES ACTS, 1937 AND 1948

Part I of the Act

1. INSPECTIONS for purposes of provisions as to health (including inspections made by the Public Health Inspectors).

Premises (1)	Number on Register (2)	Number of		
		Inspec- tions (3)	Written Notices (4)	Occupiers prosecuted (5)
(i) Factories in which Sections 1, 2, 3, 4, and 6 are to be enforced by local authorities ...	981	1,120	18	—
(ii) Factories not included in (i) in which Section 7 is enforced by local authority	2,912	5,274	68	—
(iii) Other premises in which Section 7 is enforced by the local authority (excluding outworkers premises)	42	214	6	—
TOTAL	3,935	6,608	92	—

TABLE 69
FACTORIES ACTS

2. CASES IN WHICH DEFECTS WERE FOUND

Particulars (1)	Found (2)	Number of Cases in which Defects were found			Number of Cases in which Prosecu- tions were instituted (6)
		Remedied (3)	To H.M. Inspector (4)	Referred By H.M. Inspector (5)	
Want of cleanliness (S.1) ...	7	7	41	1	—
Overcrowding (S.2) ...	—	—	—	—	—
Unreasonable temperature (S.3)	1	1	1	—	—
Inadequate ventilation (S.4) ...	—	—	2	—	—
Ineffective drainage of floors (S.6) ...	—	—	—	—	—
Sanitary Conveniences (S.7)—					
(a) Insufficient ...	11	10	—	8	—
(b) Unsuitable or defective ...	66	63	—	10	—
(c) Not separate for sexes ...	3	3	—	—	—
Other offences against the Act (not including offences re- lating to outwork) ...	60	4	56	1	—
TOTAL ...	148	88	100	20	—

TABLE 70
FACTORIES ACTS
Part VIII of the Act
OUTWORK

(SECTIONS 110 AND 111)

Nature of Work (1)	SECTION 110		No. of prosecu- tions for failure to supply lists (4)	SECTION 111		Prosecu- tions (7)
	No. of out- workers in August list required by Section 110 (1) (c) (2)	No. of cases of default in sending lists to the Council (3)		No. of instances of work in unwhole- some premises (5)	Notices served (6)	
Wearing apparel— making, etc.	148	—	—	—	—	—
Making of Christmas articles (Class 29)	53	—	—	—	—	—
TOTAL ...	201	—	—	—	—	—

TABLE 71

SUMMARY OF PROSECUTIONS (Cases Heard)—Year 1961

Act	Section	No. of Informations or Complaints	Penalties	Costs	Orders
			£ s. d.	£ s. d.	
Public Health Act, 1936 ...	75	9	7 0 0	—	—
Public Health Act, 1936 ...	94	17	27 0 0	—	5
Public Health Act, 1936 ...	95	—	—	—	—
Public Health Act, 1936 ...	290 (6)	11	28 0 0	—	—
Public Health Act, 1936 ...	154	3	5 10 0	—	—
Public Health Act, 1936 ...	236	1	2 0 0	—	—
Unregistered person keeping a Common Lodginghouse, Public Health Act, 1936 (Obstructing Inspector in the course of his duties —Failing to allow access to premises.)	287/288	1	5 0 0	—	—
Shops Act, 1950 ...	Evening Closing	15	12 0 0	—	—
Shops Act, 1950 ...	Half-holiday Closing	5	4 10 0	—	—
Shops Act, 1950 ...	Sunday Closing	2	1 0 0	—	—
Shops Act, 1950 ...	Welfare	—	—	—	—
Food and Drugs Act, 1955	2 and 13	1	10 0 0	11 11 0	—
Food and Drugs Act, 1955	(Adulterated Milk)	33	116 0 0	50 17 0	—
Food and Drugs Act, 1955, and the Food Hygiene (General) Regulations, 1960 ...	—	43	135 0 0	—	—
TOTALS ...		141	£353 0 0	£62 8 0	5

CLEAN AIR ACT, 1956—INSPECTIONS, OBSERVATIONS, ETC.

[illegible]

Industrial Chimneys

SHIPPING

CLEAN AIR ACT, 1956—SECTION 3

Notices of intentions to instal received	69
Application for approval received	55
Application returned for modification	2
Installations approved	55
Applications withdrawn	—

HEIGHTS OF NEW CHIMNEYS

Plans examined to check chimney height	...	...	...	...	...	...	86
Plans approved	...	...	...	...	...	...	74
Plans rejected	...	...	...	...	...	...	—
Plans approved after chimney height increased	...	...	...	...	...	...	12
Plans withdrawn	...	...	...	...	...	...	—

TABLE 73

SMOKE CONTROL AREAS CONFIRMED DURING 1961

Area	Date Confirmed	Date Operative	Industrial Premises	Commercial Premises	Dwellings	Others (Local Authority and Crown)
No. 10 Smoke Control area bounded by River Mersey, Dingle Lane, Aigburth Road, Aigburth Vale, Elmswood Road, Rose Lane, Railway Line, Heath Road, High Street, Acrefield Road, Gateacre Brow, Belle Vale Road, Naylors Road and the city boundary to its junction with the River Mersey at Speke	10.5.61	31.10.63	166	1,158	27,212	138
No. 11 Smoke Control Area bounded by Old Hall Street, Leeds Street, Pall Mall and Tithebarn Street... ..	18.4.61	1.11.61	25	303	29	8
No. 12 Smoke Control Area bounded by Hanover Street, Duke Street, Upper Duke Street, Hope Street, Hardman Street, Leece Street, Berry Street and Seel Street	27.4.61	1.11.61	66	330	214	19
TOTALS			257	1,791	27,455	165

TABLE 74

SMOKE CONTROL AREAS

ADAPTATIONS OF DWELLINGS, 1961

No. 10. Smoke Control Order 1960.

Made ...	...	...	...	...	...	6th July, 1960
Confirmed ...	...	...	...	...	...	18th May, 1961
Operative ...	...	...	...	...	...	31st October, 1963
Number of dwellings authorised for conversion ...	...	...	...	...	...	142
Claims received for grant aid ...	...	...	...	...	...	31
Total amount awarded as grant ...	...	...	...	...	...	£460.18.9
Total amount recoverable as Exchequer Grant ...	...	...	...	...	...	£263.7.10

No. 11. Smoke Control Order, 1960.

Made ...	...	...	...	...	...	6th July, 1960
Confirmed ...	...	...	...	...	...	18th April, 1961
Operative ...	...	...	...	...	...	1st November, 1961
Number of dwellings authorised for conversion ...	...	...	...	...	...	6
Claims received for grant aid ...	...	...	...	...	...	1
Total amount awarded as grant ...	...	...	...	...	...	£7.7.0
Total amount recoverable as Exchequer Grant ...	...	...	...	...	...	£4.4.0

No. 12. Smoke Control Order, 1960.

Made ...	...	...	...	...	...	5th October, 1960
Confirmed ...	...	...	...	...	...	27th April, 1961
Operative ...	...	...	...	...	...	1st November, 1961
Number of dwellings authorised for conversion ...	...	...	...	...	...	49
Claims received for grant aid ...	...	...	...	...	...	9
Total amount awarded as grant ...	...	...	...	...	...	£125.1.6
Total amount recoverable as Exchequer Grant ...	...	...	...	...	...	£71. 9.5.

ATMOSPHERIC POLLUTION MEASUREMENT

follows:—

[illegible]

ATMOSPHERIC POLLUTION MEASUREMENT

Smoke and Sulphur Dioxide Volumetric Filter

	SMOKE										S.O. ₂																
	J.	F.	M.	A.	My	Jn.	Jy.	A.	S.	O.	N.	D.	J.	F.	M.	A.	My	Jn.	Jy.	A.	S.	O.	N.	D.			
Average Value	21	12	10	10	7	45	34	33	60	77	112	165	HATTON GARDEN				14	15.1	7.8	150	138	141	232	308	458	624	
Highest Value	501	29	23	21	13	100	80	60	110	190	220	395	54.0	34.3	22.0	28.0	14.4	271	263	283	420	618	949	2,055			
Lowest Value...	8	3	—	4	3	20	10	20	30	50	40	50	10.7	8.5	3.6	7.6	3.7	40	78	80	146	165	195	197			
Average Value		19	14	155	10	58	39	52	118	115	229	552	GARSTON				24	15.9	18.1	13.3	286	228	250	364	404	585	938
Highest Value		31	28	28	23	140	80	170	150	190	490	930		47.8	34.4	40.6	33.1	590	363	461	687	732	1,010	2,209			
Lowest Value...		10	5	7	6	10	20	10	40	70	80	100		10.7	6.2	8.2	7.0	129	117	134	216	185	249	263			
Average Value							29	32	51	65	107	108	WOOLTON						89	145	225	277	413	344			
Highest Value		Not in operation					70	110	90	180	230	250		Not in operation					177	229	386	506	696	661			
Lowest Value...							—	10	30	30	50	60							—	31	142	152	201	168			
Average Value							18	19	43	62	109	155	CROXTETH						58	177	201	224	303	455			
Highest Value		Not in operation					40	90	80	140	200	420		Not in operation					149	238	343	363	529	2,002			
Lowest Value...							—	10	20	20	20	70							11	6	111	89	158	146			

Note:— January-May inclusive, measurements are in milligrammes per cubic metre.
June-December inclusive, measurements are in microgrammes per cubic metre.

TABLE 77

SUMMARY OF RODENT INFESTATIONS AND DISINFESTATIONS OF BUILDINGS AND LANDS DURING THE YEAR 1961

Description of Premises	Infestations				Reinfestations during the Year				Category		Total infestations and reinfestations	Total infestations and remedied
	Premises	Rats	Rats and Mice	Mice	Premises	Rats	Rats and Mice	Mice	Major	Minor		
Shops	556	251	14	291	23	9	2	14	—	581	581	591
Factories	302	147	31	124	20	8	—	12	—	322	322	342
Warehouses	244	144	17	83	11	10	—	4	—	258	258	264
Dwelling-houses	2,416	1,527	12	877	39	29	—	11	—	2,456	2,456	2,626
Other buildings and lands	953	481	31	441	56	17	2	43	—	1,015	1,015	1,030
Food premises (included in above)...	(715)	(308)	(35)	(372)	(36)	(13)	(1)	(22)	(—)	(751)	(751)	(683)
TOTAL	4,471	2,550	105	1,816	149	73	4	84	—	4,632	4,632	4,853

NOTE :—Infestations remedied include 536 outstanding from 1960.

TABLE 78

**RAT DESTRUCTION IN SEWERS.
MAINTENANCE TREATMENTS.**

Sewer Manholes treated	Initial Treatment 1953	MAINTENANCE TREATMENTS	
		1961 (1)	1961 (2)
Pre-baited... ..	16,378	12,004	13,143
Pre-bait taken	9,329	2,876	3,565
Poison baited	11,141	4,798	5,709

TABLE 79

**RAT DESTRUCTION IN SEWERS
ANNUAL TEST BAITING**

Test Baiting Divisions	Year 1953	Year 1960	Year 1961
Total number of manholes	6,337	11,686	11,735
Number of manholes tested	797	1,419	1,286
Number of manholes showing takes	68	78	52

TABLE 80
QUANTITY OF FOOD CONDEMNED FOR DISEASE
OR FOUND UNFIT FOR HUMAN CONSUMPTION

						Tons	Cwts.	Qrs.	Lbs.
Beef, Mutton, Veal and Pork	...	...				166	5	2	26
Offal	...	...	...	...	...	458	16	3	13
Fish (Wet)	...	...	...	...	...	34	11	—	17
Fish (Dry)	...	...	...	...	...	3	4	—	27
Shellfish	...	...	...	...	...	2	4	—	—
Poultry	...	...	...	...	...	5	19	1	25
Game	...	...	...	...	...	—	—	3	6
Rabbits and Hares	...	...	...	...	...	—	7	2	27
Fruit	...	...	...	...	...	123	15	2	15
Vegetables	...	...	...	...	...	330	18	3	9
Nuts	...	...	...	...	...	33	3	1	7
Dried Fruits	...	...	...	...	...	—	8	3	2
Canned Goods	...	...	...	...	...	62	9	—	27
Sundries	...	...	...	...	...	19	2	—	19
						1,241	7	3	24

TABLE 81

CARCASSES AND OFFAL INSPECTED AND CONDEMNED IN WHOLE OR IN PART

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed 561,662	43,718	33,346	15,951	360,004	108,643
Number inspected 561,662	43,718	33,346	15,951	360,004	108,643
All Diseases except Tuberculosis and Cysticerci.					
Whole carcasses condemned	20	122	445	1,418	491
Carcasses of which some part or organ was condemned	4,822	11,772	1,070	92,210	9,066
Percentage of number in- spected affected with disease other than tuber- culosis and cysticerci ...	11.1%	35.6%	9.5%	26%	8.7%
Tuberculosis only.					
Whole carcasses condemned	32	12	4	—	10
Carcasses of which some part or organ was condemned	1,327	203	—	—	1,657
Percentage of the number inspected affected with tuberculosis ...	3.1%	0.6%	0.02%	—	1.53%
Cysticercosis.					
Carcasses of which some part or organ was condemned	16	6	—	—	—
Carcasses submitted to refrigeration ...	16	6	—	—	—
Generalised and totally condemned ...	—	—	—	3	—

TABLE 82

METEOROLOGICAL SUMMARY, 1961

Recorded at Liverpool Observatory and Tidal Institute, Bidston.

Month	Mean Barometric Pressure in.		Temperature °F			Rainfall in.		No. of days with rain	Sunshine hrs.	
	1961	Normal	Mean	Mean	Mean	1961	Normal		1961	Normal
				Max.	Min.					
January	29.84	29.92	39.1	43.0	35.4	4.58	2.35	19	38.6	51.3
February	29.98	29.93	44.5	49.3	40.3	2.41	1.77	15	67.1	66.7
March	30.24	29.92	47.3	52.7	42.6	0.54	1.73	9	145.3	111.3
April	29.73	29.92	49.2	54.9	44.6	3.28	1.69	21	104.6	160.9
May	30.03	29.97	52.0	57.7	46.9	1.43	2.04	6	225.7	202.7
June	30.01	29.99	57.2	63.3	51.9	1.57	2.01	9	231.9	208.7
July	29.98	29.95	57.6	62.7	50.4	3.15	2.72	12	164.6	183.1
August	29.98	29.92	58.9	64.1	54.2	3.45	3.15	19	190.4	168.3
September	29.88	29.96	58.6	64.8	53.1	2.62	2.72	19	144.3	132.3
October	29.73	29.90	51.6	55.9	47.2	3.37	3.17	23	120.7	96.2
November	29.90	29.88	44.7	48.4	41.0	1.66	2.71	12	78.5	59.4
December	29.87	29.86	36.7	40.0	32.8	2.52	2.68	13	57.7	41.8
Year	29.93	29.93	49.8	54.7	45.0	30.58	28.74	177	1569.4	1482.8

The normal is the long period average for that time of year.

MISCELLANEOUS STATISTICS—AREA OF CITY—
NUMBER OF INHABITED HOUSES—RATEABLE VALUE—
PENNY RATE

[illegible]

TABLE 28
NIGELLAKEOUE STATISTICS--AREA OF CITY--
NUMBER OF INHABITED HOUSES--RATEABLE VALUE--
PENNY RATE

Month	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	2893	2894	2895	2896	2897	2898	2899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TABLE 84
HOME ACCIDENTS—Family Circumstances

Type of accident	Number 0-5 years	Number 6-15 years	Males	Females	Fatalities	No Infor- mation	Parents Present at Accident	Parents not Present at Accident	Number of children in Family										Mother Working	Mother not Working	Time			Marital State					Previous Accidents	
									1	2	3	4	5	6	7	8	9	10			a.m.	p.m.	Not known	Married	Widowed	Divorced	Separated	Single	Yes	No.
Drowning	124	—	79	45	—	5	71	48	18	42	23	20	4	6	4	1	1	—	14	105	22	61	36	112	2	2	1	2	23	96
	—	35	20	15	—	3	11	21	2	4	5	5	7	6	1	1	—	1	4	28	3	22	7	30	—	—	1	1	6	26
Fires	65	—	35	30	—	9	21	35	11	17	17	4	5	2	—	—	—	—	8	48	9	33	14	49	—	1	4	2	10	46
	—	6	4	2	—	1	—	5	—	1	—	2	—	1	—	1	—	—	1	4	1	3	1	4	1	—	—	—	2	2	3
Poisoning	63	—	33	30	—	4	53	6	12	19	12	6	5	1	2	1	1	—	8	51	9	38	12	54	—	1	3	1	4	55
	—	14	9	5	—	2	11	1	1	2	4	—	1	3	1	—	—	—	5	7	—	9	3	12	—	—	—	—	5	7
Electricity	35	—	20	15	1	7	19	9	7	5	8	2	3	1	2	—	—	—	3	25	6	17	5	27	—	—	—	1	5	23
	—	16	10	6	1	4	7	5	1	2	3	1	4	—	—	1	—	—	4	8	1	8	3	10	1	—	1	—	2	10
Automobiles	17	—	13	4	—	—	12	5	2	7	5	3	—	—	—	—	—	—	5	12	—	8	9	17	—	—	—	—	1	16
	—	30	17	13	—	1	11	18	6	11	5	3	2	2	—	—	—	—	10	19	4	20	5	25	1	—	1	2	5	24
Other	45	—	26	19	—	4	33	8	7	12	10	3	4	2	3	—	—	—	3	38	8	15	17	37	1	2	—	2	9	32
	—	21	12	9	—	2	9	10	—	4	4	3	3	3	1	—	—	1	7	12	1	9	9	17	1	1	—	—	5	14

For information:—

Years 0-5 years. 13 cases due to absent, inadequate or insecure fire guards. Fatality due to this cause.

Years 6-15 years. 2 cases due to absent, inadequate or insecure fire guards. Fatality due to this cause.

TABLE No. 85.

TABLE 86.

TABLE SHOWING POPULATION, BIRTH-RATES, DEATH-RATES, INFANT AND MATERNAL MORTALITY RATES, ETC., OF A NUMBER OF THE LARGER AUTHORITIES FOR 1961.

Name of Authority	Birmingham	Bradford	Bristol	Cardiff	Kingston-upon-Hull	Leeds	Leicester	Liverpool	Manchester	Newcastle-upon-Tyne	Nottingham	Sheffield
Registrar General's estimated population for 1961	1,110,290	294,210	436,000	256,900	300,790	511,650	273,130	745,810	660,300	267,230	312,280	494,650
Comparability factor—												
(a) Births	0.95	1.00	0.99	0.94	0.96	0.98	1.01	0.93	0.96	0.97	0.96	1.01
(b) Deaths	1.15	0.99	0.96	1.12	1.22	1.13	1.01	1.22	1.17	1.12	1.17	1.10
Crude birth rate per 1,000 population	19.45	18.77	16.19	19.34	19.65	17.4	17.10	22.11	19.69	18.11	18.59	16.49
Birth rate as adjusted by factor... ..	18.48	18.77	16.03	18.18	18.86	17.1	17.27	20.56	18.90	17.57	17.85	16.65
Crude death rate per 1,000 population	11.42	13.51	12.35	11.47	11.75	12.5	12.36	12.42	13.49	12.28	12.29	13.09
Death rate as adjusted by factor	13.13	13.37	11.86	12.85	14.34	14.1	12.48	15.15	15.78	13.75	14.38	14.39
Infant mortality rate per 1,000 live births	23.85	26.25	17.84	24.15	27.41	23.1	23.76	28.3	29.84	24.17	27.65	23.41
Neonatal mortality rate per 1,000 live births	16.58	16.83	14.02	15.49	17.09	14.8	18.20	18.98	20.61	17.77	20.61	18.75
Stillbirth rate per 1,000 total births	20.15	24.54	19.17	19.73	17.61	18.7	16.01	22.52	21.89	19.25	20.03	18.41
Perinatal mortality rate per 1,000 total births	34.44	39.38	31.53	32.35	30.58	32.2	30.55	38.29	39.94	34.65	36.18	35.13
Maternal mortality rate per 1,000 total births	0.23	0.00	0.139	—	0.33	0.33	—	0.12	0.23	—	0.34	0.36
Tuberculosis rates per 1,000 population												
(a) Primary notifications—												
Respiratory	0.64	0.77	0.36	0.61	0.485	0.64	0.531	0.543	0.578	0.666	0.594	0.47
Non-respiratory... ..	0.09	0.12	0.05	0.08	0.027	0.07	0.0915	0.072	0.059	0.105	0.073	0.10
(b) Deaths—Respiratory	0.07	0.05	0.048	0.12	0.079	0.05	0.066	0.107	0.078	0.0786	0.070	0.08
Non-respiratory... ..	0.005	0.01	0.009	0.012	0.003	0.01	0.007	0.008	0.008	0.0075	0.016	0.01
Death Rates per 1,000 population from—												
Cancer (all forms including Leukaemia and Aleukaemia)	2.07	2.39	2.10	2.07	2.254	2.21	2.02	2.289	2.43	2.380	2.285	2.51
Cancer of Lungs and Bronchus	0.51	0.47	0.48	0.48	0.598	0.57	0.44	0.704	0.71	0.655	0.625	0.66
Meningococcal infections	0.005	0.003	0.002	—	0.003	0.01	0.0037	0.007	0.00	—	0.003	0.00
Whooping Cough	0.00	0.003	—	—	0.003	—	—	—	0.00	—	—	—
Influenza	0.16	0.13	0.144	0.16	0.219	0.11	0.198	0.145	0.12	0.0374	0.275	0.23
Measles	0.005	0.000	0.005	—	0.009	0.004	—	0.001	0.00	—	0.003	0.01
Acute Poliomyelitis and Encephalitis	0.007	0.000	—	—	0.003	—	0.0037	0.003	0.00	0.0037	—	0.01
Diarrhoea (under 2 years)	0.02	0.03	0.005	—	0.03	0.01	0.018	0.027	0.02	0.0037	0.016	0.02
Diarrhoea (under 2 years) (per 1,000 live births)	1.11	1.63	0.28	—	1.52	0.78	1.07	1.213	1.08	0.206	0.859	0.98

TABLE SHOWING POPULATION, BIRTH, DEATH, MARRIAGE, AND DIVORCE RATES, 1901-1902

State	Population	Births	Deaths	Marriages	Divorces
Alabama	1,000,000	40.0	15.0	10.0	0.5
Alaska	100,000	40.0	15.0	10.0	0.5
Arizona	1,000,000	40.0	15.0	10.0	0.5
Arkansas	1,000,000	40.0	15.0	10.0	0.5
California	1,000,000	40.0	15.0	10.0	0.5
Colorado	1,000,000	40.0	15.0	10.0	0.5
Connecticut	1,000,000	40.0	15.0	10.0	0.5
Delaware	1,000,000	40.0	15.0	10.0	0.5
District of Columbia	1,000,000	40.0	15.0	10.0	0.5
Florida	1,000,000	40.0	15.0	10.0	0.5
Georgia	1,000,000	40.0	15.0	10.0	0.5
Idaho	1,000,000	40.0	15.0	10.0	0.5
Illinois	1,000,000	40.0	15.0	10.0	0.5
Indiana	1,000,000	40.0	15.0	10.0	0.5
Iowa	1,000,000	40.0	15.0	10.0	0.5
Kansas	1,000,000	40.0	15.0	10.0	0.5
Kentucky	1,000,000	40.0	15.0	10.0	0.5
Louisiana	1,000,000	40.0	15.0	10.0	0.5
Maine	1,000,000	40.0	15.0	10.0	0.5
Maryland	1,000,000	40.0	15.0	10.0	0.5
Massachusetts	1,000,000	40.0	15.0	10.0	0.5
Michigan	1,000,000	40.0	15.0	10.0	0.5
Minnesota	1,000,000	40.0	15.0	10.0	0.5
Mississippi	1,000,000	40.0	15.0	10.0	0.5
Missouri	1,000,000	40.0	15.0	10.0	0.5
Montana	1,000,000	40.0	15.0	10.0	0.5
Nebraska	1,000,000	40.0	15.0	10.0	0.5
Nevada	1,000,000	40.0	15.0	10.0	0.5
New Hampshire	1,000,000	40.0	15.0	10.0	0.5
New Jersey	1,000,000	40.0	15.0	10.0	0.5
New Mexico	1,000,000	40.0	15.0	10.0	0.5
New York	1,000,000	40.0	15.0	10.0	0.5
North Carolina	1,000,000	40.0	15.0	10.0	0.5
North Dakota	1,000,000	40.0	15.0	10.0	0.5
Ohio	1,000,000	40.0	15.0	10.0	0.5
Oklahoma	1,000,000	40.0	15.0	10.0	0.5
Oregon	1,000,000	40.0	15.0	10.0	0.5
Pennsylvania	1,000,000	40.0	15.0	10.0	0.5
Rhode Island	1,000,000	40.0	15.0	10.0	0.5
South Carolina	1,000,000	40.0	15.0	10.0	0.5
South Dakota	1,000,000	40.0	15.0	10.0	0.5
Tennessee	1,000,000	40.0	15.0	10.0	0.5
Texas	1,000,000	40.0	15.0	10.0	0.5
Vermont	1,000,000	40.0	15.0	10.0	0.5
Virginia	1,000,000	40.0	15.0	10.0	0.5
Washington	1,000,000	40.0	15.0	10.0	0.5
West Virginia	1,000,000	40.0	15.0	10.0	0.5
Wisconsin	1,000,000	40.0	15.0	10.0	0.5
Wyoming	1,000,000	40.0	15.0	10.0	0.5

TABLE 87
NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS) DURING THE YEAR 1961.

DISEASE.	NUMBER OF CASES NOTIFIED.													TOTAL DEATHS
	At all Ages.	At Ages—Years												
		Under 1	1—	2—	3—	4—	5—	10—	15—	20—	35—	45—	65—	
Scarlet Fever.....	321	4	9	35	26	39	162	32	7	7	—	—	—	—
Enteric Fever (including Paratyphoid)	4	1	1	—	—	1	1	—	—	—	—	—	—	—
Puerperal Pyrexia.....	498	—	—	—	—	—	—	—	64	365	69	—	—	—
Pneumonia	383	36	17	17	10	7	32	3	7	27	31	102	94	195
Cerebro-spinal Fever	10	3	1	3	—	1	2	—	—	—	—	—	—	5
Poliomyelitis (Paralytic)	50	8	14	9	5	3	4	2	4	1	—	—	—	2
Poliomyelitis (Non-paralytic)	17	1	4	3	2	2	2	—	—	3	—	—	—	—
Dysentery	335	41	42	52	32	25	53	20	7	27	6	9	21	—
Ophthalmia Neonatorum	73	73	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	29	—	—	—	—	1	—	1	1	3	1	12	10	—
Malaria	2	—	—	—	—	—	—	—	—	—	1	1	—	—
Measles	5541	375	811	890	864	799	1747	41	11	3	—	—	—	1
Whooping Cough	341	50	48	61	61	33	78	8	1	1	—	—	—	—
Food Poisoning.....	99	9	8	8	—	7	4	10	2	16	12	20	3	—
TOTALS.....	7703	601	955	1078	1000	918	2085	117	104	453	120	144	128	203

TABLE 1
 THE HAY AND GRAIN MARKET, 1914

Commodity	Quantity					Value
	1914	1913	1912	1911	1910	
Hay	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Grain	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Wheat	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Barley	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Oats	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Rye	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Flour	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Feed	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Straw	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Stalks	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Wheat	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Barley	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Oats	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Rye	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Flour	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Feed	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Straw	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Stalks	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000

CITY OF LIVERPOOL

TABLE 88.

Infant Mortality during the year 1961.

Net deaths from stated causes at various ages under One Year.

CAUSE OF DEATH	Under 1 day	1 to 2 days	2 to 3 days	3 to 4 days	4 to 5 days	5 to 6 days	6 to 7 days	1 to 2 weeks	2 to 3 weeks	3 to 4 weeks	Total deaths under 28 days	28 days to 2 months	2 to 3 months	3 to 4 months	4 to 5 months	5 to 6 months	6 to 7 months	7 to 8 months	8 to 9 months	9 to 10 months	10 to 11 months	11 to 12 months	Total deaths under 1 year
Tuberculosis of Respiratory System	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
„ Meninges, etc.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
„ Intestines, etc.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
„ Other Organs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Syphilis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningococcal Infections	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	1	—	—	—	—	3
Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Masles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chickenpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Psychosis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningitis (non-tubercular)	—	—	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	—	—	—	—	—	2
Influenza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	—	—	—	—	—	—	—	—	—	—	—	12	6	5	5	3	7	5	1	3	2	—	49
Bronchitis	—	—	—	—	—	—	—	—	—	—	—	8	8	5	3	2	1	1	—	—	—	1	29
Esteritis	—	—	—	—	—	—	—	—	—	—	—	2	6	2	3	1	—	1	3	—	1	—	19
Malformations	26	7	3	2	4	2	2	6	8	1	61	16	2	3	6	5	—	2	—	—	—	—	95
Injury at Birth	18	10	4	5	2	—	3	3	—	—	45	—	—	1	—	—	—	—	—	—	—	—	46
Infections of Newborn	5	1	2	2	2	1	—	8	2	7	30	—	—	—	—	—	—	—	—	—	—	—	30
Other Diseases of Early Infancy	102	19	16	12	7	6	2	8	—	—	172	1	—	—	—	—	—	—	—	—	—	—	173
Other Causes	1	—	—	—	—	—	—	1	1	—	3	2	1	2	4	1	1	2	1	2	1	—	20
Totals	152	37	25	21	15	9	7	26	13	8	313	42	24	18	21	12	9	12	6	5	4	1	467
266 (Total Deaths under 7 days)																							

Net Births in the year { Legitimate ... 15,546
 Illegitimate ... 946

Net Deaths in the year of { Legitimate Infants 437
 Illegitimate Infants 30

TABLE 89.
CITY OF LIVERPOOL.

[illegible]

TABLE 90

TUBERCULOSIS CASES ON REGISTERS OF CHEST CLINICS

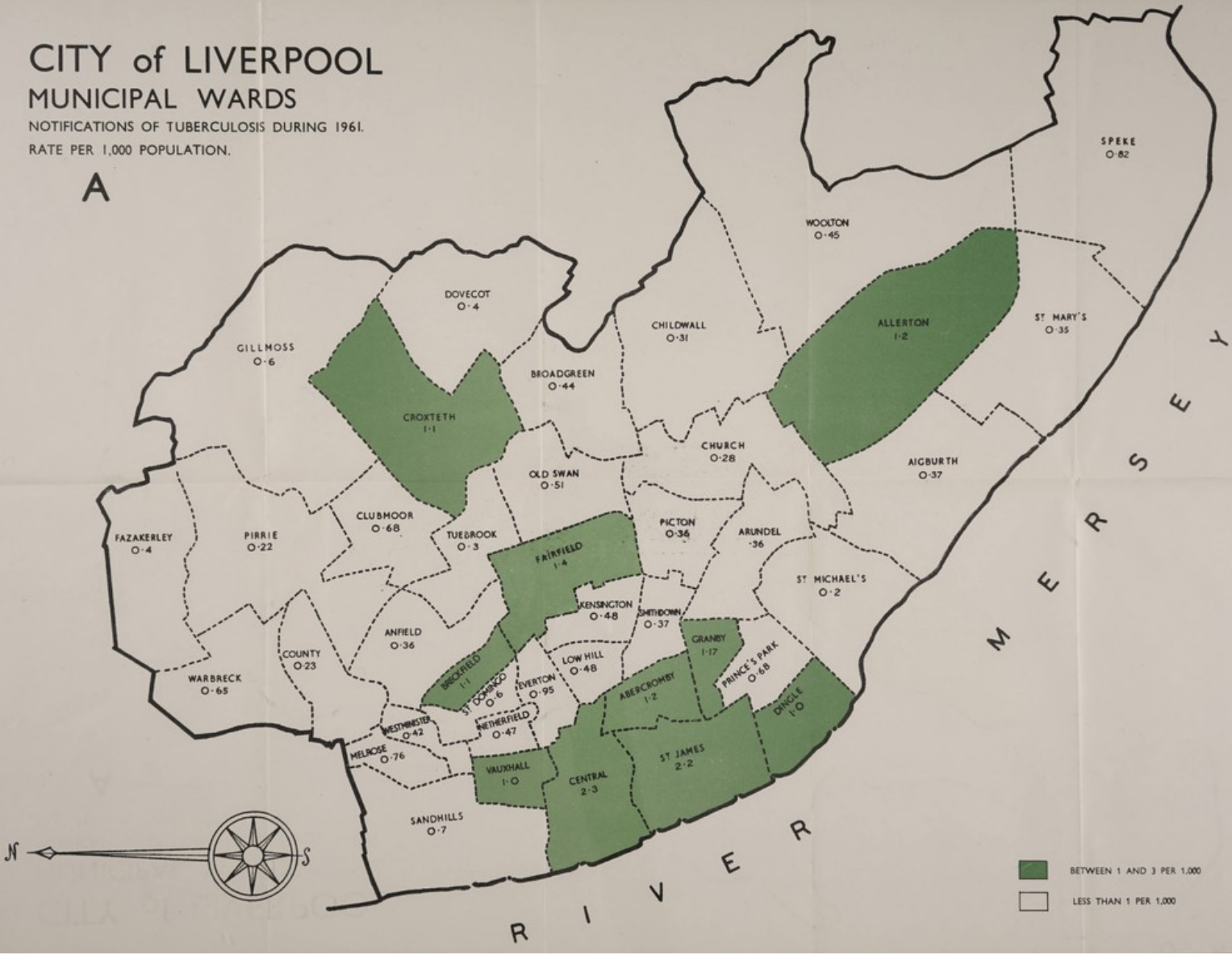
DIAGNOSIS	RESPIRATORY			NON-RESPIRATORY			TOTAL			GRAND TOTAL
	Adults		Children	Adults		Children	Adults		Children	
	M.	F.		M.	F.		M.	F.		
C.—NEW CASES examined during the year (including contacts) (Definitely Tuberculosis) ...	283	126	40	24	36	13	307	162	53	522
D.—CONTACTS examined during the year:										
(a) Definitely tuberculous ...	—	9	18	—	—	—	—	9	18	27
(b) Diagnosis not completed ...	1	1	8	—	—	—	1	1	8	10
(c) Non-tuberculous ...	287	498	1,318	—	—	—	287	498	1,318	2,103
E.—CASES written off the Register as Recovered	331	353	54	28	19	17	359	372	71	802
F.—NUMBER OF CASES on Register on 31st Dec. 1961:										
(a) Definitely Tuberculous	3,480	2,848	417	149	220	88	3,629	3,068	505	7,202
(b) Diagnosis not completed ...	5	6	—	—	—	—	5	6	—	11
Number of attendances of patients at the Chest Clinics during the year 1961 ...			6,372	Number of patients under medical treatment at home on 31st December, 1961 ...						507
Number of visits paid by the Tuberculosis Medical Officer to the homes of patients during 1961			660							
Total number of cases vaccinated with B.C.G. during 1961:—				Total number of visits paid to the homes of patients by Tuberculosis Visitors during 1961... ..						24,481
Children			*3,421							
Others			123							

* Includes 1,966 newly born babies in Maternity Wards in Sefton General Hospital and Walton General Hospital.

CITY of LIVERPOOL
MUNICIPAL WARDS

NOTIFICATIONS OF TUBERCULOSIS DURING 1961.
RATE PER 1,000 POPULATION.

A



R

REPORT

OS

DURING 1961

SANDHILLS
0-7

NELORE
0-76

0-42

0-47

DOAKOT

0-4

0-36

0-23
COAL

0-22

CROOKET

CL

CITY of LIVERPOOL

MUNICIPAL WARDS

NOTIFICATIONS OF TUBERCULOSIS 1957 — 1961

RATE PER 1,000 POPULATION.



R

REPORT

DS

1957 — 1961

SANDHILLS

WILCOX

WILCOX

COOKCOT

ANGEL

COUNTY

MOSS

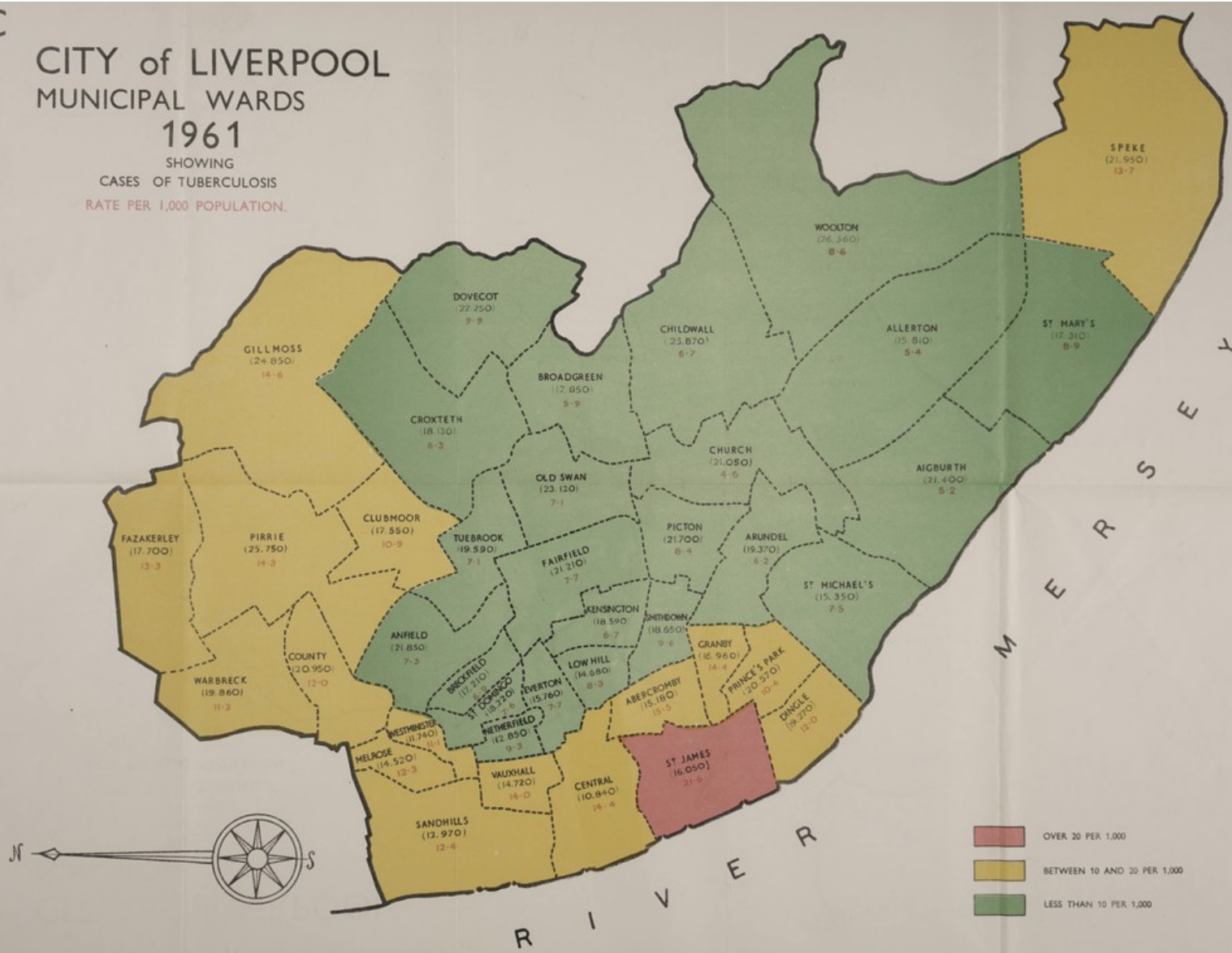
CROXTETH

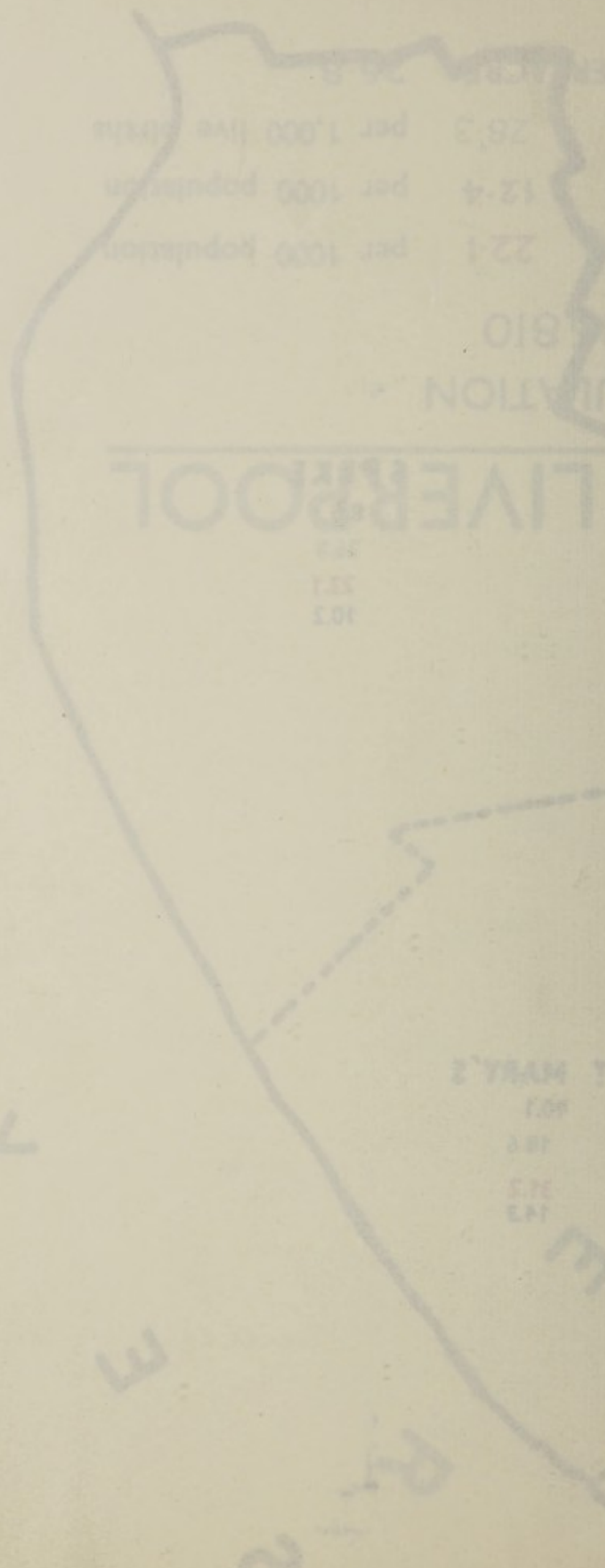
WILCOX

WILCOX

CITY of LIVERPOOL MUNICIPAL WARDS 1961

SHOWING
CASES OF TUBERCULOSIS
RATE PER 1,000 POPULATION.





PERSONS PER ACRE 26.8
BIRTH RATE 28.3
per 1,000 live births
12.4
per 1,000 population
22.1
per 1,000 population
74,810
POPULATION

OF LIVERPOOL

10.3
11.1
12.3

ST. MARY'S
10.3
11.1
12.3
14.3

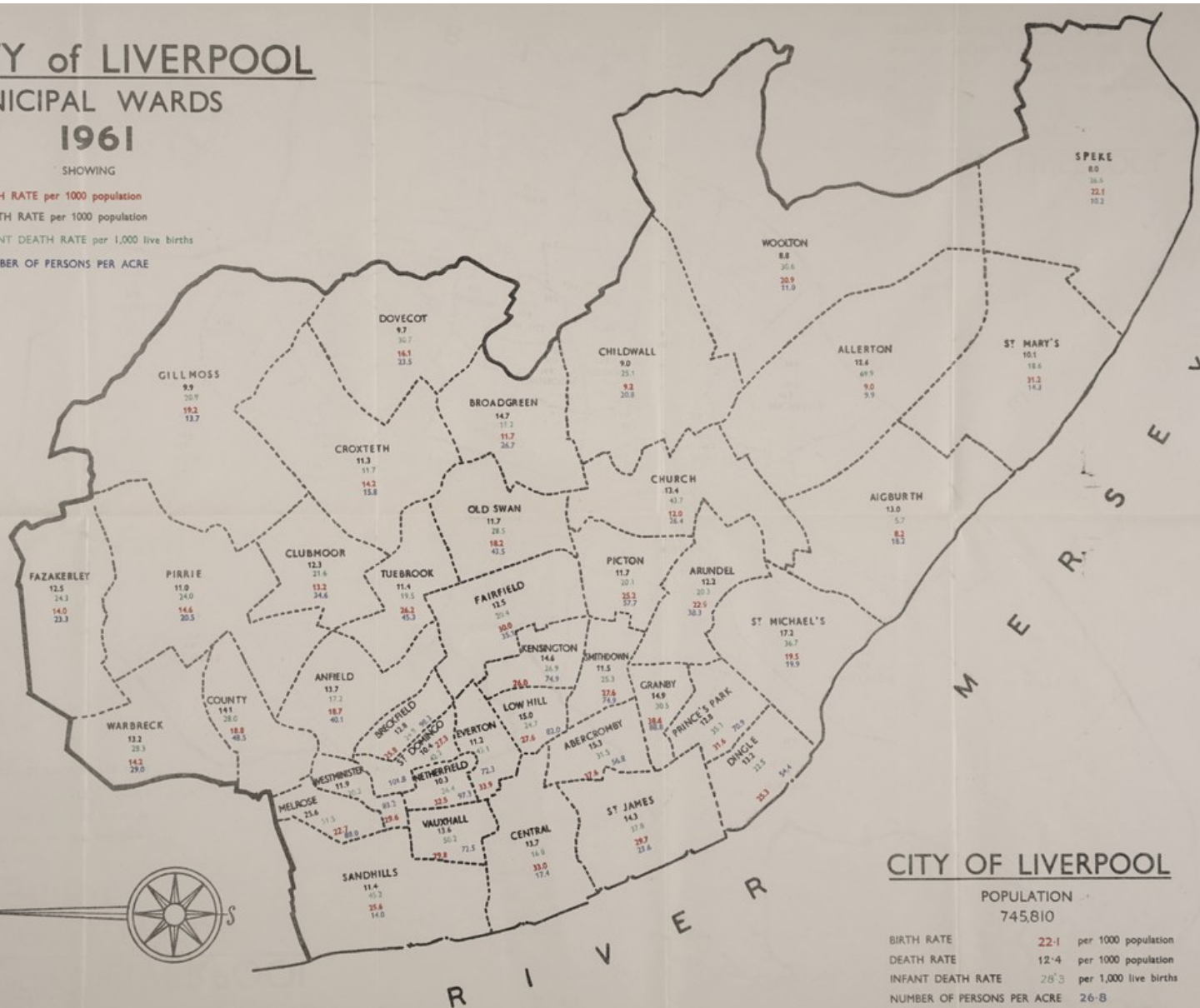
W

R

2

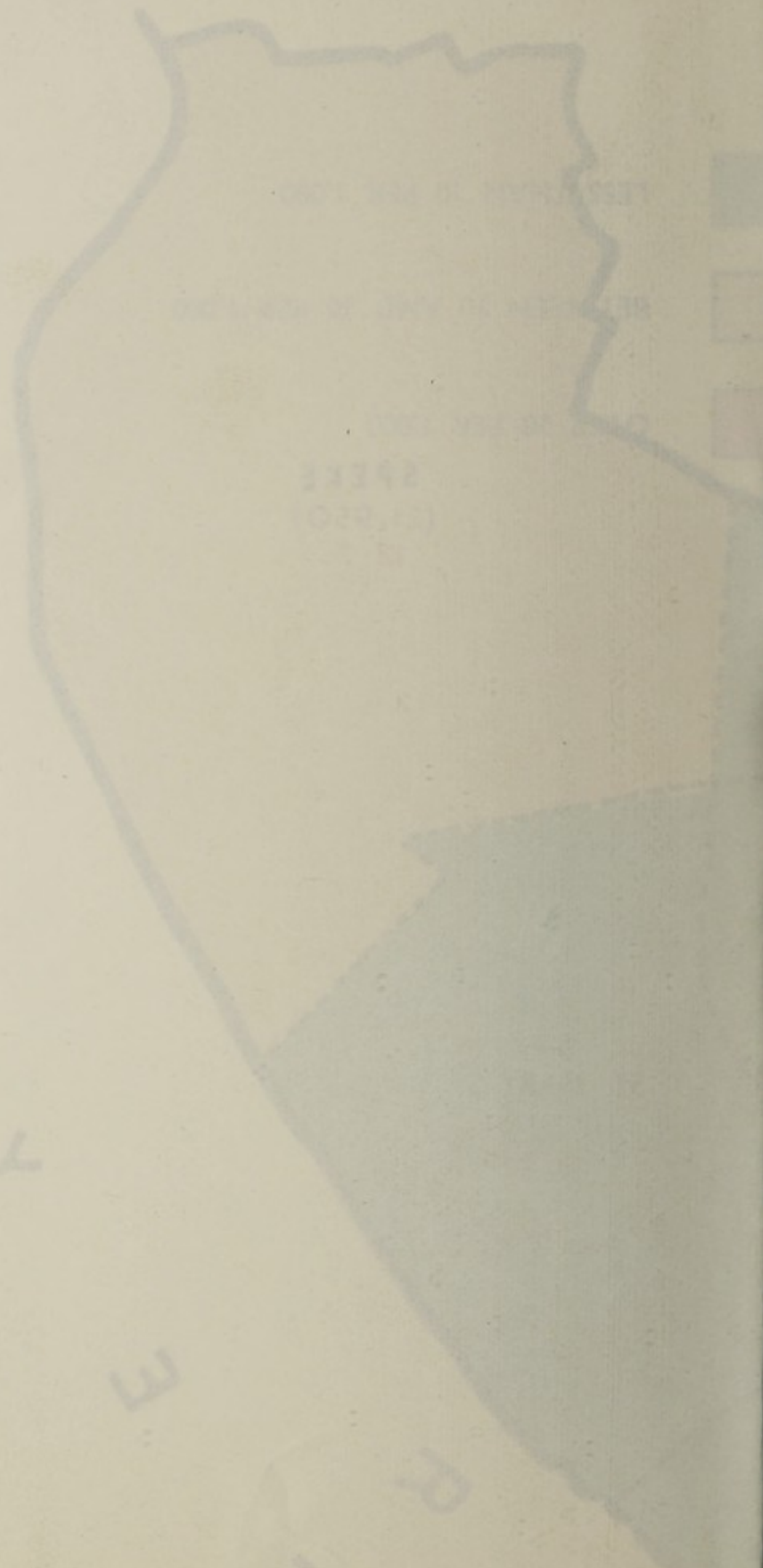
SHOWING

BIRTH RATE per 1000 population
DEATH RATE per 1000 population
INFANT DEATH RATE per 1,000 live births
NUMBER OF PERSONS PER ACRE



POPULATION
745,810

BIRTH RATE	22.1	per 1000 population
DEATH RATE	12.4	per 1000 population
INFANT DEATH RATE	28.3	per 1,000 live births
NUMBER OF PERSONS PER ACRE	26.8	



OFFICE OF THE ATTORNEY GENERAL

DEPARTMENT OF REVENUE

STATE OF ILLINOIS

33342

(039,12)

Y

W

R

2