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# REPORT

ON THE HEALTH OF THE

# CITY OF LIVERPOOL

FOR THE YEAR 1958

BY

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

Medical Officer of Health

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### **PREFACE**

MY LORD MAYOR, LADIES AND GENTLEMEN,

I have the honour to submit my seventh annual report on the health of the City of Liverpool, this being the 111th year reported on by the Medical Officer of Health.

The dramatic smallpox outbreak in Merseyside, starting with the arrival through the Port of an Indian seaman which led to five further cases occurring in Bebington; and the contacts of which led to much work in Liverpool, was probably the most important public health event of the year. However, the steady progress made in the health and velfare services of the City, although less exciting, is nevertheless much nore important and the details are given in the report that follows.

#### Vital Statistics.

The birth-rate in the city during the year decreased slightly to 0.5 per thousand estimated population compared with 20.9 in the revious year.

It is disappointing to record that the still-birth rate again showed a mall rise in 1958 to 25.7 per thousand compared with 24.9 in 1957, and 4.1 in 1956. Attention was drawn in the last Annual Report to the betinate nature of the still-birth rate amongst the child mortality rates t present, and emphasises its increasing importance.

There was again a welcome and encouraging drop in the number of eaths from tuberculosis and in 1958, the number of such deaths fell to 09 compared with 128 the previous year. The exact meaning of such a gure is more easily understood when it is recalled that five years ago here were 244 deaths annually from tuberculosis. This means that in he space of five years the death rate from tuberculosis has been more han halved within the city.

The infant mortality rate showed a slight increase to 27.7 and there as also a corresponding increase in the peri-natal mortality rate to 1.4 compared with 39.08 in 1957.

There was a fall in the number of deaths from cancer of the lung to 99 compared with 448 in the previous year.

Midwifery Service During the year there was a further increase in the number of home confinements carried out, and altogether 254 more home deliveries were undertaken in 1958 compared with 1957. The municipal midwives delivered 4,169 cases making an average case load per midwife of just under 79 cases compared with the figure of 66 recommended by the Ministry of Health. In order to assist midwives to undertake this heavy role, two nurses were appointed in August to carry out investigations regarding home conditions as requested by the different hospitals.

Gas and air analgesia was administered in an increasing number of cases, it being available to assist 3,454 domiciliary deliveries.

Premature Babies A full account is given of the work of the 3 special premature baby midwives at present working within the city. These nurses made 5,081-visits and looked after 479 babies. These included 114 premature babies born and nursed at home, and in the remainder of cases the premature babies were discharged earlier from hospital to the special care of these premature baby nurses. The work of this service has continued to be most valuable and it is interesting to note that approximately 50 per cent. of the premature babies nursed at home were successfully breast fee compared with 28 per cent. who had been nursed in hospital. In premature babies, breast feeding is even more important than otherwise and there is no doubt that the higher figure is almost entirely due to the extra time and care which these nurses are able to spend with the mothers at home.

Work of Health Visitors

1958 has been a year which has shown a great variety of the work undertaken by health visitors. Two special investigations were started one into breast feeding and the other into the follow up of home accidents, and both of these were carried out by the health visitor staff

In addition, the health visitors played a prominent part in contact tracing during the smallpox outbreak in the city in May, 1958, and over 1,000 contacts were visited as well as the work undertaken in examining and vaccinating a number of persons in the large stores affected in the city centre.

Details are given in the text of the report for the first time of number of interesting cases handled by the health visitors during the year to show the sort of work and the diverse problems which they have had to tackle. Much of this is done in connection with problem families to

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Preparations for the Mass X-ray Campaign started in November and forty health visitors were seconded to assist in this task. In particular, they were given the difficult task of recruiting 11,000 voluntary workers from the general public and they succeeded so well in this that by Christmas the target had been reached. This essential part of the preparatory work for the X-ray Campaign entailed much work for the health visitors including house-to-house visiting, addressing of meetings and visiting various organisations in their area. There is no doubt that by achieving their targets so well the health visitors laid the foundation for the successful survey which followed later.

The liaison with hospitals (particularly with paediatric out-patient Liaison with departments) has increased and arrangements are now made for health Hospitals visitors to attend regularly all the paediatric out-patient departments in the city. Details are again given of the follow-up of difficult cases which have resulted from this increased liaison with the hospital authorities.

Two health visitors were delegated to work specially in connection Special Work with epileptic patients at Alder Hey Children's Hospital and at the of Health Royal Southern Hospital. This work which has just started includes the Epileptic attendance of the health visitor at out-patient departments so that she can play her part in following up the diverse social factors influencing the successful treatment of this condition. In the case of adults a close iaison has been kept with the Disablement Resettlement Officer to assist is far as possible in the placing of epileptic persons in employment.

The special health visitor who has for the past 3 years been dealing Special Health vith diabetes has continued to develop her work and a full account is Visitors given in the report showing the very close contact and liaison which she Diabetes as maintained with the David Lewis Northern Hospital which treats o many diabetics in the city. Full details are given of interesting cases which have been dealt with by this health visitor and it is clear that this ervice is continuing to be of very great value to these patients.

Among the cases dealt with, forty-one needed hospital admission and letails are given of the reasons why these diabetic patients had to be dmitted to hospitals.

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#### Home Accidents

A survey of home accidents was started in July, 1958, with the cooperation of hospitals. Information was received about home accidents from all hospitals, ambulance and fire services and all cases were carefully followed up by health visitors undertaking home visits. During the period, 1st July to 31st December, 818 home accidents were traced and more than half these occurred in children under the age of five years In 57 instances there was a history of a previous accident within the home and in 354 cases one or both parents were present at the time of the accident. This survey which has brought to light many interesting and helpful findings is being continued during 1959.

Publicity Campaign to Accidents

The city took part in the nation-wide survey to prevent accidents in Prevent Home the home which was launched by the Ministry of Health and suggestee in circular 58/1958.

> The campaign was launched on 3rd November by the Lord Mayor as a meeting in the Town Hall. During the period of the campaign, mann instructive exhibitions were arranged by the North-Western Gas Board and M.A.N.W.E.B. in their respective departments and, in addition many large city stores co-operated by displaying appropriate posteril and placing special emphasis upon fireguards. Other interesting exhibit included types of non-inflammable materials suitable for children clothes. The Chief Fire Officer of the city was very helpful and arrangee for the showing of many short films on the "Guard that fire" theme i various city cinemas, and members of his staff also arranged ver effective displays in many shop windows loaned by the Liverpoon Savings Group. All clinic premises in the city set up small exhibition on the same topic. It is hoped that this effort will highlight the dange of home accidents at present. With the marked reduction in the amounof serious infectious disease of the young child today, the accident i the home is increasingly becoming a most serious factor responsible fd much loss of child life and subsequent ill health. As all these accident can be prevented, usually quite simply, it is most important that every thing is done to reduce this wasteful loss of life.

#### Ante-Natal Clinics

The total number of mothers attending ante-natal clinics has increased slightly although this is due entirely to the increase attendance at midwives ante-natal clinics rather than doctors attende ante-natal clinics. This very largely emphasises the increased co-operation PREFACE xiii

tion which is being shown between the health department and general practitioners in this respect, and more and more midwifery sessions have been arranged at the surgeries of doctors undertaking midwifery.

The total number of children under five years of age attending infant Infant welfare clinics fell slightly but it was felt that this reduction was probably Welfare Clinics associated with the large number of older children attending at the same time for poliomyelitis inoculations. Towards the latter part of the year, special sessions for poliomyelitis inoculations were organised and the infant welfare clinics were found to be attended by as many young mothers and children as previously.

There has been a marked increase in the attendance at 'toddlers clinics' and a total of 437 toddlers aged between two to five years attended compared with 252 during the previous year. This is a most satisfactory increase as a complete medical check up of a child just as they are nearing school age is of very real value.

Monthly meetings with the senior child psychiatrist continued to be Psychiatric neld in one of the local authority clinics and has been most valuable in Clinic solving many problem difficulties in young children.

A survey was undertaken in the period 1st January to 22nd Breast September and 7,272 mothers were visited by health visitors during Feeding his period. Full details are given of the survey. It is most interesting o record that there was very little difference found between those children born in hospitals and those born at home, the figures of breast feeding being 25.1 per cent and 24.7 per cent, respectively, at the age of six weeks.

Again, there was no difference between the incidence of breast abscesses in hospital and home delivered children or in the occurence of epsis in infants born in hospital and those born at home. There was, lowever, a very close co-relation between breast abscess and sepsis in he infant, for, in the case of hospital deliveries taking mothers who and breast abscesses, 23.4 per cent. of their infants had some sign of epsis.

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#### Day Nurseries

During June, the Sarah McArd Day Nursery was opened. This nursery has proved to be most successful. All the staff were transferred en bloc from Mill Road Hospital to the Sarah McArd Day Nursery and there has been a noticeable improvement in the general health of both the staff and the children following this move. This is probably to some extent connected with the ideal construction of this day nursery with its three play rooms opening out on to a play terrace which has formed a real suntrap.

At present there are twelve municipal day nurseries in the city giving a total number of 670 places. In addition, there are three private day nurseries at present accommodating a total of 152 children.

#### Home Nursing Equipment

The loan of home nursing equipment has continued to increase, and a total of 2,898 articles were loaned compared with 2,562 in 1957. Towards the end of the year the system whereby a small deposit was demanded from the person was changed as it was found that the depositionly held up the provision of this vital equipment and in itself was little safeguard.

#### Home Nursing

The Liverpool Queen Victoria District Nursing Association has continued to act on an agency basis and has provided home nursing in the city during the year. Agreement was reached for the City Council to take over full control of home nursing from 31st December, 1959. The City Council has indicated its intention to remain in membership with the Queens District Nursing Institute.

#### Home Help Service

The home help service has continued to expand and a total of 2,600 families were helped in 1958 compared with 2,385 in 1957. At the same time, the number of home helps employed increased from 168 to 184.

It is interesting to look back over the last 10 years of the home helps service, since it was first introduced. It will be seen that the emphasishas changed from providing home helps in the emergency illness and nursing mother category to the aged and chronic sick. For instance, in 1948 there were 639 emergency cases against 255 aged chronic sick, whilst in 1958 there were 900 emergency cases compared with 1,704 aged and chronic sick.

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Details are given of one or two interesting cases who have been reatly helped and there is no doubt that a home help provided to an ld person living on their own can be of great value and helps them o continue to live happily at home for a long period.

The health education undertaken by the city has continued. Requests Health ave been made from many organisations for talks on all types of Education ealth matters and in all instances a request for a speaker has been met. The subjects dealt with have been very wide in scope including naternity and child welfare, vaccination, immunisation, food poisoning, affectious disease control, poliomyelitis immunisation and slum clearnce. In addition, many talks and lectures on food hygiene and other ubjects have been given to employees of food handling firms within he city.

The Health Department once again presented a large health Liverpool ducation exhibit at the annual Liverpool Show in Wavertree in July. Show Exhibits covered 2 tents including a cinema tent and showed in articular the problems of cancer education (with special reference to arcinoma of the lung), the work of premature baby nurses within the ity and the problems of atmospheric pollution, particularly in relation the possible connection between it and carcinoma of the lung. There as also a small portion of the show dealing with recruitment of pluntary workers for the coming Mass X-ray Campaign.

1958 has been an eventful year for infectious diseases in the city Infectious specially as there was a case of smallpox landed from a ship in March Diseases hich later led to five further cases in Merseyside. In addition, there as an increase in the amount of paratyphoid fever present in the city.

Full details are given of the smallpox outbreak which followed the Smallpox inding of a seaman in the port of Liverpool on 19th March, from the s. "Circassia." It will be seen that no cases occurred directly from his seaman, but that a young boy living in Bebington was infected hilst the seaman was being nursed in the Smallpox Hospital at ebington. The exact way in which this child was infected is still inknown although it is thought that it may well have been air borne if fection. Subsequently, four further cases occurred amongst contacts the boy, and one of these cases, a woman who had been in contact with the child, made a series of journeys to the city for shopping

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purposes when suffering from a modified attack of smallpox. Vigorous counter measures were taken by the department including the vaccinating and following up of many possible contacts and throughout the whole of the Whitsun holiday all the medical officers of the department, together with thirty-five public health inspectors and thirty health visitors were busily engaged on these duties. During this period no fewer than 2,300 separate home visits were made. Close surveillance was continued in every case for twenty-one days following the visit of the smallpox case to Liverpool and fortunately no further case occurred.

In addition, all doctors of the city were informed immediately be letter of the possibility of smallpox and asked to report any suspicious illness to the health department. Consequently, a panel of four medical officers in the health department were kept busy by examining suspicious cases referred to by general medical practitioners. A meeting of local medical officers of health was also arranged so that the neighbouring authorities were completely brought into the picture.

This episode once again emphasised the special danger which large port such as Liverpool has to accept in relation to smallpox and the present vaccination rate among the population is far too low for there to be any complacency about it. As will be seen in the further section of this report, the episode did lead to a great increase in the number of vaccinations carried out during May and June, and during those months a total of 8,385 vaccinations were performed. Vaccinations was not recommended to the general public but it is hoped that the incident will convince parents of the importance of having your children vaccinated during their first year of life.

Paratyphoid fever In 1958, eighteen cases of paratyphoid fever were confirmed Liverpool. This is a large increase over the two cases discovered in 1957. Full details are given of a school outbreak which occurred Liverpool at this time. It will be seen that following stringent contact tracing throughout the school, other carriers of the organism were discovered and one of these was a young mother of one of the childrent This illustrates once again the great importance of chronic carriers the spread of this infection and shows how essential it is that contact tracing must be carried out as wide as possible so that every other

PREFACE XVII

source of infection can be discovered. The bringing to light of these unsuspected carriers played a significant part in preventing the spread of paratyphoid further throughout the community.

In addition, there is the first report of the investigations into the finding that paratyphoid fever organisms were present in the River Alt. These investigations, which were still proceeding, were brought to light following the discovery of a number of cases of paratyphoid in the Borough of Crosby. It is hoped to give a full report during next year's annual report of the subsequent action taken.

There was a most significant reduction in the number of cases of Whooping whooping cough reported. To get the fullest idea of this reduction it Cough is necessary to look at the figures over the past 6 years which are as follows.

1953... ... 4,740 cases 1954... ... 1,933 ,, 1955... ... 2,490 ,, 1956... ... 2,559 ,, 1957... ... 1,726 ,, 1958... ... 474 ...

It will be seen that the reduction has been most remarkable and it seems likely that this spectacular reduction must be connected with the increased number of parents who are having their young babies immunised against whooping cough.

This reduction is likely to be followed by marked improvements in the health of children as it is not always realised that a certain proportion of those young children who recover from whooping cough are left with chronic illnesses of the chest, including bronchitis and bronchiectasis. This would seem, therefore, to be the time to heighten the attack on this disease and parents are urgently asked to ensure that all their young children are protected as early as possible against whooping cough. Immunisation should be started in the third and jourth months of life.

It is most pleasing to report a marked reduction in the number of Poliomyelitis new cases of poliomyelitis confirmed within the city. There were sixteen asses in 1958 compared with thirty-five in the previous year. Once

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again, the full extent of this reduction is best seen by comparing the figures of the past six years which are as follows:—

1953	 38 c	onfirmed	cases
1954	 35	"	,,
1955	 46	,,	"
1956	 32	"	92
1957	 32	99	>>
1958	 16	97	"

It will be seen that in none of the last six years has there been asset few cases as in 1958, and the reduction has been the lowest figure for these past five years. Although it is early to be certain of these trends, this finding is most encouraging and it must be very largely related to the immunisation campaigns which are at present being carried out against this disease. It is very important that this immunisation be continued and that every person under the age of 25 years be immunised against this disease.

#### Food Poisoning

The amount of food poisoning traced within the city remained very similar to the year before, being 131 cases. This is a very satisfactory finding as in 1957 there had been a marked reduction over the previous two years. Full details are given of the outbreaks and it is most interesting to see that in addition to the 88 confirmed cases of salmonella infection discovered, contact tracing led to the bringing to light of a further 78 excretors who had no symptoms. The discovery of these carriers means that preventive precautions can be taken immediately with them and, therefore, greatly reduces the possibility of them spreading infection to others.

Dysentery

There was an increase in the number of cases of dysentery discovered during the year, due mainly to a fairly large-scale outbreak which was present in the city from the end of 1957 to the middle of March, 1958 Altogether 931 cases of confirmed bacilliary dysentery were reported including 924 cases of sonne dysentery.

#### Radiation Monitoring

This year for the first time there is a small section on radiation hazards and radiation monitoring given in the full text. Following the demonstration recently of the possible dangers of radioactive fall-out, arrangements have been made for the department to carry outests to ensure that the levels of radioactivity in water and food are

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periodically measured. Full details are given of the results in relation to water and it will be seen that although the level of radiation has varied and is appreciably higher in the upland surface waters than in deep well waters, in no instance has the radiation, which has been demonstrated, been of a very high level. In every case, it has been well below the safety limits prescribed by the Medical Research Council for River Thames water and this standard itself is at least one-quarter of the International limit. This means that the water supply of Liverpool is absolutely safe from the point of view of radioactivity.

It has been recognised that it will be necessary to carry out an Training of extensive training scheme for staff of the Health Department who will, Staff in Radiation n future, be concerned with measuring possible increases of radiation, Hazards and during the year steps were taken to start training senior members of the department in radiation hazards. Three members attended a full-time course on radiation safety and hazards arranged by the Liverpool College of Technology and this is one of the pioneer courses at present being run in the country. In addition, a doctor was sent on a course arranged by the Society of Medical Officers of Health earlier n the year. By the steady training of such members of the staff it is noped, within a relatively short space of time, that it will be possible o build up a nucleus of trained personnel who will be able to deal with hese problems in the future.

There has been a substantial increase in the number of immunisations Immunisation and vaccinations which have been carried out within the city in relation o all the principal diseases that are capable of being prevented in this vay.

During 1958, a total of 53,659 children up to the age of 15 years Poliomyelitis ompleted a course of inoculation against poliomyelitis. This was by Immunisation ar the largest number ever inoculated and compares with a figure of 0,803 children in 1957. Of these children protected, 42,191 (78.6 per ent) were inoculated at the Health Department clinics and 11,468 21.4 per cent) were protected by general practitioners. In addition, ,178 adults were protected, comprising 1,398 expectant mothers and ,780 persons in the age group 15-25 years. In addition to this, 25,600 ooster doses (third inoculations) were given.

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It is estimated that since the scheme started in 1956 a total of approximately 83,000 young persons under the age of 15 have been protected, which is estimated at roughly 39 per cent of this age group.

Towards the end of the year, poliomyelitis vaccine became much more readily available and there are now supplies to cover all persons under 25 years of age who wish to have an inoculation without delay. It is particularly important that everything should be done if possible to ensure that as many of the 15/25 age group should receive immunisation. During the year, a special lunch-hour clinic, from 12 noon to 2 p.m. was opened on Mondays to Fridays inclusive for young persons employed in the city, and any young person wishing to receive an inoculation can come along to the Health Department. The management of 5,000 industrial firms throughout the city, together with all general practitioners have been notified of these facilities, and by the end of the year over 1,200 young persons had taken advantage of this. Arrangemens were also made with the University to offer poliomyelitis vaccination facilities to all students.

# Diphtheria

It is most satisfactory to report a further increase in the number of Immunisation children immunised against diphtheria. No fewer than 14,938 persons received a primary inoculation against diphtheria and this figure compares with 11,200 in 1957. This increase follows the encouraging one of last year and is much larger in effect, being an increase of 3,738. It is interesting to consider the possible reasons for this increase. It seems likely that the most important factor was the introduction of combined vaccine on a much larger scale during the year. Combined vaccine is vaccine in which diphtheria and whooping cough inoculations are given together and has the effect of reducing the number of inoculations by half. If the experience of 1958 is any guide, it seems clear that this change has been a most satisfactory one, for it is probabled that the main reason for the increase is that it is now much easier for a mother to get immunisation for her child than before, for she only has to attend on two separate occasions compared with four previously. Obviously if the number of visits can be cut down the chance of the parents forgetting or failing to bring the child again is reduced, and this year's figures are further evidence that this has probably been the case. It is hardly necessary to add how encouraging this increase is.

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an increase which has been seen both in regard to the number of people immunised at clinics and by family doctors, particularly as so much nation-wide publicity has been given to other immunisation procedures, especially poliomyelitis.

The number of infants immunised against whooping cough again Whooping substantially rose for there were 12,832 children immunised in this Cough scheme compared with 9,165 in the previous year. This is a most satisfactory and encouraging result and reference is made in the infectious disease part of the report to a remarkable fall in the number of cases of whooping cough reported. This fall is likely to be mainly due to the larger number of children now protected from this dangerous disease. It is important to realise that when whooping cough cases are reduced the advantage is much greater than apparent at first for a severe attack of whooping cough, particularly in the very young child, will produce a great deal of chronic ill-health resulting from chest conditions.

Immunisation

As might well have been expected, there was a remarkable increase in Smallpox the number of vaccinations carried out. This obviously was connected Vaccination with the arrival of smallpox in the port of Liverpool in March, and during May and June a total of 8,385 vaccinations were carried out. The number of young children under 1 year of age vaccinated varied very little, being 8,832 compared with 8,250 over the previous year. This number is a disappointing one as it might well have been expected that parents would have taken the lesson of the smallpox outbreak to heart and would have brought their children forward more readily for vaccination. It is impossible to over emphasise the importance in a seaport such as Liverpool of having a high number of young children vaccinated against smallpox. Once a child has been primarily vaccinated then subsequent re-vaccination is a relatively simple thing and a child is made much safer against possible contact with smallpox at a later date.

At the time of writing this report, once again smallpox is present within the city and all parents are most strongly urged and advised to ensure that their children are immunised as early as possible in life.

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Tuberculosis

It is most satisfactory to be able to report a substantial decrease in the number of new cases of tuberculosis notified during the year. In 1958 there were 795 new cases of respiratory tuberculosis compared with 1,021 in 1957. This spectacular reduction is most satisfactory and represents the first substantial fall in the number of new cases of tuberculosiss since 1955.

Another most encouraging feature of the year's work in the tuberculosis field has been the increased number of contacts who have been traced. Of all new cases of tuberculosis discovered in the city during the year, 43 per cent produced a history of contact with another discovered case, compared with 28 per cent in 1957. This great increase indicates a much tighter control over the disease and suggests that the reservoir of unknown cases is becoming substantially reduced. This is especially encouraging just before the city reached the full benefit of the recent most successful Mass X-ray Campaign.

Pattern of Tuberculosis Within the City

The pattern of distribution of tuberculosis within the city is very clearly shown in the two coloured maps (a) and (b) opposite page 666 in the full text of the report. Study of these two maps producess very interesting features. The first map (a) shows the total number of new cases of tuberculosis discovered during the year, and map (b) the total incidence of known cases, including new cases, throughout the city. It will be seen that the two maps do not correspond in their incidence. Certain areas of the city show a particularly high number of cases of tuberculosis living there, particularly Gillmoss and Speke. The reason for this is that many ex-patients with tuberculosis are re-housed to these areas of the city. It is, however, most re-assuring to find from map (a) that this re-housing of cases has not resulted in a corresponding increase in the new cases occurring for it will be seen that both Gillmoss and Speke are in the middle group in relation to new cases and correspond with the neighbouring wards, Dovecot, Fazakerley and St. Mary's respectively, whereas the largest number of new cases of tuberculosis still occur in the overcrowded central areas of the city, in the wards Melrose, Westminster, Vauxhall, Central, Abercromby, St. James and Granby.

These statistics clearly show that the policy of rehousing ex-

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disease in that area and this is particularly re-assuring when it is known that many cases are re-housed on the grounds of tuberculosis.

The figures of new cases of tuberculosis showed a further marked Age and Sex increase in the number of male patients found compared with the Incidence of New Cases females, for the number of males rose during the year from 54 per cent to 59 per cent and the number of females fell correspondingly from 46 per cent to 41 per cent. The actual age incidence of the disease is given in the graph attached to page 67 in the general report and shows that the maximum age incidence in men occurred in two peaks, one in middle life and another between 50-60 years of age, whilst that of women occurs within the age group 20 to 24 years. These trends which have been recognised in many parts of the country underline the importance of concentrating investigations if possible on the male population, particularly the male population over the age of 30 years.

The total number of visits is recorded as 35,670 compared with 42,063 After-care in the previous year, but it is difficult to compare these figures fairly as Tuberculosis the method of counting contact visits has been altered. In future a Visitors contact visit is only counted as one for the whole family and not one for each member of the family. However, there has been a reduction in the number of visits paid and this has meant that more time has been able to be spent by the tuberculosis visitors in carrying out their visits and this has led to increased advantages.

Full details are given of the help which has been given to tuberculosis patients in relation to rehousing urgently those cases in which there is an acute danger of spread of infection particularly to children. There has been a marked reduction in the number of such applicants during the year from 941 in 1957 to 712, which is encouraging as showing definite signs of improvement in relation to tuberculosis rehousing in the city generally.

The scheme for vaccinating school children has continued to operate B.C.G. very satisfactorily throughout the year and it is most gratifying to be Vaccination able to report that the percentage of acceptors has risen from 71.3 per cent in 1957 to 75.3 per cent in 1958.

The number of mantoux positive children found at the age of 13 years has dropped from 21.5 per cent to 19.2 per cent in 1958. This is further evidence of the reduction within the city of the amount of tuberculosis.

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Action taken Act, 1956.

Full details are given of the four cases which were admitted to under Section hospital on Magistrates Orders during 1958, as well as a further report Public Health on the original case which was admitted. It is most interesting to see in this initial case that within a week of his final discharge, the patient had applied to the department of the chest clinic for readmission to hospital. In the other four cases, in only one of them was an extension of the Order required and the three other cases had changed their views and seemed now thankful that they had been forced to enter hospital and continued to co-operate very well in accepting treatment. There is no doubt that the exercise of this Section of the Public Health Act has been most valuable.

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Mass X-Ray Campaign, 1959

A full report of the Mass X-ray Campaign, 1959, will be given in next year's annual report as the campaign itself was held in that year, and the full details of the findings will then be available. There are, however, details given in the text of the annual report of the initial stages of the campaign which were undertaken during 1958.

These included the selection of the sites for the X-ray centres which proved to be a very difficult job as many of the conditions which were necessary were impossible to be met by local organisations. However, by Christmas this had been finally arranged. Publicity arrangements for the campaign itself began on the 1st October, with a series of important central meetings in the Town Hall, presided over by the Lord Mayor and addressed by prominent personalities, the audiences being representatives of the city, the medical profession, clergy, known voluntary agencies, trade, industry and commerce and trade unions. At the same time, a publicity committee was formed including representatives of the press, B.B.C., I.T.V., and industry. The main task undertaken during November and December, 1958, was the recruitment and organisation of voluntary workers. These were recruited on a ward basis and in all it was estimated that 11,000 were needed to enable each home to be visited at least five times by one visitor during the period of the campaign. A publicity office was opened in each ward at the beginning of November, and during the second, third and fourth week of that month, public meetings were held in each ward, which were addressed either by the Medical Officer of Health or his Deputy. In all instances these meetings were presided over by the Alderman or Councillors of the ward. Following these meetings, each ward formed a

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Committee and these Committees met individually later that month to discuss ways and means of recruiting volunteers and for coping with other local problems. Each ward was allocated a health visitor and a public health inspector and the recruitment of the voluntary workers became the prime responsibility of the former. By Chistmas, due to the untiring efforts of many members of the staff, particularly the health visitors, over 10,000 voluntary workers had been recruited and finally the figure of voluntary workers exceeded 13,000. There is no doubt that the foundation for the success of the survey was laid in this vital period of the campaign, from 1st October to 31st December, 1958.

The Mental Health section of this year's Annual Report is divided Mental into two parts. Firstly, a review of the new legislation connected with Health the Bill at present before Parliament, and secondly a report of the work for 1958.

Towards the end of 1958 the City Council finally decided to allocate Training to the Health Committee part of the former Fazakerley Cottage Homes for adaptation into training centres and later hostels for mentally handicapped persons. Progress on this has been slower than anticipated. Once the new centres are in operation at Fazakerley, it is likely that they will meet all the training commitments of the city for some years to come and this will be the case even bearing in mind that the new legislation will entail compulsory attendance at centres of certain mentally handicapped persons at present not attending.

It is pleasant to report that there has been a further improvement in Institutional the waiting list for hospital accommodation for mentally defective Care persons. At the end of 1957 there were 56 persons waiting in the top urgency. This figure had been further reduced to 39 by the end of 1958. Even this smaller number still contains very many extremely urgent cases whose retention at home is causing great hardship both to the family and other persons living in the neighbourhood.

The number of persons helped by short term care has steadily Short Term increased during the year and a total of 56 patients were admitted to Care Orchard Dene for a total stay of 131 weeks in comparison to 44 patients for 109 weeks in the previous year, and in the Regional Hospital Board hospitals the figures also improved to 55 patients for 198 weeks compared with 44 for 184 weeks in 1957.

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Increased Staffing The introduction of the new legislation on mental illness and mental deficiency emphasises the importance of after care work undertaken by the local authority and to enable the authority to meet the increased work, arrangements were made towards the end of the year for the staff of the mental health section to be strengthened by the establishment of 8 new posts of visiting officers, in addition to the 18 already held. At the same time, arrangements were made for the officers to be given an "essential user" car allowance to help them in their work. In addition, the Health Committee have arranged for 3 officers to be seconded to refresher courses run during the year by the National Association for Mental Health.

Ambulance Service The number of patients carried by the Ambulance Service in 1958; increased. It will be remembered that in 1957 there was a small decrease; of 0.3 per cent in the number moved compared with the previous year, but in 1958 the number moved was 217,979 which represents an increase; of 2.3 per cent or 4,948 patients.

It is interesting to note that although the ambulance vehicles travelled an additional 992 miles they used 3,607 gallons less fuel than previously. This result is almost entirely due to the new ambulances being fitted with diesel engines compared with petrol engines. Although the better quality oil costs a little more, the records show that the approximates saving in fuel was £650.

Co-operation with Neighbouring Local Authorities The arrangements referred to for the first time last year, whereby the ambulances of all the North Wales Authorities visiting the city always report to the Ambulance Control in Liverpool and are prepared to taker back patients even to neighbouring areas, have worked extremely well and have led to much economy and have cut down the number of longs journeys undertaken by Liverpool ambulances unnecessarily.

The fleet of sitting case ambulances have been able to cope with the large number of patients receiving out-patient treatment. As an experiment, a Shift Leader has been placed at a large hospital from 10 a.m. to 5.30 p.m. each day. The requests for transport have been dealt with by this officer and all ambulance crews report to him. Results have shown a very marked improvement in the speed of patients returning thome and the turn round has been speeded up very much by increased co-operation.

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Reference is made in this year's annual report for the first time to a Occupational new service, that of domiciliary occupational therapy. This was started Therapy in March, 1958, with the appointment of a full-time senior occupational therapist in the department. It is intended eventually that occupational therapy shall cover physically handicapped, mental and tuberculous patients, although during the first year it has been found necessary to concentrate more and more on the very severely physically handicapped people. The introduction of this service has been a great step forward in the domiciliary services of the city, and particular note should be taken of the interesting account of the first year's work of the Senior Occupational Therapist in the body of the annual report on page 10. Details are given of some of the interesting cases treated. In all, this service was taken to the homes of sixty patients during the year. It is interesting to read the account of two patients who have been bed-ridden and confined to their homes for many years and to hear how quickly and satisfactorily they have responded to the visits of the occupational therapist. There is no doubt that the first year of this service has shown the value of rehabilitation of these persons who have lost touch with ordinary living conditions due to chronic and long standing illness.

Towards the end of the year, the Health Committee decided to increase the staff of this section as it had been such a conspicuous success by the appointment of two further assistant occupational therapists early in 1959. It is hoped that the service will be developed even further and that centres will be opened where patients can receive advanced treatments which are not possible at home. Such a service has already shown in the first few months of its operation, that it can bring to life severely handicapped people who have felt that the impact of long standing chronic illness had made their lives a misery. By rehabilitating these persons back to life new hope is given to them, and the benefits which will be derived will be enormous.

Reference was made in last year's annual report to the fall in the Welfare waiting lists for old people awaiting admission, for in 1957 the waiting Service list fell to 90 at the end of the year. This sudden fall was due to the opening during that year of three new hostels and it was therefore not surprising to report that there has been an increase in the waiting list during 1958. This stood at the figure of 232 at the end of the year.

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Considerable concern was expressed by the Aged Persons Sub-Committee at the end of the year in the way in which the waiting list was so rapidly increasing, and the Committee decided to go ahead rapidly with the provision of new accommodation.

One of the reasons for the present waiting list is the current upgrading at Westminster House which can only be done with the decanting of numbers of old people from that establishment which was in the past very overcrowded by modern standards.

Owing to the great concern in the increased number on the waiting list, the Committee decided, at the end of the year, to support a pilot scheme which is designed to help old people in need of accommodation to find proper living accommodation in private households. This has been referred to as a "Boarding-out Scheme" for the want of a better phrase but it is important to realise that it is more along the lines of a scheme planned to help people find suitable accommodation.

Up-grading at Westminster House

The programme of up-grading in Westminster House was resumed during the year when the necessary loan sanctions were forthcoming in November, to start the work of adaptation of House 12. This adaptation, which in many respects will be the most difficult undertaken in Westminster House, will undoubtedly remove what has been some of the worst accommodation in that Establishment, and should provide good accommodation for roughly 75 old people in the future. Experience during the year has emphasised the value of the new up-grading at Westminster House and on many occasions the residents and their visitors have commented on the great improvements which have been effected in these up-graded parts of Westminster House.

During the year an additional lift was provided in the main building and this will go a long way to help make the running of this hostel much smoother.

Hostels

Once again it is very pleasing to report that due to the continued of generosity of the Merseyside Hospitals Council, it has been possible to instal in the hostels new television receivers, modern radio sets and new pianos, where they are required. These amenities have been very keenly appreciated by the residents. The broadcast line which has also been provided to New Grafton House continued to give great pleasure to the residents there.

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Loan sanction has been received for the construction of a lift at "Lismore" and it is hoped that a start will be made on this project early in 1959. When this is completed it would have the effect of providing the equivalent of ground floor accommodation at this hostel.

During the year, the staff of the hostels was considerably strengthened by the engagement of further female attendants, some of whom have expressed their willingness to reside at the hostels during times when the matrons or assistant matrons are away on annual or sick leave. At a time when it is so difficult to get residential staff such an arrangement will be of very great value.

During the summer arrangements were completed whereby every new Chest X-Ray entrant into the residential accommodation maintained by the City of Residents Council had a chest X-ray before admission. By this means, at least three active cases of pulmonary tuberculosis were discovered which otherwise would not have been found, as well as further cases requiring attention. There is no doubt that this routine preventative precaution will be of great benefit to all the old people living in the accommodation and will reduce the risk of infection being introduced into any of the residential accommodation.

This problem has remained fairly constant throughout the year Temporary although at one time the number of persons resident in the accommodation tion fell to 19—a new low record. However, the numbers shortly rose again and the approximate daily average throughout the year was 63, very similar to the year before. The success of running the temporary accommodation has continued to depend very much on the individual control which the Liaison Sub-Committee of the Health Committee continued to exercise over this problem, and particularly on ensuring that people admitted to temporary accommodation use it only for a very short time. Some idea of the turnover involved is given when it is realised that, during the year, the total number of persons who were admitted to the accommodation was 834.

Once again the annual report gives details of some of the more Domiciliary interesting cases which have been dealt with by the welfare visitors in Welfare Service the course of their ordinary duty during the year.

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River View Rest Centre

This venture which was started during the Coronation year, has become further established as a most successful part of the Pier Head life of Liverpool. It is most satisfactory to see the number of old people who use this centre and in summertime there are many days on which the number is in the region of 400-500. A further similar centre is planned in the near future in the Sheil Park area. It is hoped that this centre will be opened during 1959.

Removal to Suitable Premises of Persons in Need of Care

Thirteen persons were removed under Section 47 of the National Assistance Act, 1948, during the year. This is an increase on the 6 removed last year, but is still considerably below the figure of 18 and Attention removed in 1956.

Registration of Disabled Persons and Old Persons Homes

A careful watch continued to be maintained on the 26 homes registered within the city in this category. 17 of them are administered by voluntary bodies and the remainder by private individuals. Conditions within these homes were found in all instances to be satisfactory.

Mobile Meals

It has long been recognised since mobile meals were started many years ago in this city that this domiciliary service, provided by the local authority, has helped considerably in preventing elderly people from deteriorating to the stage when they need residential care and consideration. During the year, the Health Committee decided to extend the present service which has, since its inception, been based on Westminster House. The one-mile limit was removed but it was realised that it would be necessary to open further centres from which meals could be collected if the service was to be extended to the whole of the city. Plans were therefore made to utilise the kitchen services at New Grafton House in the south end of the city, and by the end of the year facilities at New Grafton House were ready to provide the meals necessary. However, difficulties were met by the Women's Voluntary Service in providing an extra van to cover this service, and the Committee decided that it would therefore be better if they provided the extra van themselves. This was done and it is hoped to start this new service early in 1959.

Throughout the year, however, there has been an increased interest in the mobile meals service which is shown by the fact that in 1957 on an average, 68 meals were provided three times a week to old people, but that this had risen by the end of 1958 to an average of 100 meals on each of three days.

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When new hostels are being planned for the future, it is hoped that it will be possible for the kitchen and its equipment to be arranged in such a way to provide an additional supply of meals to elderly people in that neighbourhood, and also a garage for the delivery van. This, in particular, would be a very valuable extension to the new hostel, plans of which are being considered in the Leyfield Road area.

The statistics of the number of people examined for blindness and Blind Welfare the number found to be blind has shown some interesting and significant changes during the past two years. For many years the numbers examined and those found to be blind were pretty constant-in the region of roughly 210 people examined a year for blindness out of which 150 were found to be blind. In 1957 this figure fell to 185 examined and 125 found to be blind, and in 1958 it fell dramatically further to 130 examined and 94 found to be blind.

Reference was made in last year's annual report to the favourable Employment trend which had been present for some years towards more and more of Blind blind people being employed in ordinary industry with a corresponding reduction in numbers in sheltered employment. This tendency has continued throughout the year and at present a total of 108 persons are employed in ordinary industry compared with 77 in blind employment. This most satisfactory change started in 1953 when the Health Committee emphasised the need for more blind people to be employed in open ndustry and has been due in most cases to the part played by the Blind Placement Officer of the Royal National Institute of the Blind, who has been so successful in the past four years in increasing the numbers of blind people employed in open industry. In 1958 the figures of 108 blind people and old people in open industry and 77 in sheltered mployment compare very favourably with the figures of 1957, which vere 94 in open industry and 97 in sheltered employment.

Full details have been given in the report of the assistance which the Sir Robert City Council has increasingly given to the Sir Robert Jones Workshops Workshops ince 1954. At present the total annual payment by the City Council to he workshops is just over £5,000. The number of handicapped persons mployed in the workshops has continued to be just under 50, the aajority of these being employed in the book-binding department.

During the year, a further investigation was carried out on the

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workshops and additional payments were made by the City Council in respect of increased salaries and wages and the employment of an additional supervisor in the book-binding department. It would be difficult to over-emphasise the value of these workshops which play as considerable part, both in the rehabilitation and employment of handicapped people. One of the particular difficulties of these workshops is connected with the rehabilitation work which they undertake, for very often their financial problems are increased by their best workers being rehabilitated back, via the workshops, to ordinary employment. Although this trend means that the workshops lose some of their best employees from time to time such a move should always be looked upon as an example of supreme success in rehabilitation of the handicapped person.

Deaf and Dumb Welfare There were about 600 Liverpool residents on the register of deaf and dumb persons at the end of the year and their welfare has continued to be carried out most satisfactorily by the Liverpool Deaf and Dumb Benevolent Society and the Catholic Deaf and Dumb Society of Stat Vincent de Paul. The grant which, in the past, has been £3 per head, was increased towards the end of 1958 to £5 per head, but this will only take effect during the financial year 1959/60. In October, the City Council promoted the first annual meeting of the five constituent local authority representatives and entertained the representatives of other constituent authorities to a luncheon after their business meeting in the morning. Following the luncheon, a provisional meeting was arranged at which Mr. George Robinson, the Superintendent of the Liverpool Adult Deaf and Dumb Benevolent Society gave a most interesting address on "Some works in the field of the welfare of the deaf and dumb".

**Epileptics** 

Reference is made in last year's annual report to the establishment during that year of a Merseyside Epileptics Association. It is most satisfactory to report that this body has continued to thrive throughout the year and now holds an important place in the welfare services for epileptics in the city. Accommodation continues to be provided free of cost by the city for this Association in Walton Village and many interested individuals, including representatives of local authorities, hospitals, and the Ministry of Labour attend. A Committee to enquire into local welfare has been set up and the Ciy Council has been

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represented on this Committee by the Deputy Medical Officer of Health and the Chief Welfare Officer.

During the year, there was an increase in the number of epileptic persons accommodated in special accommodation, at the cost of the local authority, and at present the City Council is maintaining 79 persons in establishments administered mostly by other authorities or voluntary bodies for epilepsy.

The question of accommodating handicapped people has been a difficult one for many years in the city and it is hoped that this will be solved when the new handicapped persons hostel is completed in the Sefton Park area. It will then be possible to provide, within Liverpool, accommodation for those few young handicapped people who require this provision.

For the first time, reference is made to medical examinations of Medical Corporation employees which were carried out in the department. These Examinations were started at the beginning of March, 1958, and consist of medical examinations of three classes of persons: (1) for entering the Corporation service, (2) for entering the superannuation scheme, and (3) for reason of extended medical sickness. 1,532 persons were medically examined under these categories and the general results are given in the ext of the report.

5,231 general medical cases were dealt with in the housing points Housing section. This is an increase of 1,028 over the figure of 1957. In addition, Points 67 pulmonary and 45 non-pulmonary cases of tuberculosis applied for assistance in rehousing and this is a reduction of 195 on the pulmonary eases and 26 on the non-pulmonary case figures for 1957. This reduction s very largely attributed to the smaller number of new cases of uberculosis discovered during 1958 compared with 1957. Within the eport are given six case histories in detail illustrating the sort of pecial work which this section is carrying out, particularly in relation handicapped persons. It will be seen that in many instances it is ossible to arrange an early transfer or to re-house where this is ecessary on medical grounds.

During the year, the work of the public health inspectorial section Environas continued to increase. Together, with many other sections of the mental spartment, the public health inspectors were particularly concerned Control

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with the examination of male contacts from the smallpox incident in May of this year. Much of this investigation had to be carried on outside normal working hours as many of the contacts of the patient! were employed in a factory and could only be visited in the evening. This investigation continued over the two weeks, including the Whitsun holiday.

Training Scheme for Assistant and Trainee Public Health Inspectors

The training scheme has continued to operate most successfully during the year and eleven assistant inspectors completed their training and obtained the Certificate of the Public Health Inspectors' Education Board, qualifying them as full public health inspectors. In addition. fifteen qualified inspectors obtained the Meat and Other Foods Certificate of the Royal Society of Health, and this means that out of our fully qualified inspectors 28 are now qualified to carry out meat! inspection at the Abattoir and markets.

Work Carried

Use of the special powers given to the Corporation under the out in Default Liverpool Corporation Act, 1955, to enable the Corporation to undertake work which landlords have failed to carry out, and to recover the cost! by collecting rents has continued throughout the year. In this way repairs have been carried out on 260 dwellinghouses involving and expenditure of approximately £2,000, and all this expenditure will eventually and subsequently be recovered. In addition, 163 drains were cleared by the local authority in default of the owners, as laid down in Section 19 of the Liverpool Corporation Act, 1955, which authorises the Corporation to clear drains after giving 48 hours notice of their intention to do so.

Infectious Disease Enquiries including Smallpox

There was a substantial increase in the number of infectious disease enquiries carried out by the public health inspectorial staff, for a total of 3,217 enquiries were carried out compared with 2,129 in the previous year, and, in addition, the number of enquiries regarding contacts of infectious disease were almost doubled, being 10,244 compared with 5,354 in 1957. Much of this increase was due to the extra work entailed by the smallpox outbreak in May.

In relation to investigation of food poisoning, there was again a considerable increase in the amount of follow-up work undertaken by the public health inspectors, for in 1958, 12,082 specimens were collected compared with 6,422 in the previous year.

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In the past, many references have been made to the drive for slum Housing and clearance which has been one of the characteristics of the work of the Clearance Health Department during the last 5 years. This work has continued and, during 1958, a total of 1,398 dwellings were surveyed for their suitability for representation in clearance areas. Much of the difficulties in relation to slum clearance still are related to the difficulties of rehousing the residents already living in clearance areas, and the speed of the drive is very largely dictated by the speed of provision of new housing.

Reference was made for the first time last year to the dangers of Dangers of purchasing sub-standard property which subsequently may be a great sub-standard financial embarrassment to the purchasers. Active steps have been taken Property by the Council to protect the interests of persons proposing to purchase such premises and during the year many thousands of enquiries have been made by people intending to buy property which has been found upon further investigation to be sub-standard and on the register compiled from the Housing Survey of 1954.

During the year, the Rent Act, 1957, continued to result in a very Rent Act, large number of applications and enquiries at the department for 1957 advice and for certificates of disrepair, and for certificates as to the remedying of defects enumerated under undertakings given by landlords. Many inspectors have been engaged full time on the subsequent inspection and visits to properties concerning these matters. A total of 17,391 visits have been made to properties and this has resulted in a very large number of properties being restored to a reasonable standard of repair. In the substance of the report full details of the work of the department concerning the Rent Act are given, including details of the various certificates which have been issued during the year.

The majority of applications for improvement grants made during Improvements the year continue to be made by owner/occupiers and 309 inspections Grant were carried out following applications received, and grants were approved in respect of 136 dwellings.

Under the provisions of the Housing Finance Provisions Act (1958) Loans on ocal authorities are able to make a loan on mortgage to a person buying Mortgage

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a dwellinghouse. Local authorities must be satisfied that such property is in all effects fit for human habitation. All such premises are inspected when the application is received and a schedule of defects submitted to the prospective purchaser of the property. These defects have to bee remedied before the loan on mortgage is allowed, thus ensuring that the dwellinghouse is completely fit in all respects for human habitation. During 1958, 694 houses were inspected for this purpose and 136 applications for such loans were approved.

#### Factory Inspection

Full details of the increased factory inspection carried out by the department during the year are given in the text of the annual report. It is pleasing to be able to pay a tribute to the large amount of co-operation which exists with Her Majesty's Inspector of Factories, and, during the year, when special problems in factories have arisen, joint visits by the factory inspector and the public health inspector have been made, very often with very beneficial results.

#### Industrial Nuisances-Noise

Complaints of noise coming from industrial premises are increasing. This type of industrial nuisance varies in character from the monotons ous low humming noise of machinery to rhythmical beating caused by the use of certain heavy equipment. Investigations of this type are difficult as it is necessary to have prolonged observations on the nuisance, for the time factor is important in determining whether the noise is excessive and constitutes a nuisance to health.

#### Various Offensive Trades

Effluvia from Complaints have been received, especially during the summer months of smells from certain premises where offensive trades are carried on There has, however, been a considerable improvement due to the installation of fume washing plants and the better understanding bil the operators of the machinery in use. The processing of condemnemeat on the day it is received has helped to reduce these complaints and the by-product plant at the Stanley Abattoir has operated mos satisfactorily and has not led to a nuisance in this respect.

#### Offices and Work Places

Systematic routine inspections have been continued in respect offices and work places despite the limited powers which are still available. Full details are given of the difficulties which are met wit particular regard to small offices. These include such things as lighting ventilation and heating, as well as the general cleanliness of the office In one instance, where it was felt the lighting of the office was

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insufficient, a public health inspector was able, by the use of a photoelectric light meter, to demonstrate to the office manager that the standard of lighting at desk level was really insufficient. As soon as it was possible to show by this way that a defect existed the management accepted this and improved lighting conditions in the office.

It must, however, be stressed that it is difficult to insist upon many of the necessary improvements as there are no legal powers at present to insist that these be carried out, and there are still many people working in offices in the city under conditions which are far from satisfactory. Although persuasive efforts are on occasions successful it is doubtful whether it would be possible to improve all these conditions until some new legislative powers are available to local authorities.

The brewery companies of the city have continued with many altera- Hygiene in tions required by the department under the Food and Hygiene Regula-Premises tions. Washing facilities for employees, suitable locker and cloak-room accommodation for outdoor clothing and first-aid equipment have been provided in nearly all the licensed premises in the city. Health education plays a very important part in these routine inspections, for it is not unusual to find that although the management may provide the necessary equipment it has not been used properly by employees. During the year, 914 visits were made to licensed premises, and 311 written infringements and 160 verbal infringements were reported.

Full details are given in the text of the report of the work of the Administradepartment in this sphere. One unsatisfactory provision of the Shops Act, 1950 Act, 1950, in respect of closing hours and application, has been highlighted in the High Court, particularly in relation to mobile shops. Two previous Divisional Court decisions that mobile shops did not come within the scope of the Shops Act have now been re-affirmed and this means that mobile shops are completely outside the jurisdiction of the Shops Act, 1950, in relation to closing hours. This naturally has increased the disquiet already felt by shopkeepers in regard to this anomalous position.

The provision of Section 42 of the Liverpool Corporation Act in Hairdressers respect of hairdressers has continued to be of value during the year. and Barbers 36 new registrations were recorded and 324 inspections made. As a

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result of these inspections warning letters were sent in respect of 12 premises, mainly dealing with minor matters. This is a considerable improvement on the previous year and there seems to be no doubt that this registration of hairdressers and barbers has been of very real value to the city without interfering unnecessarily with the trade.

#### Atmospheric Pollution

There has been a great increase in the work of the department for, on 1st June, 1958, the remaining sections of the Clean Air Act, 1956, came into force. Full details of the powers and work of the local authority in respect of atmospheric pollution in relation to the Clean Air Act are given in the general text of this report. It will be seen that these include the prior approval in smoke control areas of new equipment.

Some 5,968 visits were made to premises to investigate complaints and to advise upon technical problems and effect improvements wherever possible. It was only necessary to issue 18 abatement notices compared with 47 issued in 1957 and 100 in 1956. This is an indication of the general improvement present throughout the city and shows the greater awareness, particularly to the necessity for keeping atmospherice pollution down to a minimum.

The river has still shown itself to be a difficult problem, for it is very often difficult to be sure which ship has been responsible for increased smoke. At least 556 observations were made on shipping in the Mersey and as a consequence 36 warning letters were sent to owners. Tugs, dredgers and hoppers which are used daily on the river are generally not suitable to conversion to oil-firing, and therefore it will only be by the provision of new vessels that the problem will eventually be completely solved.

#### Domestic Smoke Emission

The domestic smoke problem is very considerable as there are 204,486 residential premises in the city and of these at least 90,000 are still burning coal in old-fashioned open grates. These domestic coal fires in such types of houses cannot be converted to smokeless combustion without considerable major adaptations, and conversions are likely to remain a constant source of problem for some time.

#### Surveys

A further seven smoke control areas have been undertaken and presented for consideration by the Minister of Housing and Local

PREFACE XXXIX

Government. These areas comprise some 4,512 premises covering 320 acres and are situated in the central part of the city. When these orders are confirmed, a large part of the centre of the city will in fact be all contained in one large smoke control area.

A preliminary survey on the largest smoke control area in the country situated in the south centre of the city was commenced during the year. The area surveyed includes the following wards, Aigburth, Allerton, Childwall, Woolton, St. Mary's and Speke, and it comprises some 9,792 acres and approximately 25,000 premises. In addition to this, a further survey was commenced in the area adjacent to Clarence Dock Power Station.

This power station still continues to be a major source of pollution over the central area of the city. On the 1st June the supervision of it Clarence Dock Power was transferred from the local authority and placed under the control Station of the Alkali Inspectorate.

Full details of the work at present being undertaken by the Central Electricity Authority to reduce this pollution are given in the full text of the report.

The drive to eliminate rats and mice from the city which has been Rodent carried on vigorously in the past few years is slowly accomplishing its purpose. There were definite indications as a result of the action taken that the rat population has been markedly reduced.

Action under the Liverpool Corporation Act, 1955, has continued Wild Pigeons and a total of 5,061 wild pigeons were caught and painlessly destroyed. This is a considerable increase on the 2,373 wild pigeons destroyed in 1957. The work of destroying these pigeons has been undertaken in a variety of premises including public buildings, hospitals, churches, industrial and commercial premises, and dwellinghouses, at the request of the persons concerned. The full cost was charged out for treatment of all premises except in the case of dwellinghouses, where free service was provided.

Details of the extended work which the department has undertaken Supversision in the supervision of food supply are given in the full text of the Supply report. This work has included a number of recommendations being

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carried out at St. John's Retail Market. Light has been greatly increased by the substitution of windows in lieu of unsuitable roofs at the north end of the market and this has excluded dust and dirt and has also helped by excluding incoming cold air to maintain a reasonable temperature within the market hall. A number of stalls have been completely redesigned and reconstructed on modern lines.

Adulteration of Food and Drugs

The routine sampling work which was carried out by the department to detect the adulteration of food and drugs was continued throughout the year and a total of 3,933 samples of food and drugs were taken or purchased. Of this number 185, or 4.7 per cent, were found not to be genuine or otherwise irregular. This represents an increase on the 1957 figure which was 3.37 per cent but is partly accounted for by the fact that one farmer over a period of three days sent into Liverpool 53 churns of milk all of which were found to contain added water. Full details of the legal proceedings which followed the discovery of adulterations are given, and it will be seen that in 73 cases, convictions were obtained.

Milk Supplies The changed delegation of duties which came into effect in 1957, whereby the general public health inspectorial staff are now responsible for the supervision and inspection of milk supplies has worked very satisfactorily and altogether 2,998 licences have been issued.

Meat Inspection

The arrangements introduced in January 1957, whereby assistant public health inspectors and trained public health inspectors helped with the work at Stanley Abattoir has led to an easing of the problems associated with the shortage of full-time meat inspectors. In addition, it has been most satisfactory to report that a further 15 qualified inspectors obtained the Meat and Other Food Certificate of the Royal Society of Health during the year and there are now 28 fully qualified inspectors to carry out meat and food inspection at the Abattoir and the markets. This sharing of the duties of the staff has meant that for a the first time the city have been able to draw upon the large trained staff which they have at their disposal and therefore have a satisfactory reserve of trained personnel to meet any emergency.

An assessment of effectiveness of the food hygiene regulations which Food Hygiene were introduced in 1956 is contained in this report. It will be seen that many improvements, particularly structural improvements, have PREFACE xli

been effected and generally managements have been very helpful and co-operative. It has, however, been found that it is necessary to keep inspecting all the time to ensure that both managements and staff keep their standards of hygiene up to scratch. There is a tendency to feel that if the premises are made suitable that is all that is really necessary. It is only too obvious that the improvements effected in the premises can be very quickly negatived by careless handling of staff, and the constant supervision and training of food-handling staff throughout the city, both in large and small premises, is as important today as it was three years ago.

The work of this section is detailed in the end of the Annual Report Disinfection and has shown a further increase. With the larger amount of polio-festation myelitis immunisation undertaken, there has been an increase in the amount of deliveries of vaccine in this connection.

This section has continued to deal with the disinfection of verminous premises and the subsequent disinfestation carried out on furniture and the disinfestation of persons at disinfecting stations. It has also provided transport for the carrying of mobile meals and the maintenance of a food and general store as well as the issuing of welfare foods and home nursing equipment. In addition, it has continued to undertake the control of the City Mortuary and burials service. This section has also been very actively concerned with the very successful health education exhibit at the Liverpool Show.

It is interesting to note how steadily the work in relation to crema-Cremations tions has grown in the past years. During 1958 there were 3,348 cremations carried out, which is an increase of 266 over the number in The Medical Officer of Health with his Deputy and Senior Medical Officer act as medical referees and every cremation document has to be scrutinised and examined and signed by the medical referee before the cremation can take place. A graph is given in the report showing the gradual increase in the number of cremations which have taken place, and the extent of this can be realised when it is remembered that in 1940 there were only 482 cremations carried out.

During the year 1958, the Chairman, Alderman Alexander Griffin, and the Deputy Chairman, Alderman M. J. Reppion, have both devoted much xlii PREFACE

time to the work of the department and their long experience in public affairs has been most helpful to me on matters of policy. I wish to record my special thanks to both the Chairman and the Deputy Chairman. I am also grateful to all the members of the staff of the Health Department for their hard work and loyalty during the year and especially for their willingness to help, after normal working hours, during the smallpox outbreak and in connection with the Mass Radiography Campaign.

I also acknowledge the help given to the Health Department by the chief officers and members of other Corporation Departments. In the field of health, many complex subjects have to be tackled which require close study and considerable patience. Because of this I wish to acknowledge the assistance given by the members of the Health Committee and for the kindness and courtesy with which they have considered the reports and recommendations made to them in the course of the year.

I am,

Your obedient servant.

andrew B. Semble
Medical Officer of Health.

Cromations



# CITY OF LIVERPOOL

The majority of the lengthy statistical tables are undured in a

## SUMMARY

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## VITAL STATISTICS FOR 1958

Area (land and inland water) 27,81	8 Acres
Population (Estimated by Registrar-General)	762,400
Deaths (all causes)	8,930
Death rate per 1,000 population	11.7
Live Births	15,662
Live Birth rate per 1,000 population	20.5
Stillbirths	413
Stillbirth rate per 1,000 total (live and still) births	25.7
Total Births	16,075
Infant Deaths (under one year)	434
Infant Mortality rate per 1,000 live births	27.7
,, ,, ,, 1,000 legitimate births	27.3
" " " " ,, 1,000 illegitimate births	35.0
Neo-natal Mortality rate (First four weeks) per 1,000 related live births	18-2
Early Neo-natal Mortality rate (First week) per 1,000 related live births	16.2
Perinatal Mortality rate (stillbirths+deaths during first week) per 1,000 total	
live and stillbirths	41.4
Percentage of illegitimate live births	5.1
Maternal Deaths	4
Maternal Mortality rate per 1,000 total births	0.25
Deaths from:—Pulmonary Tuberculosis	109
Death rate	0.143
Non-pulmonary Tuberculosis	7
Death rate	0.009
Respiratory Diseases	1,554
Death rate	2.04
Cancer (all forms)	1,643
Death rate	2.15

#### 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, 15,662 live births were registered within the City which represents a birth rate of 20.5 per 1,000 of the estimated mid-year population. 8,064 of these births were male and 7,598 were female. 5.1 per cent of the total live births (799 births) were illegitimate live births. These figures show a slight decrease in the birth rate for the year compared with 1957. There has also been a small decrease 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 16.4 per 1,000. The variation in births and stillbirths from 1938 to 1958 inclusive is given in the graph on the page facing.

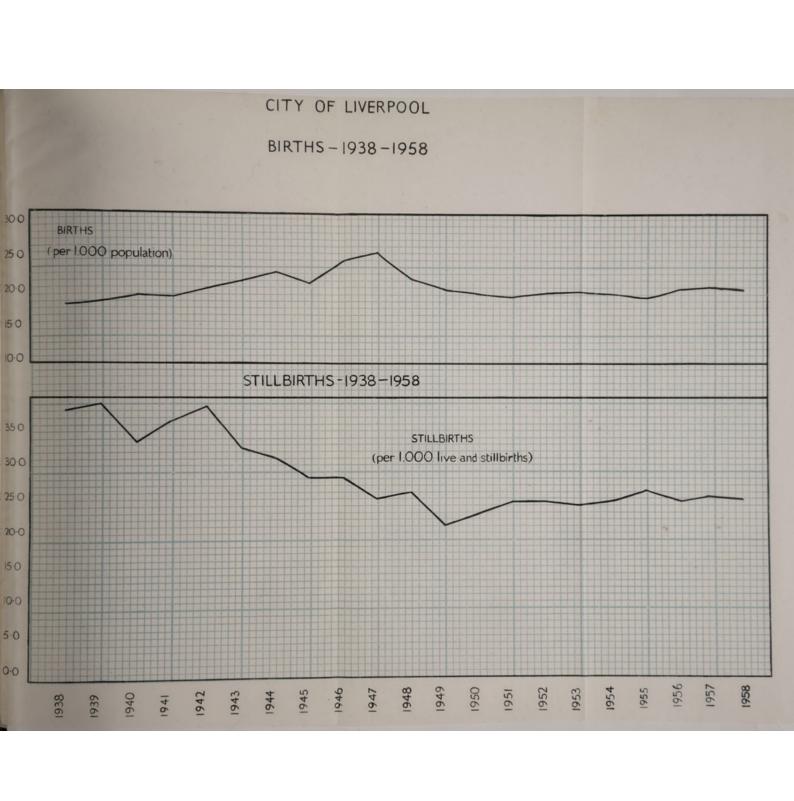
Stillbirths.

Stillbirth Rate There were 413 stillbirths registered in the City during the year, representing a stillbirth rate of 25.7 per 1,000. This is a slight increase on the figure of 24.9 for the preceding year. The stillbirth rate among legitimate babies was 24.9 per 1,000 and among illegitimate babies was 40.8 per 1,000.

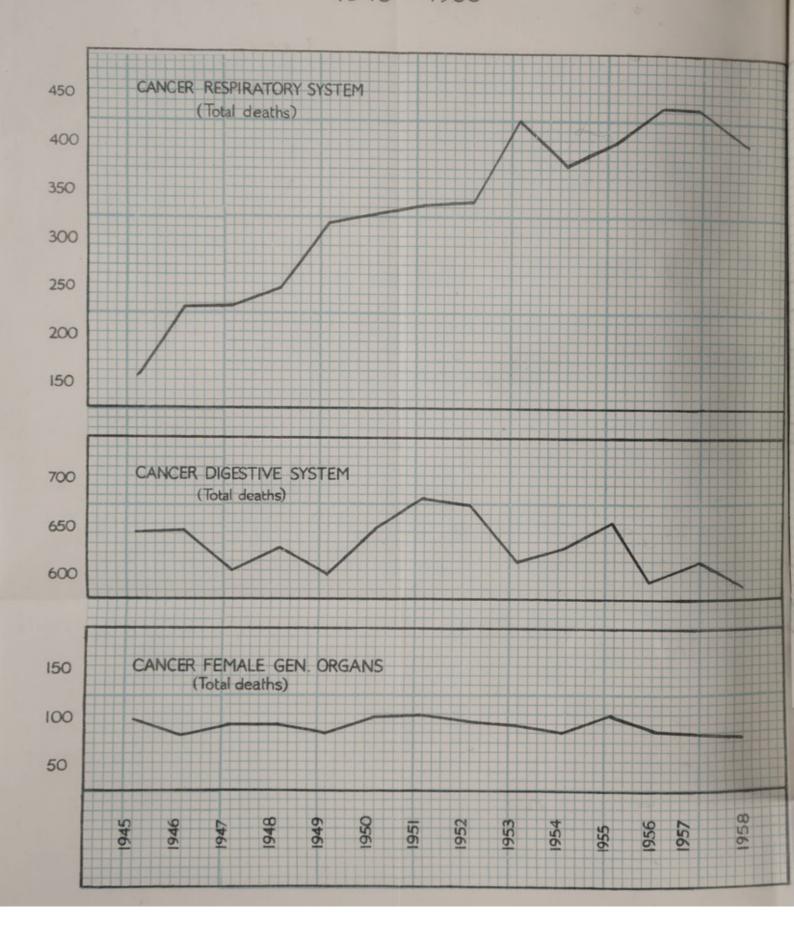
Mortality.

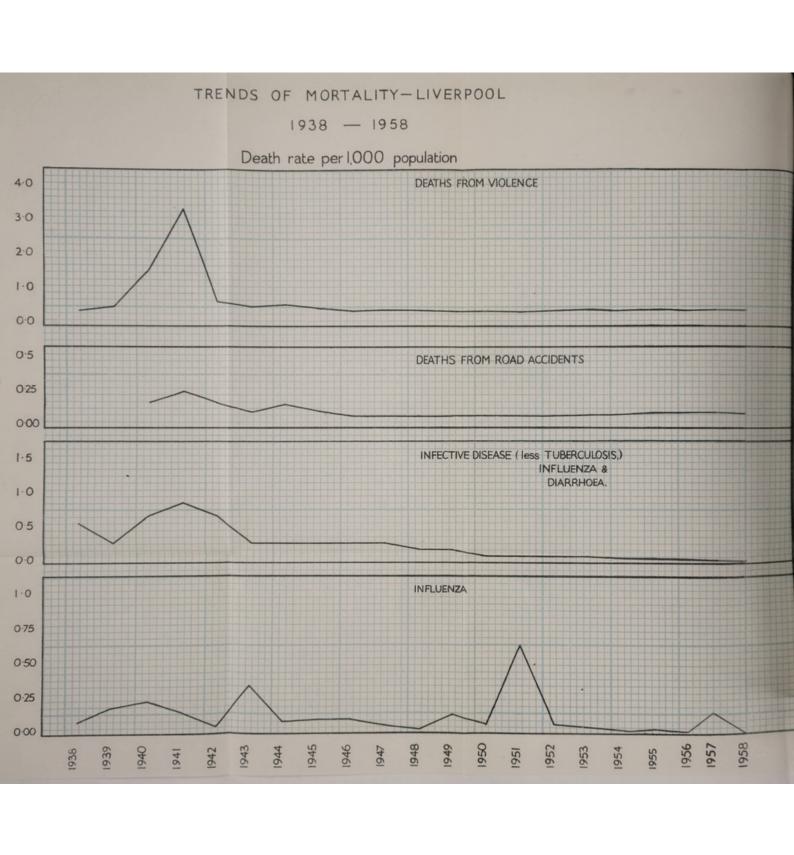
General Death Rate There were 8,930 deaths registered within the City during the year, 4,518 males and 4,412 females. This gives a general death rate of 11.7 per 1,000 as compared with a death rate of 11.8 for the preceding year. The number of deaths from eancer of the lung was 399, lower than the number recorded the previous year (448). It is encouraging to record that a further fall was observed in the number of deaths from tuberculosis during the year, and the number of such deaths fell to 109 compared with 128 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.



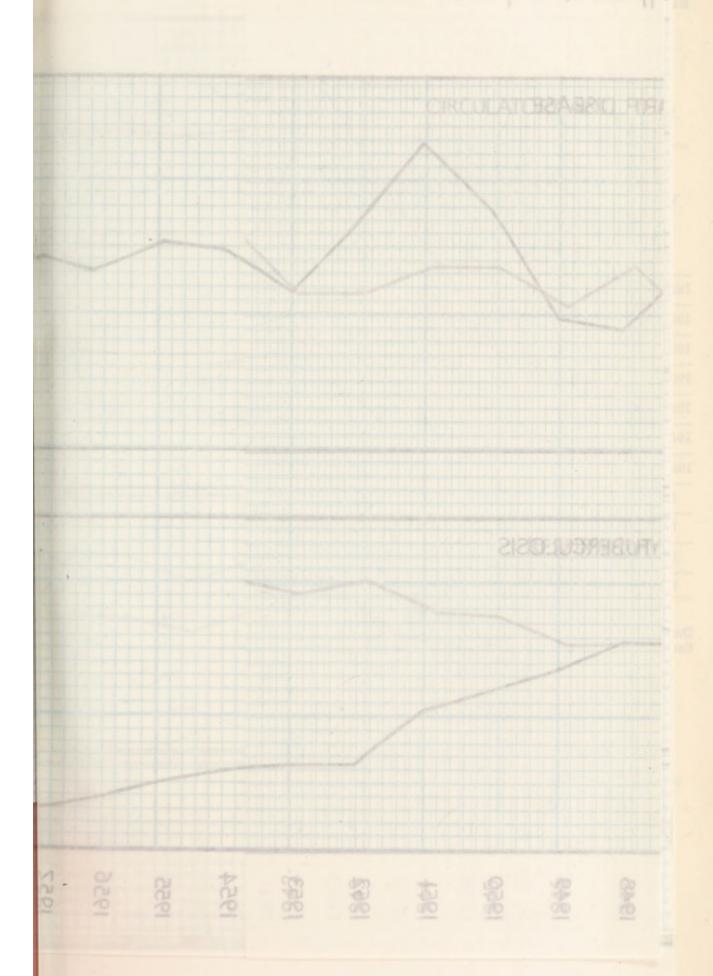
# TRENDS OF MORTALITY-LIVERPOOL 1945 - 1958

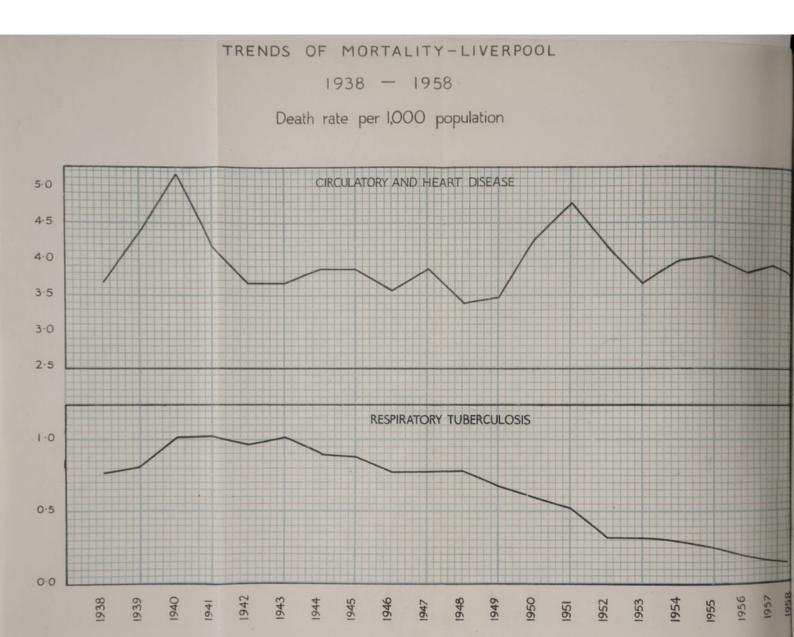




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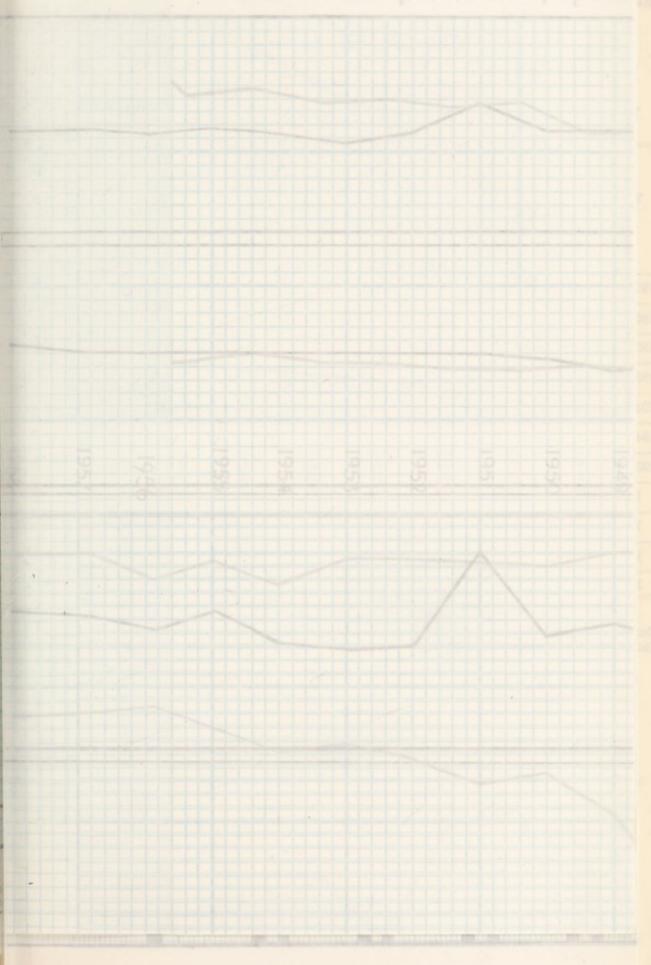
Death rate per notalingo





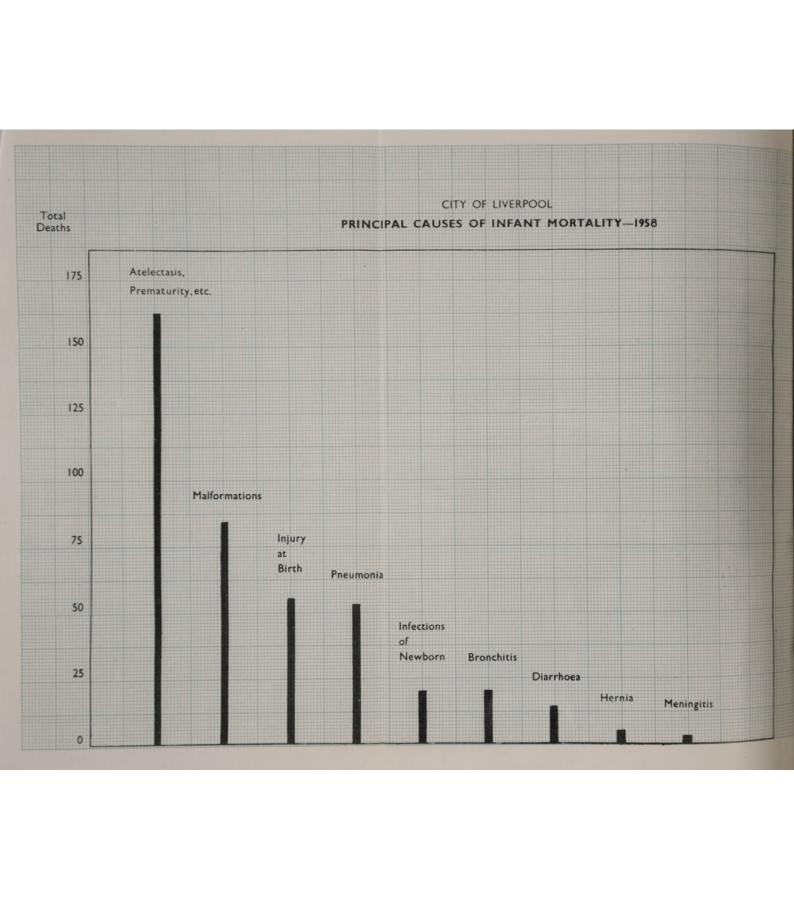
1938 - 1958

Death rate per 1,000 populati



#### TRENDS OF MORTALITY-LIVERPOOL 1938 - 1958 Death rate per 1,000 population 20-0 ALL CAUSES 15.0 10.0 5.0 3.0 CANCER 2.0 1.0 0.0 RESPIRATORY 3.0 DISEASE 2.0 1.0 0.0 DIGESTIVE 0.8 DISEASE 0.7 0.6 0.5 0.4 0.3 DIABETES 0.2 0.1 0.0 1956 1946 1940 1942 1944 1945 1947 1949 1950 1958 1957 1938 1939 1941 1981 1952 1953 1954

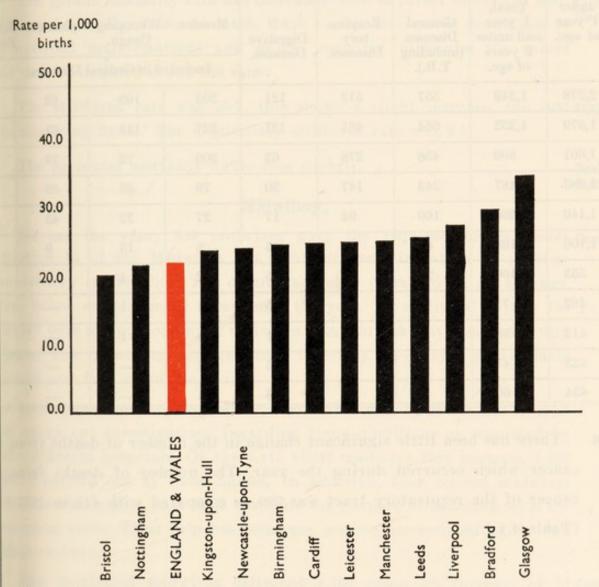
# IRAM CAUSES OF INFANT MORTALITY-1958



Infant Mortality.

The infant mortality rate increased slightly during the year to 27.7 per Infant 1,000 live births. A total number of 434 infant deaths occurred, of Mortality which 28 were illegitimate children. This represents an illegitimate infant mortality rate of 35.0 compared with a legitimate mortality rate of 27.3. 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.

# OF THE LARGER AUTHORITIES FOR THE YEAR 1958



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 1958 the rate was 41.4 compared with 39.08 in 1957.

ninet Mortality.

Child Mortality Rate Child Mortality.

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 rose from 47 to 60 in 1958.

YEARLY AVERAGE NUMBER OF DEATHS IN SUCCESSIVE QUINQUENNIA, 1920-1954, TOTAL DEATHS IN THE YEARS 1955, 1956, 1957, AND 1958.

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.).	Respira- tory Diseases.	Digestive Diseases.	Measles. Whooping Diphtheria. Cough.  Included in General Diseases.			
									1920-24
1925-29	1,879	1,252	564	461	121	227	118	61	
1930-34	1,601	890	456	278	63	200	72	79	
1935-39	1,283	487	243	147	30	79	46	58	
1940-44	1,140	366	160	94	17	27	23	45	
1945-49	1,100	168	67	36	13	8	15	9	
1950-54	553	100	26	22	5	2	4	20.0	
1955	462	71	9	19	5	1	1	_	
1956	413	58	8	6	1	_	1	650	
1957	423	47	6	11	6	1	1-13	-	
1958	434	60	4	13	6	1	B_ B	_	

Deaths from Cancer There has been little significant change in the number of deaths from cancer which occurred during the year. The number of deaths from cancer of the respiratory tract was 399 as compared with 448 in 1953 (Table 4.)

#### MATERNITY AND CHILD WELFARE

There was a slight reduction in the birth rate. The total figure for Births live and still births was 16,075. The total number notified was 19,140. The disparity between these two 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 confinements was 5,379. The figure Domiciliary for 1957 was 5,139.

The infant mortality rate has increased from 26 in1957 to 27.7 in 1958. Infant On analysing the causes of death, there was an increase in deaths due to Mortality congenital malformations and gastro enteritis, otherwise the causes of death remained about the same.

The stillbirth rate was 25.7, this shows a slight increase, the 1957 Stillbirths figure being 24.86. The domiciliary stillbirth rate was 9.5.

The perinatal mortality figure rose slightly.

Perinatal Mortality

#### Midwifery.

During the year, 324 midwives gave the required notice under Case Load Section 15 of the Midwives Act, 1951, of their intention to practise midwifery in the City. The domiciliary staff remained on an average, five below establishment throughout the year. In addition to this, 193 weeks were lost on account of midwives being on sick leave and maternity leave. The remaining midwives had, therefore, to carry a particularly heavy case load amounting to 78.

In order to assist the midwives, two nurses were appointed in August to carry out investigations regarding home conditions as requested by the different hospitals. Of the 4,441 visits made for this purpose, 1,026 were carried out by these nurses, In addition, four retired midwives were working on a part time basis for the purpose of assisting with the nursing visits. Their help has been very greatly appreciated by the full time midwives.

The municipal midwives delivered 4,169 cases, an increase of 81 Confinements compared with 1957. The Liverpool Maternity Hospital District Midwives delivered 1,202 cases, showing an increase of 173 compared with the figure for 1957. The total increase in the number of domiciliary deliveries was, therefore, 254.

There were only eight cases delivered by midwives in private practice.

The number of patients delivered in private nursing homes was 450.

Early Hospital Discharges There was a total of 6,167 special visits paid by midwives in addition to their ordinary routine work. Of these visits, 2,752 were to maternity cases discharged from hospital before the tenth day.

Analgesia

Gas/air analgesia was administered in 3,454 domiciliary deliveries as compared with 3,394 in 1957; 2,861 domiciliary deliveries were given pethidine as compared with 2,816 in 1957.

Work of the Supervisors During the year, 690 visits were paid by the administrative staff to midwives, and 400 special visits were also paid by them in respect of special cases including puerperal pyrexia, and patients with back obstetric histories who refused to book at a hospital for confinement.

Medical Assistance Under the rules of the Central Midwives Board, midwives sought medical aid in 2,024 cases—1,635 mothers and 389 infants.

On 60 occasions consultants were called in connection with obstetricase emergencies or complications (37 mothers and 23 infants).

Midwives were also called out by the ambulance service to 28 cases.

Three midwives were suspended from practice in order to prevente the spread of infection.

Refresher Courses Six municipal midwives attended postgraduate courses of instruction during the year.

Part II Training of Midwives The Part II midwifery training school, in conjunction with Sefton General Hospital, continued to develop. Thirty-six pupil midwive completed their training and qualified as midwives.

Flying Squad

During the year there was a total of 54 calls. In 51 cases the doctors was booked for the delivery, in one a midwife only was booked and two were unbooked emergencies. Three patients were transferred to hospital Of the 54 cases, four had ante-partum haemorrhage, two had bleeding before the 28th week, there were four forceps deliveries, four were breeded deliveries and forty were normal vertex deliveries. None were borous before the arrival of the midwife. Blood transfusions were given in twenty cases.

The primary reasons for calling the flying squad are shown in the following table :-

Asphyxia neonatorum	(breech)	 		1
Prolapse of cord		 		1
Abortion		 		2
Ante partum bleeding		 		4
Intra partum bleeding		 		16
Post partum bleeding		14		
Retained placenta (wi		10		
Obstetric shock		 		1
Failed forceps		 		2
Breech presentation		 		1
Undiagnosed twins (1	breech)	 		1
Eclampsia		 		1
•			_	
				54

During 1958 there were 717 cases notified of puerperal pyrexia. The Puerperal cause in 157 of these was urinary infection, in 222 pelvic infection, in Pyrexia 100 respiratory infection and in 73 breast infection. The cause was not known in the remaining 165 cases.

#### Maternal Deaths.

There were four maternal deaths. One case was an inward transfer where a Liverpool resident moved outside the city to have her confinement and died in the hospital for that district. The cause of death was pulmonary embolism. The three remaining cases died of haemorrhage. One was a ruptured ectopic pregnancy and the other a case of post partum haemorrhage. The latter case was delivered on the district. It so happened that the doctor booked for this case has had considerable experience of obstetrics, both in hospital and on the district. The obstetric emergency services were very quickly available, but before they arrived the general practitioner had already started to give the patient a transfusion. Further resuscitative measures were applied by the obstetrician from the hospital. Later the patient was transferred to hospital and died some twelve hours after delivery. This case was a most unusual one and was the subject of a conference at one of the maternity hospitals. Everything possible was done for the patient before and after admission to hospital.

The third case had an intraperitoneal pregnancy and died of post operative haemorrhage.

There were five deaths from associated conditions. One patient who was four weeks post partum, died of peritonitis following an operation for partial gastrectomy and duodenostomy. Another patient died of carbon monoxide poisoning having committed suicide ten weeks post partum. The three remaining patients had rheumatic heart disease. They all had mitral stenosis and died of cardiac failure.

#### Premature Baby Nurses.

The department is fortunate in having the services of three highly trained nurses, who devote their time exclusively to the domiciliary care of premature infants. One of their main duties is to teach the mothers how to look after their own babies. This service has greatly facilitated the early discharge from hospital of premature babies to the care of their mothers.

Visits

Babies Born
at Home

The total number of visits paid by these nurses was 5,081 and the total number of babies looked after was 479. There were 114 babies born as home and nursed at home, and sixteen were transferred to hospital. Of the 130 babies born at home, 120 were alive at the end of 28 days.

Babies Born in Hospital Three hundred and forty nine babies born in hospital were transferred to the care of the nurses and ten of these had to return to hospital for further treatment. The duration of the nurses' attendance depends on the condition of the baby and the type of home, together with the level of intelligence of the mother. Some babies may require three or four visits a day and the nurse may continue to visit for three or even four weeks. In other cases the mother may be considered competent to local after the baby after six or seven days' visiting.

Duration of Care

A note was made of the number of home deliveries and hospital deliveries when the baby was wholly breast fed at the end of the period of care. The figures are as follows:—

Breast Feeding in Hospital and Home Deliveries

Hospital ... 28.3% were breast fed. Home ... 50.9% were breast fed.

The comparatively high incidence of breast feeding in this small ground of premature infants who were born at home, and remained under the care of these nurses, would appear to reflect the high quality of the health educational methods.

The premature baby nurses had a display of their equipment at the Liverpool Show. This attracted great interest, and was mentioned on the radio in Northern News.

#### The Work of the Health Visitor.

This has been a year of great variety. Two special investigations were started during the year, both of which were carried out by the health visiting staff. One was a breast feeding survey and the other a follow up of all home accidents.

May, 1958, brought additional work for the health visitors due to Smallpox an outbreak of smallpox on Merseyside. Nearly 1,000 contacts were visited and any who reported sick were seen daily in their own homes until pronounced fit, either by their own general practitioner or by one of the medical officers of the public health team. The health visitors also assisted in vaccinating and examining all the employees of three of the largest stores and other business premises in the city. Thirty health visitors were seconded to this special work and remained on it for nearly hree weeks.

Preparations for this campaign, to take place in February/March, Mass 1959, began in November, 1958, and forty of the health visitors were Radiography Campaign seconded to assist in this task. Their main function at this stage was to recruit 11,000 voluntary workers from the general public to assist in louse-to-house visiting during the campaign. To do this, they themselves lid house-to-house visiting, arranged and addressed meetings, visited lergy and welfare officers of stores and factories and pursued various ther channels from which voluntary helpers might be recruited. By thristmas the target number of voluntary workers was in sight, but ot without much sustained effort and extended hours of work.

The ordinary work of the health visitors as family visitors continued. Visits nd in spite of the many diversions, 15,134 primary visits were made to ewly born infants. To children under the age of five years the total number t visits was 180,058 and 46,301 families were visited at least once. As in 157, the health visitors were asked to make an increasing number of ifferent types of special visits in addition to the figures shown above. hese special visits included some in connection with housing difficulties

and calls in connection with special requests from voluntary social organisations and hospital consultants for further information about the home conditions.

The following four reports are examples of these special enquiries:-

(a) Report for Personal Service Society.

Family "A."

This family consists of mother, father and four children-Mary, agec 5½ years, attending school, Joan, born 18.4.54; Tom, born 7.4.56; ancer Richard, born 31.7.57. They live in a small four roomed house (two small upstairs bedrooms, kitchen and back kitchen downstairs). The house is lit by gas and there is a cold water supply only. Mr. and Mrs. "A" have been known to me for several years and during this time Mr. "A" has had numerous short jobs and also long periods of unemploy ment. They lost their first child, Robert in 1953, with a primary cances of the buttocks and since the advent of the other four children there has been a gradual deterioration in the household. Mr. and Mrs. "A," ii must be said, have a genuine affection for their children and they appear quite well nourished, happy, and normal; but the general neglect of the house and appearances of both mother and father have been very evidence during the past twelve months or so. The family were helped in 195 several times with clothes from the W.V.S. and the Education Depart's ment have helped to clothe Mary, the schoolchild. When the last babys was born, Mrs. "A" stated she was getting a cot from a friend, but unfortunately this was not forthcoming. She said she could not afformation one herself as they were only receiving National Assistance and Family Allowance, the total weekly income being £6 10s. 0d. She wave advised to apply to Copperas Hill Welfare Department regarding clothing and a cot but as they required a small sum of money, the famil m stated they could not afford it. They also stated that they possessed only one double bed for the whole family and that the National Assistance would not help them in the purchase of a bed. On questioning therein closely, I discovered they had been helped a couple of years ago but the bed purchased fell to pieces because of woodworm! In addition to the double bed and mattress they have one mattress minus bed for the siof them (most of the bedding and clothing is in pawn). It was evider by that the management was very much amiss, but Mrs. "A" would not say very much except that her husband was fond of the "beer." Howeve

before Christmas we had a discussion together and she was asked point-blank what was causing this definite deterioration. It appears that Mr. "A" who is, as I have said, fond of his children, is also very weak-willed and easily dominated. Apart from drinking he is also addicted to gambling. This seems to be the worst of the two evils because although he has been able to control his drinking habits, he still cannot resist his daily backing of horses. He said he "hoped always to win some money for the kids." Unfortunately, the only time he had ever won any appreciable sum, viz.: £20, it had been spent in the public-house. He also smokes quite a number of cigarettes per day. Mrs. "A" also smokes, but she has reduced the number to approximately three a day.

They are in debt to an amount of nearly £150. This debt is owed to credit drapers, one furniture store, and arrears of rent. Court orders are pending, re these arrears, so they were advised to get in touch with the Personal Service Society regarding legal advice. If Mr. "A" were a stronger character, Mrs. "A" would, I am sure, pull her weight more in the home. The N.S.P.C.C. have not yet been contacted, the children are, apart from the neglect of the house and bedding, fairly satisfactory. A case conference was later called regarding this family and the recommendation was that the Family Service Unit should undertake concentrated supervision.

#### (b) Report on housing difficulty.

Family "B."

Mrs. "B," aged 21 years, a white girl.

Mr. "B," approx. age 23 years, negro.

James, born 24.11.55; Helen and Henry (twins) born 22.1.57; Robert, born 3.8.58. Living in one room.

As a result of earlier efforts on behalf of this young family, they have acquired a few more housing points, but they are still waiting for accommodation and the last born infant is still being kept in hospital because there is literally nowhere to put a carry-cot, a basket or a prame for him to sleep in. The nervous strain is reducing this young family to physical debility and extreme emotional tension. Whatever the parents deserve, or do not deserve, here are four little children living in conditions that enforce upon them unnatural repression of physical, nental and emotional development. It is pathetic to see them. James

who was three years old this week is growing permanently solemn, has a very poor appetite and is lacking in normal vitality. His mother says she has given up taking him to the doctor because he says the whole trouble arises from their living conditions.

The twins are 22 months, and they are sad and listless. Robert has not yet known anything normal in his life. In his three months' existence he has been in Mill Road Hospital, Leasowe Children's Hospital, Royal Liverpool Children's Hospital and Heswall Hospital. "Failure to thrive" was the cause of his stay in the Royal Liverpool Children's Hospital. Mrs. "B" is longing to have her baby home to decent conditions. She has done her very best to find somewhere to live for herself but no one wants a sub tenant with four children under four years. She does her best to keep the peace in the flat, but she looks and feels ready to "snap" under the strain.

This family was eventually rehoused in December, 1958.

(c) Report for Dr. Glyn Hughes, Consultant Dermatologist at Newsham General Hospital.

Family "C."

This family is extremely well known to me, and is visited weekly is sometimes daily. Living so near the clinic they are constantly requesting me to go up to settle quarrels, money matters and talk to the older of children about coming in late.

They live in a three bedroomed Corporation flat with all amenities which is sparsely furnished and not always very clean. Both parent is are of very low mentality. Mr. "C" is receiving a blind pension but can get round the house well. He appears to do most of the housework and cooking and looks after the baby. I have never seen Mrs. "C" doing of any real housework or cooking although there are seven children. The eldest aged 15 has just left school. He is under the care of the Probation Officer and appears to be completely out of control. Jannette, aged 1 by years, is out of control too, and at present is at Colomendy. Brian, age as 11 years is in the care of the local authority, having been before the Court for persistent truancy from school. John, the youngest child was born on 8.5.57. Besides visits from the Probation Officer and the Children's Officer, I have also called in the Inspector from the National Society for the Prevention of Cruelty to Children. There is an incomposite of the Prevention of Cruelty to Children. There is an incomposite the probation of Cruelty to Children.

of over £10 per week in the household. Mrs. "C" and family have spent a period at Brentwood, but it has done her very little good. She is a poor manager with money, giving the older children quite a lot to squander. She has been shown how to spend her money and a house-keeping budget made out for her, but it is of no avail. Mr. "C" is more co-operative. Both parents are very bad tempered at times.

Peter, aged 3 years, was seen by me this morning, and referred to the general practitioner for report by Dr. Glyn Hughes. Mrs. "C" then brought him down to the clinic for advice about the condition of his head. She has a special comb which she was given at the beginning of the year. The school nurse has visited her and instructed her regarding the cleansing of heads and I have also cleaned the young children's heads. Mrs. "C" always states the children will not stand still for her and says "what can I do?" She is hopeless at carrying out any treatment for her children. The family has been helped by many associations. Supervision continues.

### (d) Special Report.

Mrs. "D," aged 79 years.

This lady lives in one room on the first floor in old property. She shares a toilet and bathroom and has lived there for fifteen years. Rent 10s, per week. Total income £2 16s. 0d. Relatives—brother and sister-in-law living in Smithdown Road.

Mrs. "D" was visited and seen on 5th March, 1958. She is rather a tall, large built woman but considering her age, she manages to get about fairly well. She says she is able to get to the shops, and she sends her washing to the launderette. She appears to be in fairly good health apart from some foot trouble due to a slight accident whilst boarding a bus. She is now being attended at home by a chiropodist from the Foot Hospital.

Mrs. "D's" personal cleanliness appears moderate, but the room in which she lives is very untidy and overcrowded with furniture and the floor is very dirty. She has a small gas cooker in one corner for cooking purposes and from her appearance she is fairly well fed. Any rubbish which cannot be burned on the fire, has to be carried downstairs through the cellar and up to another flight of stairs out into the yard. Mrs. "D"

would, I think, be able to manage, if she had the assistance of a home help at least once a week to do the heavy cleaning. She is not averse, however, to entering a home for the aged, but specified that she would like to go to the Greenbank or Ullet Road area where she says she has two friends living nearby whom she could visit frequently. Mrs. "D's" brother and sister-in-law visit her each day.

Domestic help has been arranged and the case referred to the Welfare Department.

Whooping Cough and Poliomyelitis Special visiting to notified cases of whooping cough ceased in November, 1958. The number of visits paid to whooping cough cases was 145, and to contacts of poliomyelitis cases 639.

Liaison with Hospitals Regular attendance by health visitors has continued at paediatric outpatient departments, thus enabling them to have knowledge of the advice and treatment given to individual cases and for them to supply valuable information concerning social conditions in the home. The following extracts from reports are examples of the information requested from time to time by paediatricians and almoners of the various children's hospitals:—

(a) Report for Almoner at Heswall Children's Hospital.

Audrey F., born 11.11.53, suffering from mental and physical retardment.

"It is difficult to get to know Mrs. "F" well or to assess her true feelings for Audrey. She appears to be very interested and concerned about her but I do not feel that she has accepted the fact that her daughter will never be quite normal. She considers that Audrey is making some progress and that she now appears to know her when she visits her. After a spell of bad weather, during which Mrs. "F" was unable to visit, she felt that Audrey had fretted for her and for her father.

The standard of cleanliness in the home is far from good but about a average for the area in which the family resides. The home is in a semi-pasement of a block of Corporation tenements. This semi-basement was a converted into living quarters only three and a half years ago.

Mrs. "F" is seldom to be found at home during the day as she spends most of her time at her mothers. The third baby is expected in five weeks' time and arrangements have been made for the mother to be delivered at home. Mary, the other child, aged 3½ years, is a very independent little miss and consequently does not absorb much of her mother's time. When I mentioned that Audrey had now been in Heswall for ten months, the mother remarked that she "wouldn't mind" having her home after the baby's arrival. This makes me feel that she is not over-anxious for Audrey to come home at present."

(b) Report for Almoner at a children's hospital regarding home conditions.

Geoffrey M., born 5.9.57.

"When visited, the above-named child looked very well although he appeared pale. Mrs. "M" stated that he has a good colour when out of doors and she frequently keeps him in the garden. As it was a bitterly cold day, the baby was being kept indoors. The child was taking weaning diet and had no cough. The home conditions are excellent and very clean. This family is one of the few I have pleasure in visiting and the parents are most co-operative. Mr. "M" does a great deal to help Mrs. "M" in looking after the children, including the twins. Mrs. "M" has promised to attend Alder Hey Hospital Outpatients' Department on 27th March. I will visit again soon."

(d) Report requested by Hospital Almoner regarding home conditions and management.

Irene K., born 9.8.54.

"This child comes from a good happy home and has excellent parents. There are five children with Irene—an older girl aged six at school, and three younger ones. The father is a builder and earns about £9 10s. 0d. weekly. He gives his wife £8, and saves the rest for the childrens clothes, etc. The mother keeps the children clean and well nourished and the house is spotless and very well run, the clothes airer always seems full of well laundered clothes. Irene does not lack love or attention at home."

(d) Report on home conditions for Almoner.

James P., born 13.10.57.

Mrs. "P" and family are living in one large room on the first floor

with the water supply on the ground floor and cooking facilities on the second floor. Sleeping arrangements for the children are a cot for Lorna and a pram for James. The mother appears to be a person of clean habits. Her living accommodation is quite neat and tidy and Lorna is usually clean and well dressed. Mrs. "P" states she is pregnant, and is very worried because she is having a baby every year and has no proper home for a growing family. She and her husband are trying desperately to buy a house, and so far have saved about £75 for the deposit. They are trying to increase this amount and I feel this perhaps, was her reason for wishing to leaves James in hospital."

Follow-up of Epileptic Cases It has been felt for some time that there is a need for the better after care of epileptics and consequently during 1958, two health visitors were delegated to carry out follow-up work with the epileptic clinics at Alder Hey Children's Hospital and the Royal Southern Hospital. This work is still in its infancy, but already it is obvious that there is a great need for these subjects to be followed up in their homes, where much helpful advice has been given regarding a wide variety of difficult problems. In the case of adults, there is a close liasion with the Disabled Resettlement Officer. It is hoped that this follow up will shortly be extended to yet another hospital.

Follow-up of Diabetic Cases The attendance of a health visitor at the David Lewis Northern Bernard Hospital has continued throughout the year. Health education, closely related to prevention, has been carried out mostly by simple explanation whilst the patients have been at ease and in a receptive frame of mind in their own homes, thus aiming to combat the many hazards of ignorance. Talks have been given at the clinics and often there have been letters or telephone messages requesting a home visit. Patients in the wards have been visited and help given, problems being discussed with the almoner, sister and doctors. The following is a typical example:—

A young woman admitted to the surgical ward for a gastric investigation, was worried because she could not visit her aged mother who lived alone and was also a diabetic. The old lady was visited by the health visitor and both mother and daughter reassured. The patient who was to have an operation was also worried regarding her husband who was at sea and did not know she was in hospital. The necessary steps were taken to inform the husband and to reassure him.

Apart from the register of patients attending the Northern Hospital, patients have been discovered by accident. For example, three patients had several months ago been given notes by their general practitioners to attend the hospital for investigation but had failed to do so because they did not like the thought of going to hospital. After friendly persuasion and the promise that they would be met at the hospital, they duly kept their appointments. Cases have also been referred direct to this department by the Queen's Nurses, general practitioners, tuberculosis visitors and from other hospitals.

A typical example of this was an old lady who was referred by a Queen's nurse. She had not attended a hospital for over a year and was receiving a small dose of soluble insulin daily and eating only carbohydrates. Although she received an allowance for the increase in her rent from the National Assistance Board, repairs had not been carried out. She never went out, but could just manage to get from the bed to a chair in her small room. The fire was unguarded. The general practitioner was seen by the health visitor and an appointment made for hospital attendance. The National Assistance Board, at the request of the health visitor, supplied a fireguard and an additional allowance for her diet. The repairs to the house were carried out and the patient was admitted to hospital and taken off her insulin. She now attends the hospital twice weekly for physiotherapy and manages to walk short distances. Advice regarding diet and recipes have been given.

Another patient was referred by a general practitioner who reported that she had refused to reduce her weight by diet. The woman admitted that she was at home all day on her own and thought of nothing else but eating. She was persuaded to attend a clinic and find herself a job and this she did, with satisfactory results.

Certain patients required convalescent treatment and these were referred to the almoner. Others had housing problems or other social difficulties and these were discussed with both out-patients and inpatients, and contact was made on behalf of the patients with voluntary and statutory bodies. Notice has been given by the health visitor to doctors at the clinic of patients who have been unemployed and arrangements have been made for conference with the Disabled Resettlement

Officer and doctors at the Industrial Clinic. Where necessary, an ambulance has been ordered to take patients to hospital for a routine check up. There is no chiropodist at the hospital and many elderly patients have been referred to the Foot Hospital by the health visitor, and domiciliary visits have been paid by the chiropodist. Feet are not examined at the hospital as a routine measure unless there is a lesion, and careful inspection of feet and advice regarding care and suitable footwear, etc., is given by the health visitor. Through her contact with the health department, the visitor was able to inform the consultants of a case of diabetes who had active respiratory tuberculosis and was living in a common lodging house.

A blind old lady living alone in one room, who was often admitted to hospital in a hypoglycaemic coma, was kept at home this year by frequent visiting. It was discovered that she was receiving an inadequate diet and although out of the area served by "Meals on Wheels," special arrangements were made on her behalf to have the above service. Assistance with her rent and extra clothing was also arranged, but she was a very independent person and refused to have domestic help. It was agreed by the hospital that she was unfit to live alone and efforts were made to have her admitted to the Charles Best Home. Eventually, after consultation with the general practitioner and the almoner, because of the deterioration in her condition, the patient agreed to go form a trial period of a month to Parkgate. During this period the health visitor kept in touch with the matron of the home. The patient returned home but stayed only one week and finally decided to be readmitted to the Charles Best Home. The Corporation Property Officer was consulted by the health visitor and arrangements were made with him and with a furniture dealer to dispose of the household goods. Transport arrangements were made by the almoner and the patient is reported to have settled quite happily in her new surroundings.

Where indicated, blind and partially sighted diabetic patients have been registered with the local authority.

During the year, 64 new cases were visited. Twenty-seven patients died in 1958 and forty-one were admitted into hospital. The causes of admission were as follows:—

2 hypoglycaemia 2 gangrene foot 1 hyperglycaemia 2 pulmonary tuberculosis 6 coronary thrombosis 1 bronchitis 5 cardiac lesions 1 appendicitis 3 pruritis vulvae 1 cholecystitis 3 thyrotoxicosis 1 virus infection 1 cataract 2 obesity 1 arthritis 1 mastitis 7 cerebral thrombosis 1 psoriasis

This work demands an ever increasing amount of all the health work with visitors' time, and the total number of visits paid to aged people during the Aged the year was 1,750.

The Personal Service Society have arranged for this service to be the Aged available once weekly to the aged in Speke. Members of the staff of the Foot Hospital attend the session, which is held each week at the local authority clinic. Chiropodists have, from time to time, attended patients in their own homes.

### Home Accidents.

A survey of home accidents was started in July with the co-operation of hospitals. Information about home accidents was received from these hospitals and also from the ambulance and fire services.

All children and adults up to 55 years of age were visited by the health visitors and persons over 55 years of age were visited by the visitors from the welfare section.

The total number of home accidents for all age groups during the period 1st July to the end of December was 818 and more than half of these occurred in children under five years of age. There were 431 accidents to children under school age and in 57 cases there was a history of a previous accident in the home. In 354 cases, one or both parents were present at the time of the accident. In 57 cases neither parent was present and in 20 cases the health visitor could not obtain access to the home.

It is hoped to continue this investigation during 1959.

### Publicity Campaign.

Concern about the large number of burning accidents in the home was expressed by both the Secretary of State and the Minister of Health in circular 58/1958 received from the Home Office in May. It was further stated in this circular that a National Campaign on the theme "Guard that Fire" would be launched in November. It was also indicated that any expense incurred would fall under the category of Health Education (Section 28 of the National Health Service Act, 1946).

In June, a campaign guide was received from the Home Office giving a suggested plan of action for Local Authorities. This plan was followed closely in the Liverpool campaign and a small working committee was formed with representatives from the following Departments, Town Clerk's, Medical Officer of Health, Fire Services and Home and Road Safety.

The campaign was launched on 3rd November by the Lord Mayor at a meeting in the Town Hall to which the Press were invited.

During the period of the campaign most instructive exhibits were arranged by the North Western Gas Board and also by M.A.N.W.E.B. in their respective departments. The large city stores also co-operated by displaying appropriate posters and placing special emphasis on the sale of fireguards. The manufacturers of a fireguard conforming to the British Standards specification kindly loaned two fireguards for display purposes. Special posters were designed and made by a member of the Women's Voluntary Service and the Liverpool Savings Committee kindly allocated one of the windows of their Childwall shop for the purpose of 'Guard that Fire' publicity. The actual display was arranged by the Women's Voluntary Service.

An interesting exhibit of non-inflammable materials, suitable for children's clothes, was loaned by a firm who have developed a method of rendering materials non-inflammable. Invitations were sent to 450 hardware dealers and chandlers, radio and electrical shops, ironmongers and fireplace dealers throughout the city, inviting them to place special emphasis on the sale of fireguards, and the 'Guard that Fire', theme during the campaign. The public health inspectors delivered leaflets to all the above shops in their different districts.

The Chief Fire Officer arranged for the showing of short films on the 'Guard that Fire' theme in the various city cinemas and members of his staff also arranged a most effective 'Guard that Fire' display in shop windows loaned by the Liverpool Savings Group.

During the month of November all clinic premises in the city were used by the health visitors to stage small exhibitions on preventive measures, and paintings and models were used. Many shopkeepers cooperated by lending kitchen stoves, cooking utensils, fireplaces and fireguards etc. for demonstration purposes. These loans which helped considerably in the success of the campaign were greatly appreciated by the health visitors. All the religious organisations in the city also assisted with this publicity campaign.

Posters were displayed in a variety of public places including factories, libraries, fire stations, school clinics, baths and wash-houses and hospitals. Leaflets were distributed by the welfare visitors in the course of their daily visiting.

At a meeting of the Local Medical Committee held early in 1958, Liaison members expressed their appreciation of the meetings which took place between the in 1954 and 1955 between the general practitioners and the health Practitioner department staff. It was stated that consequent on these meetings, there Medical and was now a much better liaison between the general practitioners, health Nursing Staff visitors and midwives. Members of the committee were so impressed with Department the results, that a request was received for further meetings to be held later in the year.

General of the Health

It has been found from previous experience that the most appropriate time to hold these meetings is between the beginning of April and the beginning of June. Accordingly, meetings were held at fifteen local authority clinics between the 9th April and the 6th June. All health visitors, midwives and district nurses working in the district served by each clinic were invited. Some of the general practitioners practise in more than one district, and reside in yet another, consequently it was thought desirable to send each doctor a list of all the meetings. A reply postcard was enclosed with each invitation and the practitioners were asked to state which clinic they would like to visit. The envelopes were addressed by the staff of the Local Executive Council. The Health Committee granted authority for an expenditure up to £2 per clinic for light refreshments.

The attendances were, on the whole, quite good, though considerably below that of 1954, which were in their turn better attended than those held in 1955. It is felt that these meetings might well be held at, say, five yearly intervals.

### Day Nurseries.

#### Private Day Nurseries

The following private day nurseries and daily minder have been registered with the local authority under the Nurseries and Child Minders Regulation Act, 1948.

Name and Address	No. of Children	Ages
Mrs. Hyland, 4 Oak Terrace, Beech Street, Liverpool, 7.	32	2-5
Victoria Settlement, Private Day Nursery, 294 Netherfield Road N., Liverpool, 5.	70	2-5
St. Hilda's Church Hall, Hunts Cross, Liverpool.	50	2-5

# Daily Minder.

Mrs. Kavanagh, 6, Southbank Road, Liverpool, 7. Six children, aged two to five.

The daily minder and the private day nurseries are visited regularly; by the local authority's medical officers.

#### Local Authorify Nurseries

There are twelve nurseries with a total of 670 places.

Mill Road Nursery was closed and the Sarah McArd Day Nursery opened in June and this new nursery has been a most successful venture. All the staff and children were transferred en bloc from Mill Road to the Sarah McArd Nursery. One rather surprising outcome of this change is the improved general health of both staff and children. The staff have expressed their indebtedness to the architect for the thoughtful planning which has added greatly to the ease of supervision of a nursery

designed to take 80 children. The three children's play rooms open out on to a play terrace and form a real suntrap. Some difficulties have been experienced due to school children gaining access after school hours and a silent burglar alarm has now been installed. It is hoped that the children will gradually decide to leave the nursery alone.

### Private Nursing Homes.

The following nursing homes were on the register at the end of the year.

money offichapting population of	No. of Beds	Medical	Maternity
Greystoke Nursing Home, 25 Aigburth Drive, Liverpool, 17.	25	23	2
Rosslyn Nursing Home, 202 South Mossley Hill Road, Liverpool, 19.	5	5	0
Lynwood Nursing Home, 32 Parkfield Road, Liverpool, 17.	18	8 medical and surgical	10
Elmswood Nursing Home, North Mossley Hill Road, Liverpool, 18.	12	0	12
Holmleigh Nursing Home, 61 Russian Drive, Liverpool, 13.	18	18	0
L urdes Private Hospital, 57 Greenbank Road, Liverpool, 15.	34	24 medical and surgical	10
Virgo Potens Hospital, Rose Brow, Gateacre, Liverpool.	32	32 medical and surgical	0
The Half Way Hostel, 25/27 Sefton Drive, Liverpool, 17.	18	18 Geriatric	0

# Local Authority Clinics.

The total number of new cases attending the ante-natal clinics has Ante-natal nereased slightly, the number being 2,836 as compared with 2,660 in Care

357. This is due entirely to the increased attendance at the midwives'

ante-natal clinics, there being 20 sessions held per month throughout the city. The midwives' sessions are only for cases where the mothers have booked a doctor for the confinement and where the general practitioner is carrying out full ante-natal supervision. Where the general practitioner does not wish to undertake full ante-natal care, the patients are encouraged to attend the local authority medical ante-natal sessions. A small number of patients will not book a doctor for the confinement, but can usually be persuaded to attend the medical ante-natal sessions and it is felt that this arrangement avoids any duplication of ante-natal care.

#### General Practitioners' Clinics

The local authority midwives are asked to attend the general practitioners' ante-natal clinics so that they can see their patients together with the doctor. This is tending to foster a better relationship between the midwives and the general practitioners and also gives the patient added confidence in the doctor and midwife.

In all, the midwives attended the ante-natal clinics of 24 generally practitioners' group practices.

#### Local Authority Clinics

The number of new cases attending local authority medical ante-natal clinics was 2,250, the corresponding figure for 1957 being 2,397.

Six ante-natal sessions were closed during the year, leaving a total of 194 medical ante-natal sessions per month throughout the city.

#### **Blood Tests**

Many general practitioners continued to send their ante-natal patients to the local authority clinics for the testing of blood only. The results of the blood tests were forwarded to the general practitioners and copies sent to the midwife concerned and also to her partner.

All patients attending for ante-natal care were given the opportunity of attending the mass radiography unit for a check up, but only about 50 per cent availed themselves of this offer. Of those X-rayed, two were recalled and in one case the second plate was found to be normal and the other who was referred to the local chest clinic is being kept under observation.

#### Relaxation Classes

The beginning of 1958 saw a marked improvement in the attendances at relaxation classes, and more cases were referred from general practitioners and hospitals. In July, however, the service suffered a

serious set-back owing to the physiotherapist leaving to take up another appointment away from Liverpool. Another physiotherapist was appointed in August, but it was not possible for her to commence until 1st December.

The total attendances of children under five years of age was 96,761, Infant compared with 98,789 in 1957. This reduction was associated with the Clinics intensive drive for poliomyelitis inoculation at the clinics. numbers of children under five years of age and, in a few cases, school children, were coming forward for inoculation during the course of the infant sessions. It was thought best to give them priority even at the expense of the infant sessions. Towards the latter part of the year, however, an increasing number of special sessions for poliomyelitis inoculations were organised and the infant clinics were gradually able to resume their proper function.

There has been a marked increase in the attendance at these clinics Toddlers' and the total number of 437 compares favourably with the figure of Clinics 252 during 1957. Sixteen sessions per month are held and it is hoped by the end of 1959 that these clinics will have been doubled in number. Throughout the year parents repeatedly expressed their appreciation of this service, which offers, by appointment, a complete medical check up of any child who is nearing school age.

By arrangement with the Education Committee, children under the Pre-school age of five years suffering from physical defects, or who appear to be children referred to mentally dull, are referred to the School Health Department for advice the School and possible treatment.

Department

The following is an analysis of the cases referred:-

Defective Vision			 223
Orthopaedic defects			 178
Speech			 27
0			 21
			 2
Mentally subnormal			 12
	***	***	 2
			 9
Behaviour problems			 2

Monthly meetings with a senior child phychiatrist continue to be held Psychiatric at one of the local authority clinics. These have been attended by 25 to 30 health visitors and cases of behaviour problems in young children vere brought forward for discussion.

General Social Problems

The community has now become very conscious of the functions of the health visitor under the National Health Service Act, and the centres to which they are attached have become well known as places where one can bring a problem knowing it will receive expert and confidential attention. These matters took a great deal of the health visitors' timeand cannot be recorded as ordinary clinic attendances.

Welfare centres are also places where other voluntary and statutory social workers can meet and discuss, between them, social problems affecting members of the community. At one centre this has proved very beneficial and such meetings have continued monthly throughout the

### Breast Feeding.

A lactation survey was undertaken covering the period from January to September, and 7,272 mothers were visited by the health visitors when the baby was about six weeks old. The following information was obtained:-

Questionnaire

- 1. Type of feeding;
- 2. Were tablets given for cessation of lactation and by whom prescribed;
- 3. Incidence of sepsis by-
  - (a) breast;
  - (b) infant.

Percentage of Breast Fed Infants in Home Deliveries

It was found that by the age of six weeks the majority of infant were already artificially fed. Of those born in hospital only 25.1 pe Hospital and cent were wholly breast fed and of those born at home the corresponding figure was 24.7 per cent. Of 3,963 mothers with normal breast condition

Patients Without Breast Abscess Who Received Tablets

- 2,058 (51.9 per cent) sought artificial aid to stop lactation. Of these-523 (25.4 per cent) received tablets from the hospital.
- 1,446 (70.3 per cent) received tablets from the general practitione 89 ( 4.3 per cent) received tablets from the chemist.

There was no marked difference between hospital and home deliveries, Breast in respect of the incidence of breast abscess, the figures being 2.5 per Abscesses in Hospital and cent and 2.6 per cent respectively. The incidence of sepsis in infants Home born in hospital was 10.6 per cent and in infants born at home 10.1 per Sepsis of cent.

Deliveries Infant

There was a close correlation between breast abscess and sepsis of the Sepsis in infant. In the case of hospital deliveries, taking mothers who had Infants of breast abscess, 23.4 per cent of the infants had some sign of sepsis. The Breast corresponding figure for domiciliary deliveries was 21.7 per cent. Of Abscesses and in Infants of hospital deliveries with normal breast condition, the incidence of sepsis Mothers with was 9.7 per cent while in domiciliary cases the figure was 9.2 per cent. Conditions

Mothers with normal Breast

### Perinatal Mortality.

During March, April and May, this authority took part in the perinatal mortality survey which was sponsored by the National Birthday Trust. Five hundred and sixty one forms, each containing considerable detail, were completed and forwarded to the General Register Office.

The hospital staffs completed the forms in respect of their own cases, and the municipal midwives gave the necessary particulars concerning domiciliary deliveries. Three of the maternity and child welfare medical officers undertook the checking of all the returns, and this proved to be quite a time consuming task.

# Welfare Foods.

The function of this service is to arrange for the distribution to the general public of national dried milk, cod liver oil, vitamin tablets and orange juice. For this purpose 50 distribution centres were in use throughout the city, classified as follows:-

> 16 full-time. 14 part-time. 2 mobile points. 18 voluntary centres.

The majority of the full time and part time centres were in clinic premises or church halls, but we are greatly indebted to the two city stores for kindly providing facilities for the disposal of welfare foods on a full time basis and to the numerous chemists who distribute the welfare foods on a voluntary basis,

The staff of 37, who are under the control of the Chief Inspector, consists of 2 supervisors and 35 distributors, 21 of whom are full time and 14 part time employees.

The following figures of the turnover during the year may be of interest:-

Welfa	re Foo	1956	1957*	1958		
National dried milk (t	ins)	 		683,182	546,424	435,242
Cod liver oil (bottles)		 		84,169	70,924	43,124
Vitamins (packets)		 		40,732	37,387	34,675
Orange juice (bottles)		 		552,377	572,997	352,723

\*On 6th April, 1957, the price of national dried milk was increased from 10½d. to 2/4d. per tin, which resulted in a drop in the demand and on 1st November, 1957, orange juice was confined to children up to the age of two years.

It will be noted that there has been a substantial decrease in the distribution of the welfare foods compared with previous years. On the other hand, there has been a steady increase in the sale of proprietory brands of baby food in the clinics during the same period, as shown by the following table:—

Proprietory Fo	oods	oods,	T e	1956	1957	1958
Dried milk (packets)	···	oggan Mag		38,408	73,805	93,369
Rose Hip Syrup (bottles)				2,579 (8 mths only)	6,546	7,242

# Home Nursing Equipment.

The scheme for the loan of home nursing equipment established in accordance with the provisions of Section 28 of the National Health Service Act, 1946, to patients being nursed in their own homes, functioned very satisfactorily during 1958. The scheme was supervised by one of the deputy superintendent health visitors.

No charge was made for the loan of the equipment, nor was any restriction placed on the number of different articles which may be borrowed by any one patient. A deposit—refundable on the return of the equipment—of one-tenth of the value was required, however, where the cost of an article exceeded one pound. Loans were made for three monthly periods and extensions were granted at the request of the patients' doctors.

A health visitor called on these patients to assess their needs, and to advise on the use of the equipment. Frequently the health visitors were able to give assistance with other problems affecting the patients' mental and physical comfort.

The demand for this service continued to grow, and each year it has been necessary to increase the stock of equipment. During 1958 2,898 articles were loaned as compared with 2,562 in 1957.

### Home Nursing.

The Liverpool Queen Victoria District Nursing Association continued to act on an agency basis in providing the district nursing service for the local health authority during 1958, although towards the close of the year, it became evident that it would not be long before the local authority would take over direct control of home nursing within the city boundaries.

At the end of the year the nurses were carrying out their duties from the following homes, centres and double-districts:—

Homes.

Central Home, 1 Princes Road. Walton Home, 1 Church Road.

Nursing Centres.

58 Queens Drive, 18.

2 Hillfoot Avenue, 19.

14 Ashmore Road, 14.

### Double Districts.

16 Manica Crescent, Fazakerley.

39 Malleson Road, 13.

192 East Lancashire Road, 11.

95 Heathgate Avenue, Speke,

Staff

The nursing staff at the 31st December, 1958, was comprised as follows:—

1 Senior Superintendent of Home Nursing.

1 Superintendent.

1 District Nurse Tutor.

3 Assistant Superintendents.

51 Queen's Nurses (full time).

6 Queen's Nurses (part time).

6 State Registered Nurses (full time). 6 State Registered Nurses (part time).

13 State Enrolled Assistant Nurses.

11 Student District Nurses.

which, in terms of full-time staff, was 15 below the approved establishment.

#### Cases and Visits

During the year a total of 342,387 nursing visits were made to 15,308 patients, classified under the following:—

								Cases	Visits
Medical			a de la	anaki.	Seno H			12,165	264,170
Surgical								2,355	51,959
Infectious Diseases								39	275
Tuberculosis								388	21,409
Maternal complica	tions							344	3,184
Others								17	1,390
Totals								15,308	342,387
Patients included i	n the a	bove w	ho wer	e 65 or	over a	t the t	ime	· ·	I management
of first visit								4,062	165,329
Children included i	n the a	bove w	ho wer	e under	5 year	s of ag	e at		
the time of first						_		1,227	8,127
the time of hist		aorea w	ho have	had m	ore tha	n 24 v	isits		The state of the s
Patients included in	n the al	JUVE W	TEC TYCE A	C ARTEST AR					

Injections

Included in these visits were 66,806 injections of insulin, 44,210 injections of penicillin, 20,575 of streptomycin, 34,911 of haematen and 49,259 others, making a total of 215,761 injections given.

**Visits** 

Nursing visits continued to be made between the hours of 8.30 a.m. and 1.30 p.m. and 4.30 p.m. and 7.30 p.m. daily. Twice daily, i.e. morning and evening, visits were paid to patients requiring them and staff were on duty each evening until 10 p.m. for emergency calls. A total of 3,154 late visits were made for the purpose of giving late morphia injections, etc.

A total of 2,708 visits were paid to infants under one year, and of Nursing Care the total of 409 treated, 78 were under one month old.

The minor ailments clinic at the Central Home continued to be used Minor throughout the year and the statistics for 1958 are given in Table 15. Clinic

The course of Queen's Training is six months for State Registered Training Nurses or four months for those nurses who are either qualified health visitors or midwives or have had at least 18 months' experience on the district.

During 1958, 23 nurses qualified as Queen's Nursing Sisters. Of these, 11 were trained for the Liverpool staff, 5 on behalf of County Borough Authorities and 7 on behalf of County Authorities as far afield as Flintshire, Caernaryonshire, Cumberland and the West Riding of Yorkshire.

The block system of training continued in use under which the lecture course is concentrated into one month, during which period all lectures are given and the students do purely theoretical work.

The remainder of the training period is spent in tutorials, study classes, visits of observation and practical work on the district.

In addition, to carrying out the district nursing service on behalf of Mobile the local authority the Liverpool Queen Victoria District Nursing Service Association maintained on an entirely voluntary basis, a mobile physiotherapy service with two fully equipped units, each staffed by a chartered physiotherapist.

This service is entirely outside the orbit of the National Health Service and is entirely dependent upon patients' payments, donations and subscriptions and part of the Association's investment income.

During 1958, 4,103 treatments were given to patients, cases being referred to the units by general practitioners and hospital specialists.

The service was very much appreciated because it enabled elderly chronic patients to be kept in a state of moderate mobility at home.

### Dental Care of Maternity & Child Welfare Cases.

In presenting the figures for maternity and child welfare dental treatment for 1958, it is noted that the attendances have once again shown a decrease, in fact, conservations have increased on the previous year.

One very encouraging sign is the number of fillings done for the children under five.

TABLE A
NUMBERS PROVIDED WITH DENTAL CARE

which, in come of full-time	Examined	Needing Treatment	Treated	Made Dentally Fit
Expectant and nursing mothers	 859	826	465	433
Children under five years	 180	155	125	83

It appears that an increasing number of maternity cases are seeking and obtaining private treatment. This point is shown by the number actually treated as compared with the number examined. Wherever the patient decides to obtain treatment, it is of the utmost importance for every expectant mother to receive dental examination early in pregnancy. Patients with sound mouths can receive advice regarding diet and oral hygiene which will help them to keep a healthy dentition.

TABLE B
FORMS OF DENTAL TREATMENT PROVIDED

e (d h	Scalings	ne ,alt	Silver	Crowns	Extrac-	General	Dent Prov		Radio-
Injection discoll	and gum treat- ment	Fillings		or inlays	tions	Anaes- thetics	Full upper or lower	Part upper or lower	graphs
Expectant and nursing mothers	167	187	3	inicoral	3,378	406+584 local	543	243*	17
Children under five years	5	59	5	Siloisi Siloisi Siloisi	296	125+10 local	e law	di oi i	- SEAL

<sup>\*</sup> Includes 14 repairs.

The local authority has great scope in promoting dental health. Posters in the clinics are of great value, but the messages they give very often only reach the wise mother. The health visitor in her daily rounds can reach a section of the public who normally show little interest in dental health, and only seek dental advice when suffering pain. Dental officers can give talks on dental care; there is fruitful ground for this wherever young wives meet, for example, at Church organisations and clubs.

Whilst this type of work does not appear so spectacular as extractions and fitting of dentures, it will provide a good basis for sounder mouths in future.

There will, of course, always be a need for actual treatment and every endeavour must be made to make the standard as high as possible. The introduction of x-ray has been a great asset and the introduction of anaesthetic consultants has been an advancement. Sound treatment and intensive propaganda will all help to improve dental health and so advance general health.

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asses. Service is also provided for households when the mother is
cospital and there are children of under communication and their applicant is visited at home below the service communication
when visit is paid white the home below in attending the assessment
of is necessary to contain the hole home below in attending the assessment
and this entails extra visiting and their interviewing

watersories the second who law at a second who de families (If six) are unable to assist. A less hours bely of this kind can find an interest of an aged person, as the following state in very directions appeared a hopeless case. The home bely visitor was interest was interest or a hopeless case. The home bely visitor was interest or a hopeless case. The home bely visitor was interest.

### THE HOME HELP SERVICE

#### Home Help Service

The home help service was originally introduced with the main object of assisting nursing mothers and cases of emergency illness. In the course of time the emphasis has changed. Now it is concerned largely with the aged and infirm and chronic sick. The demand from an ageing population is naturally increasing and yet the emergency service must always have priority. The growth of the service and change of emphasis is illustrated in the following table:—

1000	Year	tana	Emergency	Aged and Chronic Sick	Total	No. of Home Helps	Admin. Staff	Total Visits
1948			639	255	894	57	4	2,659
1950			1,114	620	1,734	81	5	5,234
1954	W		768	1,512	2,280	126	5	5,120
1958			900	1,704	2,604	184	8	6,155

#### Emergency Service

This service is provided each day to patients suffering from acute illness. Maternity cases come within this classification and advance arrangements are made, thus avoiding delay when the need arises. The home help usually attends for periods of one to four weeks in emergency cases. Service is also provided for households when the mother is in hospital and there are children of under compulsory school age at home.

Each applicant is visited at home before the service commences and a further visit is paid while the home help is attending. Occasionally it is necessary to change the helper, usually because of incompatibility, and this entails extra visiting and tactful interviewing.

#### Pensioners Service

The pensioners service is provided for a few hours weekly to assist the aged and/or infirm with their housework and shopping. It must be reserved for those people who are alone and whose families (if any) are unable to assist. A few hours help of this kind can make an enormous difference to the life of an aged person, as the following example illustrates:—A man of 83 years living alone in very dirty conditions appeared a hopeless case. The home help visitor was impressed, however, with his desire to be clean and a home help was

persuaded to make a start in September 1958. She met with great success and is frequently congratulated by his neighbours, whose offers of help he had refused in the past. Her success lay, not only in cleaning, but also in curing him of his long-standing anti-social habits.

Extended service is provided in cases where the patient is not Chronic expected to live and the removal of the helper would cause distress, and in cases where the income is too small to allow for the payment of other assistance. Such a case was that of a young widow suffering from tuber-culosis who did not wish to stay in hospital because of her children aged 7 and 2 years. A home help was sent on 24th July, 1958 and worked from 9 a.m. until 5 p.m. each day for three months, then as the health of the patient improved so the service decreased, and she now receives help on two mornings per week.

The standard charge for service is 3s. per hour and an assessment Charge scale is used for those who are unable to pay this amount. The minimum charge is 4s. per week and applicants in receipt of National Assistance are re-imbursed by the National Assistance Board.

The number of home helps increased from 168 to 184 during the year Home Help and is still increasing. There is no shortage of applicants for this staff employment, but as it is largely unsupervised and calls for absolute integrity, the staff must be carefully selected.

The helpers are sometimes unable to gain access to their pensioner patients, and if neighbours cannot give any information they take their problem to the nearest policeman, who will decide whether to make an entry or not. In 1958, 12 forced entries were made and in all cases the pensioner was either very ill or deceased.

The section was housed with the rest of the Health Department in Change of Hatton Garden from 16th December, 1957. The proximity of other sections, namely Health Visitors, Welfare Visitors and Wages has been very helpful.

### HEALTH EDUCATION

The Health Department has been extremely active in the field of health education. Speakers have been provided on various health matters and the service is becoming more widely known and used each year. Many different organisations have requested speakers on a very wide range of topics including maternity and child welfare, infectious disease, mental health, immunisation and vaccination, smallpox, food hygiene, atmospheric pollution, slum clearance and Rent Acts. In every instance a request for a speaker has been met.

Campaign designed to prevent the home

Reference has already been made to the special campaign which was launched early in November to reduce the number of accidents in the accidents in home. Many different firms, including the North-Western Gas Board and M.A.N.W.E.B. assisted in this campaign together with other Corporation departments particularly that of the Chief Fire Officer. Displays were also set up in many of the child welfare clinics illustrating various hazards which can be present in the home and lead to repeated accidents. In particular there was a most interesting exhibit set up showing how, by the use of modern non-inflammable materials, particularly for children's night attire, the safety of the home can be considerably increased.

> Leaflets and booklets were freely available and were distributed widely throughout the campaign.

Liverpool Show, 1958

Exhibits of health education illustrating various aspects of maternity and child welfare, preventive medicine, atmospheric pollution and tuberculosis services were set up at this Show. The maternity and child welfare display primarily high lighted the work of the special premature baby nurses working at present within the city, and many enquiries were made from members of the general public of the ways in which these special nurses can help the premature baby.

The relationship of atmospheric pollution and cigarette smoking on the incidence of lung cancer was another main theme of one of the exhibits showing the problems of carcinoma today, particularly carcinoma of the lung. Industrial causes of cancer were also illustrated by means of models and photographs. The early history of smoking was traced from its importation into this country during the Elizabethan period up to the present high rate of tobacco consumption in most

European countries. It was shown how this was related to the progressive increased incidence of carcinoma of the lung in those who smoked excessive quantities, particularly of cigarettes. An interesting comparison was drawn between members of the medical profession who smoked heavily and those who do not smoke.

The incidence of cancer in various other organs of the body both in the male and female were illustrated by means of models, charts and statistics, and chest X-rays depicted various stages and positions of cancer of the lung and the latest methods of combating this disease by means of radiation and deep X-ray. Many enquiries were made on this topic during the Liverpool Show and clearly demonstrated the great interest that many members of the public have in this increased problem.

A further aspect of the work on health education was the exhibit showing the ill effects of atmospheric pollution on both the health of the people of the City and the buildings of our City. Prevention of smoke pollution was high lighted and the causes of atmospheric pollution and its effect on property and persons were illustrated by the use of photographs and working models. Many of these models had been made by nembers of the staff whilst a few other ones were loaned by various irms, and their assistance in this matter was greatly appreciated.

Finally, there was a small exhibit illustrating the importance of the coming Mass X-ray Campaign and members of the public were requested o volunteer as voluntary helpers during the campaign. This resulted n just over 200 persons being recruited during the 3 days of the liverpool Show.

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On the evening of 19th March, the s.s. "Circussia" arrived to Liverpostaving on boards a lascar seaman with smallnox. Three days before

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# INFECTIOUS DISEASE

#### SUMMARY

Number of confirmed cases of infectious disease reported during 1958:—

Enteric Fever (Paratyphoid Fever	r)				 	18
Scarlet Fever					 	879
Measles and German Measles					 	7,210
Cerebro-spinal Fever					 	29
Puerperal Pyrexia					 	717
Ophthalmia Neonatorum					 	89
Erysipelas					 	33
Poliomyelitis—Paralytic					 	14
Non-Paralytic					 	2
Pneumonia, Acute Primary and I	nflue	nzal Pn	eumon	ia	 	406
Dysentery (Sonne 924, Flexner 7)					 	931
Whooping Cough					 	474
Food Poisoning					 	131
Malaria (Contracted abroad)					 	3
Acute infective encephalitis					 	2

No cases of Plague, Smallpox, Typhus Fever, Anthrax or Diphtheria occurred during the year.

Throughout the year, a close and cordial co-operation has been afforded the department by Dr. A. B. Christie, Physician Superintendent, and colleagues 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.

# Small pox.

Although no case of smallpox occurred in Liverpool during 1958, a case was transferred to the smallpox hospital, New Ferry, from a ship within the port of Liverpool and subsequently a smallpox outbreak of five cases occurred in the New Ferry area. The following is a full description of the events that lead to this outbreak.

On the evening of 19th March, the s.s. "Circassia" arrived in Liverpool in having on board a lascar seaman with smallpox. Three days before the vessel's arrival, the Liverpool Port Health Authority had been informed of the case by wireless telegraphy. During this three days are

interval, as a preliminary precaution, revaccination of all medical officers, port health inspectors, fireboat crew, ambulance drivers and hospital staff who were likely to come into direct contact with the case was carried out. Vaccination was also offered to all company and port officials who had business aboard the vessel when it arrived in Liverpool.

The victim had become ill on 9th March, eleven days after leaving Bombay and the rash had appeared on 12th March. On arrival in Liverpool, the diagnosis was confirmed that the patient was suffering from a severe semi-confluent form of Asiatic smallpox. He was landed together with his cabin companion by the fireboat "William Gregson" and both were taken by ambulance to the smallpox hospital, New Ferry. Meanwhile, every person on board the "Circassia" was examined and their destinations checked. All aboard had been vaccinated by the ship's surgeon during the voyage. Disinfection of the isolation cabin and bedding was undertaken and the vessel freed from medical control four hours after boarding. The passengers were then disembarked at the Princes landing stage in the usual manner. The "Circassia" continued its voyage to Glasgow the same day (20th March). Both the Medical Officer of Health for Glasgow and the Ministry of Health were informed of these measures. No further cases were reported from the crew or passengers of the "Circassia." The lascar steadily improved under treatment and was discharged with his companion on the 8th May and rejoined the "Circassia."

At the smallpox hospital, the usual precautions were taken about Smallpox in disposal of scabs, disinfection of floors, and disposal of bed linen. New Ferry After the patients' admission no one entered or left the hospital grounds except medical personnel. Stores, milk and groceries were left outside the main gates, yet, on the evening of the 14th April, a diagnosis of severe discrete smallpox was made in respect of an unvaccinated male child aged 1 year and 11 months, living in a house 400 yards from the smallpox hospital. He was admitted immediately to the hospital. Subsequent enquiries revealed that this child had been confined to his home for two weeks before 21st March because of mumps. On the 25th March he was taken by his mother to the hairdresser's. On 6th April he appeared to have a heavy cold. Three days later (9th April) a rash appeared on his face which spread within 24 hours to his arms and

legs. Despite the gravity of his illness, he responded well to treatment (penicillin 1 mega unit daily, later 2-5 mg. cortisone in orange juice twice daily) and was discharged on the 17th May.

As far as could be established there was no connection whatsoever between this family and the hospital, and the only feasible explanation appeared to be contamination by airborne dust.

As the child had been at home during the first six days of the eruptive stage of his illness before diagnosis, it was appreciated that the family contacts had been heavily exposed. The household consisted of five, mother aged 40, vaccinated in infancy and again in 1946; father aged 37, vaccinated in infancy and again during war service; daughter aged 6 unvaccinated; grandmother aged 73 vaccinated in infancy; and the victim. These family contacts were vaccinated on 14th April and kept in isolation at home under strict surveillance by the Bebington Medical 1 Officer of Health. In addition they were further protected by injections of immune gamma-globulin. All known contacts of this family were vaccinated between April 14th-16th.

2nd case

3rd case

On 21st April, the child's grandmother became ill and on the 23rd in April, she developed a rash and was admitted as a case of smallpox to New Ferry Hospital. On the 25th April, the child's older sister, living in the same house, developed a rash and was admitted to New Ferry Hospital as a case of smallpox on the 26th April.

4th case

As contacts of the child had been kept under surveillance for eighteen adays i.e. until 1st May, and no further case had been reported up to 10th May, the outbreak was thought to be at an end. However, a man aged 54 was admitted to Clatterbridge Hospital on the 17th May with a diagnosis of meningococcal meningitis. He had a haemorrhagic rash and was extremely toxic. A diagnosis of haemorrhagic smallpox was made and the patient removed to New Ferry Smallpox Hospital the same day. It was discovered that the patient's wife who accompanied him to hospital was a contact of the male child previously referred to, having visited the house some ten minutes before the diagnosis of smallpox was made. She had been released from surveillance on 1st May. She denied being ill, but on the evening of the 17th May, when examined she was found to be suffering from smallpox modified by vaccination. She was admitted to

5th case

New Ferry Smallpox Hospital on 18th May, was never very ill and discharged on the 31st May. Her husband meanwhile deteriorated rapidly and died on the 20th May.

As a result of these unforeseen events, further spread of the infection was now feared from three separate sources:—

- (1) The man's place of employment.
- (2) Clatterbridge Hospital.
- (3) The journeys of the wife when infectious but undiagnosed. Liverpool had direct connections with all three and immediately vigorous preventive measures were established.

The deceased worked in a large engineering works in Bromborough. He was employed as a storekeeper and in that capacity was in contact with a large number of the employees. Sixty of these lived in Liverpool. Nearly all were vaccinated at the works on the 19th May. The remainder were vaccinated in their homes and all were kept under daily surveillance by public health inspectors. Vaccination was advised for their families and a vaccination centre was established in the Health Department.

During the time the two smallpox cases had been in the receiving room at Clatterbridge Hospital a young child spent some time there awaiting transfer to Walton Hospital. This hospital was informed later in the day of the danger and the child was vaccinated. The vaccination, however, was not successful and the child was transferred to a special isolation block in Fazakerley Hospital. He did not develop the disease. All the hospital contacts were vaccinated. Subsequently, a doctor, on receiving room duties in the hospital at the time was transferred to Fazakerley for observation as he had not previously been vaccinated, but did not develop the disease.

The major part of the precautions adopted by the Liverpool Health Liverpool Department followed a journey of the wife to Liverpool on the 10th May. It appeared that five days after the smallpox rash had appeared upon her person she visited Liverpool, on a Saturday shopping expedition, accompanied by her niece who resided in Kirkby. They visited a number of large stores in the centre of the City, tried on some garments and

handled goods of various sorts. They visited the market and later had coffee in a large restaurant. As she was not diagnosed until a week after this journey, vaccination of the staff in the stores concerned could of course not offer full protection against the disease, but it had the positive aim of preventing any secondary cases within the stores should a primary case be so mild as to miss detection. The managers and staff of the various shops, market stalls and restaurant readily co-operated. Vaccination teams of doctors, health visitors and public health inspectors visited and all at risk were vaccinated. The staff were advised that their own families (the possible later secondary cases) should also be vaccinated and lists were posted up in the stores of the health clinics which were to be opened specially on the morning of Saturday, 24th May, for this purpose.

Meanwhile, all doctors in the city had been informed of the possibility of smallpox and asked to report any suspicious illness to the Health Department by day or directly to one of a panel of four medical officers of the Health Department at night.

All close contacts were visited daily by a health visitor or public: health inspector, completely examined and any sign of illness or spots reported by telephone to the Health Department. A medical officer then went to see the case. During working days these inspections, apart from those away sick, were carried out in the stores. Over the Whitsun holiday, these daily inspections were continued by home visits. The Health Department was open and functioning throughout the Saturday, Sunday and Monday of the Whitsuntide holiday, both as an operational headquarters and a vaccination station.

Complete staff lists were obtained to ensure that everybody had been included in the surveillance, and anybody not reporting for work was svisited at home the same day.

Scrapings of all doubtful lesions were taken and virological examination carried out by Professor Downie of the Department of Bacteriology, University of Liverpool.

Liverpool Surveillance Throughout this period, thirty-five public health inspectors, thirty health visitors and all the medical officers were engaged full-time on this task and over 2,300 separate home visits were made. Close surveillance

was continued for 21 days from the visit of the smallpox case to Liverpool on the 10th May, and ceased as far as her contacts were concerned, on the 31st May. The watch on the contacts of her husband, living in Liverpool, ceased on the 3rd June, as he had been to work on the Tuesday after his wife's visit to Liverpool.

Medical Officers of Health of other authorities were informed where contacts had left Liverpool, and in addition a meeting of all local Medical Officers of Health was arranged.

Vaccination was not recommended for the general public though a centre was established in the Health Department for anyone who wished to be protected. Vaccination of those particularly exposed, such as the assistants on counters where the case had made purchases, were inspected within three days and any apparent failures were revaccinated. All vaccinations in the stores were examined after seven days, and the general public were asked to return after a week for the vaccination to be inspected. During the months of May and June, a total of 8,385 persons were vaccinated in Liverpool. Of these, 4,282 were primary vaccinations Liverpool and 4,103 were revaccinations. (Full details are included in the Immunisation and Vaccination section, page 65.)

Other precautions included the tracing and vaccination of the crews who had manned the buses which may have been used by the smallpox case, and their families, and removal of any garments or materials which she was known to have handled whilst shopping. No further cases of smallpox were reported.

Although a large-scale outbreak of smallpox in Liverpool was feared, it never materialised, due in no small measure to the precautions and action taken.

Later in the year (in the early hours of the 11th July, 1958) the s.s. Suspected "Parthia" from New York arrived in the Port of Liverpool with a s.s. "Parthia" steward, aged 29, aboard, thought to be suffering from smallpox. Prior to the vessel's arrival, all precautions had been taken, including vaccination of all passengers and crew of the liner, vaccination of ambulance drivers, and all port officials and medical officials who were to board the "Parthia". Examination of this man showed that he was suffering from a staphylococcal dermatitis and he was removed for treatment to Fazakerley Isolation Hospital.

#### Paratyphoid Fever

During 1958, eighteen cases of salmonella paratyphi B were confirmed in Liverpool. This is an increase of sixteen over the 1957 figures. These cases, with three exceptions, were discovered following routine stool sampling of patients suffering from gastro-enteritis. The details are as follows:—

	Patien	t	Age Years	Sex	Date of onset of symptoms	Site	Phage type
1 2 3			9 9 47	F M F	23.1.58	School outbreak	3a 3a 3a
4 5 6 7 8 9			16 72 45 69 8 39	M M F F M	23.2.58	Family outbreak	1 1 1 1 1 1
10			52	M	7.4.58	Isolated case	3a
11 12			3/12	F M	30.3.58 2.4.58	2 positive cases in same family	3b var 3 3b var 3
13 14 15 16 17			2 10 28 2/12 3	M F F F	20.5.58 6.6.58 8.6.58 12.6.58	Family outbreak	1 1 1 1
18			11/12	M	21.10.58	Isolated case	11

The history of the school outbreak is of interest and the details are as a follows:—

#### School Outbreak

On the 23rd January, 1958, a girl aged nine years, a pupil at a Liverpool residential special school, was admitted to the school sick bay with a pyrexia of 100°. Her condition deteriorated and later that day she was admitted to Fazakerley Isolation Hospital with symptoms of meningeal irritation. Subsequent bacteriological examinations of faeces, urine and blood culture were positive for salmonella paratyphical B, phage type 3a.

Similar bacteriological investigations of the 34 staff and 63 children at the school were negative, with the exception of a boy aged nine years in the same class as the patient who was found to be a symptomless

excretor of salmonella paratyphi B, phage type 3a. He had no previous history of illness suggestive of enteric fever and was thought to be a carrier. He was removed to Fazakerley Isolation Hospital on 3rd February.

In the course of investigations swabs were taken from eleven water closets and from 39 surfaces within the dormitories, playrooms, diningrooms, kitchen, classrooms and sick bay. The results were negative with the exception of the external water closet, situated adjacent to the school kitchen, which was positive for salmonella paratyphi B, phage type 3a. This water closet was provided for the convenience of the outside staff (gardeners, contractors, etc.), but it was established that both the children had used it during the term. It had also been used by the kitchen staff whilst repairs were carried out to the internal water closet. Disinfection was undertaken and it was rendered free from infection.

An extensive bacteriological investigation of gardeners, contractors and kitchen staff revealed no evidence of infection with salmonella paratyphi B.

It was also ascertained that 54 persons had visited the school since the commencement of term. These included delivery men, refuse and food collectors and window cleaners etc. All were interviewed and it was found that several had used the external water closet at the school. Faecal and blood specimens from all these persons were obtained and bacteriologically examined with negative results.

The home contacts of the patient were also examined with negative results. In the case of the home contacts of the suspected carrier an isolation of salmonella paratyphi B, phage type 3a, was found in the stools of his mother (aged 47) after seven consecutive specimens had been examined with negative results.

It is interesting and significant to note that she had had a vague history suggestive of enteric fever in December 1957. Recently she had been attending a hospital outpatient's department with suspected gall bladder trouble and was due to be admitted for an operation. This history was suggestive of a convalescent excretor of salmonella paratyphi B. She was admitted to Fazakerley Hospital on the 9th April and after the appropriate treatment made a satisfactory recovery. Another

interesting result of the extensive enquiries brought to light the case of a boy who had suffered from paratyphoid fever three years previously (1955), the organism being of the same *salmonella* phage type (3a). He had been a pupil at this school in 1954, and had been a constant companion of the suspected carrier.

He was visited and specimens of blood, faeces and urine were examined with negative results. It is interesting to speculate that he may have contracted the infection from the suspected carrier in 1954 or vice versa, the carrier may have become infected by him at that time and been in an infectious state for the past four years. This would explain his mother's illness in December, 1957.

Finally this suspected carrier, despite extensive treatment in Fazakerley Isolation Hospital, is still excreting salmonella paratyphi B and has been added to the list of chronic carriers.

Paratyphoid Fever and the River Alt.

#### Paratyphoid Fever

A preliminary report on an investigation into paratyphoid fever and the River Alt.

On the 11th September, the Medical Officer of Health for Crosby reported that between June and July 1958, thirteen cases of paratyphoid fever had occurred in the Borough of Crosby. The source of this outbreak was thought to be due to a person who was a member of a yachting club situated at the mouth of the River Alt.

Bacteriological tests showed that this person was infected with salmonella paratyphi B, phage type 1. Samples of sludge and water taken from the river adjoining the club headquarters were found to be infected with the same organism. At the same time, a sample of sludge taken at the Liverpool City Boundary of the River Alt was similarly infected with salmonella paratyphi B, phage type 1.

Preliminary Investigations.

Intensive bacteriological examination of water and sludge from the River Alt and all its tributaries was undertaken by the Liverpool Beath Department. Between September and December, 151 samples of water and sludge were examined. Of these, 56 were positive for salmonella (15 salmonella paratyphi B, 41 various salmonellae) and 95 negative for pathogenic organisms.

Twelve of the paratyphoid isolations were of phage type 1; one of phage type worksop; one untypable, and one still remains to be typed.

These preliminary findings suggested considerable infection of the River Alt with salmonella paratyphi B and its tributaries with less dangerous salmonellae. At this stage, it was not possible to determine the exact source of the infection or whether there were several sources, but the investigation did suggest that the effluent from both the West Derby and Walton Sewage farms should be regarded with suspicion. These investigations are proceeding to localise the source or sources of pollution.

The findings and the completion of the investigation will be reported later.

### Register of Chronic Typhoid and Paratyphoid carriers.

Examination of two chronic typhoid carriers and five paratyphoid B Register of carriers has continued throughout the year.

Chronic Typhoid and Paratyphoid carriers

### Whooping Cough.

During the year, 474 cases of whooping cough came to the notice of the Whooping Health Department, a figure representing a case rate of 0.6 per 1,000 of Cough the population.

There was a remediable reduction of 1,252 cases compared with the 1957 figure of 1,726.

The extent of the reduction of whooping cough since 1953 is shown by the following table giving the incidence in those years.

#### CASES OF WHOOPING COUGH

1953	 	4,740 cases
1954	 	1,933 cases
1955	 	2,490 cases
1956	 	2,559 cases
1957	 	1,726 cases
1958	 	474 cases

It seems likely that this recent substantial reduction must be connected with the increase in the number of whooping cough preventive immunisations now being undertaken.

Measles.

During the year, 7,210 cases of measles were reported representing a case rate of 9.4 per 1,000 of the population.

There was a decrease of 2,970 in the number of notified measles cases as compared with the 1957 figure of 10,180.

Table 1 shows the incidence of measles during the past eight years :-

TABLE 1.

INCIDENCE OF MEASLES CASES AND RATE PER 1,000 POPULATION.

Year	1951	1952	1953	1954	1955	1956	1957	1958
Cases	10,464	8,768	10,090	8,599	5,998	6,662	10,180	7,210
Rate per 1,000 population	13-3	11-1	12.8	10-9	7.7	8.6	13.2	9-4

### Poliomyelitis.

Poliomyelitis

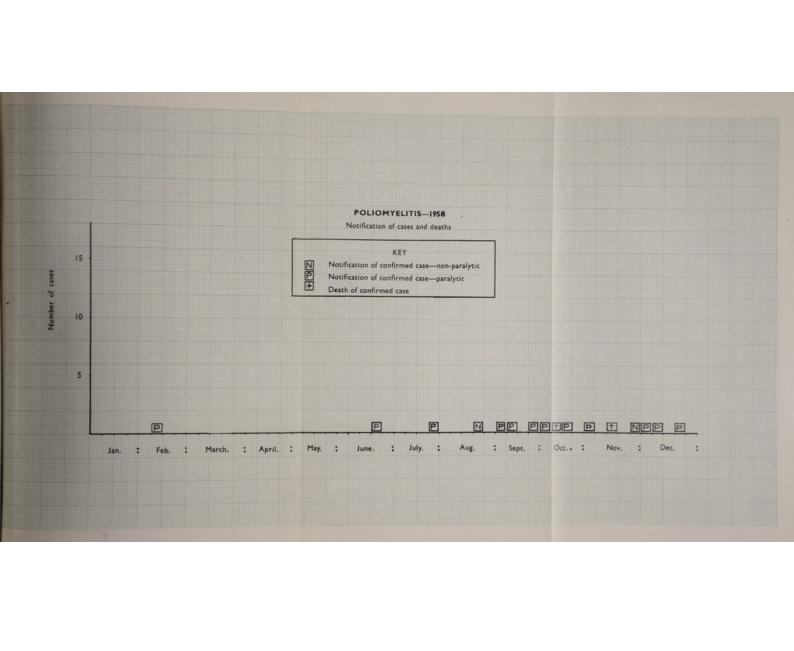
Forty-nine patients were originally notified as suffering from poliomyelitis, but in only sixteen cases was the diagnosis actually confirmed. Fourteen were paralytic cases and two non-paralytic cases. This is half the 1957 figure of thirty-two. Two cases were fatal.

The chart illustrates the incidence of confirmed cases.

The following is a summary of the age incidence of cases. There were nine patients under the age of five years, six in the age group fivefifteen and one aged thirty.

TABLE 2. Poliomyelitis 1958.

Age	 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+
MALE Paralytic Non-paralytic	 5	2	1 2	1 _		=	_	=
FEMALE Paralytic	 4 (1 died)	ne <u>l</u> ni	rou <u>t</u> ada				1 (died)	_
Non-paralytic	 -	-	_	-	-	-	-	-



Pol

Three of these children had been immunised with poliomyelitis vaccine.

(Approximately 39 per cent. of children between the age of one and fifteen years of age had been immunised by 1st July, 1958.)

Fatal Cases of Poliomyelitis.

Two fatalities occurred during 1958 as follows:-

Fatal cases of Poliomyelitis

Case 1. A female child aged three years five months complained of nausea on Saturday, 4th October. Later in the day she had bouts of vomiting. The same day the family doctor examined the child and kept her under observation. Her condition deteriorated and on Tuesday, the 7th October, she was admitted to Fazakerley Isolation Hospital. The following day a pharyngeal paralysis developed. Feeding by Ryle's tube was commenced. Twenty-four hours later paralysis of the intercostal muscles ensued and the child died. A post mortem confirmed the diagnosis of polio-encephalitis together with pneumonia of the right lung.

Case 2. A woman aged 28 years, married with two children. Her children had severe colds towards the end of October 1958, and she in turn developed a persistent "cold" which lasted for two weeks. By the 12th November this "cold" was getting worse. The following day she experienced severe headache on walking and that evening her husband found that her left arm was paralysed. The following day she had difficulty in getting out of bed and by 6 p.m. was having difficulty in breathing. On the 15th November, she was admitted to Fazakerley Isolation Hospital as a case of pneumonia and poliomyelitis. On admission, she was grossly dyspnoeic and cyanosed. All limbs were paralysed. She was nursed in the iron lung, but on the 17th November, respiration became embarrassed and she died. A post mortem confirmed the diagnosis of pneumonia and polio-encephalitis.

### Food Poisoning Investigations.

Since the Food Hygiene Regulations 1955, came into operation on Poisoning Investigations the 1st January, 1956, some 26,119 specimens from 14,630 persons have been submitted for bacteriological examination in connection with ingestion disease investigation. Public health inspectors have assisted in the investigations both in tracing and following up contacts.

Intensive health education lectures to the food trade by the medical staff and public health inspectors continued throughout the year. There is no doubt that Liverpool's drive to better the standards of hygiene amongst food handlers has resulted in a great improvement in the standard of hygiene in food premises.

### Food Poisoning.

#### Food Poisoning

One hundred and thirty-one cases of confirmed food poisoning; occurred in Liverpool during 1958. This figure is two less than the 133 cases reported in 1957. Of the 131 cases, 43 (33%) were due to staphylococcal toxin and 88 (67%) were due to salmonella organisms. During these investigations 78 symptomless excretors of salmonellae were found.

Salmonella 1	Patients	Symptomless Excretors	Total			
Salmonella Typhi-muriun	ı	 		75	52	127
Salmonella Bareilly		 ***		2	8	10
Salmonella Thompson		 		4	11	15
Salmonella Anatum		 		2	2	4
Salmonella Bredeney		 		1	-	1
Salmonella Heidelberg		 		1	1	2
Salmonella Hvittingfoss		 		1	2	3
Salmonella Newington		 		1	-	1
Salmonella Wangata		 		1	1	2
Salmonella Panama		 			1	1
TOTAL		 		88	78	166

The satisfactory maintenance of a low incidence of food poisoning (as compared with 307 cases reported in 1956) is likely to be due to a number of factors, including:

- (1) The higher standard of personal hygiene amongst food handlers in Liverpool together with improving conditions in food premises generally.
- (2) The arrangements made whereby food handlers who are contacts of ingestion disease are kept from handling food until a negative specimen has been submitted.
- (3) The exclusion of symptomless excretors discovered during routine investigations.
- (4) The great interest, vigilance and co-operation from general practitioners, food firms and restaurants generally within the city.

Staphylococcal Toxin Food Poisoning.

Between the 4th and 5th of December, 1958, an explosive outbreak of acute food poisoning accurred affecting twenty out of sixty-three Indian seamen living at an Indian Seamen's Hostel. The first case occurred at 8 p.m. on the 4th December, being closely followed by six further victims. The remaining thirteen, all of whom had partaken of the 6 p.m. evening meal, consisting of curried mutton and rice, were taken ill between four to eight hours later. Enquiry showed that although a small portion of the mutton had been kept over from the previous day the majority of the food consumed at this meal had been freshly prepared. Unfortunately as is often the case, the remnants of the meal had been disposed of. It was therefore not possible to establish bacteriologically the vehicle of infection. It was of interest to note that the majority of these Indian seamen ate with their fingers although knives, forks and spoons, were available for use.

Stool specimens from all the victims, together with those from the cook who had prepared the meal, were examined. Staphylococcus pyogenes was found in two of the victims' stool specimens as well as the stool specimens from the cook. Epidemiologically, it was considered that this person may have been the source of infection. There was ample opportunity for staphylococcal toxin to have been formed in the mutton which had been left overnight in the warm kitchen. It would seem likely that the victims ate this contaminated food whilst the forty-three unaffected seamen had eaten the freshly prepared curried mutton.

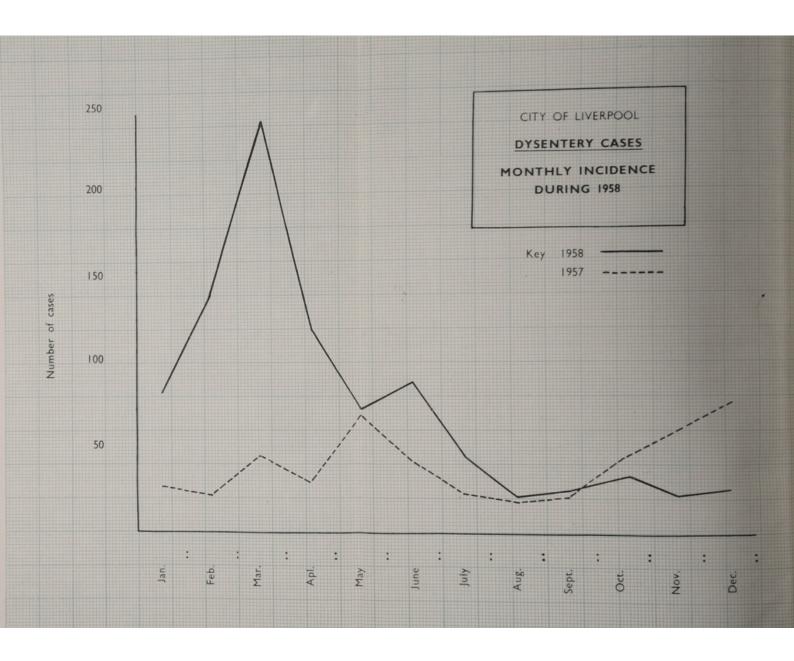
Salmonella Bareilly.

Salmonella Bareilly The investigation of a small but interesting outbreak of salmonella bareilly involving eight persons (including the family of a Liverpool medical practitioner) was undertaken during September and October, 1958.

The main features were as follows:-

A doctor's son aged nine years was admitted to Fazakerley Isolation Hospital on the 23rd August, 1958, as a suspected case of paratyphoid fever. Bacteriological investigation of his stools showed the infection to be due to salmonella bareilly.

Enquiries revealed that his father, mother and two brothers together with the maid had recently spent a three weeks holiday in the South of France. During their stay, the maid experienced an illness consisting of general malaise, headache, vomiting, diarrhoea and abdominal pain. These symptoms commenced within 48 hours of her consuming some pre-cooked sausage (she being the only member of the party who ate this food). When the party returned to Liverpool on the 20th August, she was still unwell and went straight to her own home where she lived with her daughter, son-in-law and two grand-children. Three days after her return the younger grand-child aged four months developed a transient episode of diarrhoea. Salmonella bareilly was isolated from



a stool specimen. A complete bacteriological examination of the stools of all members of both families showed that the maid's four contacts were excreting salmonella bareilly. They were symptom free apart from the male child aged four months. The doctor's eldest son, aged twelve years, was also found on this occasion to be a symptomless excretor of salmonella bareilly. Subsequently, on the 13th September the doctor himself was shown to be a symptomless excretor of salmonella bareilly.

All positive cases were treated with chloramphenical or streptomycin and within eight weeks all became free of salmonella bareilly infection.

Throughout this investigation 15 persons (including contacts) were examined and a total of 76 faeces and 30 urine specimens were submitted for bacteriological examinations. Of these, 22 faecal specimens from eight persons were found positive for salmonella bareilly—all the urine specimens proved negative.

#### Dysentery.

During the year, 931 cases of confirmed bacillary dysentery were Dysentery reported in Liverpool, as follows:—

This is an increase of 92% on the 1957 figure and 52% on the figure for 1956.

The chart illustrates the incidence of notified cases of dysentery during 1958 as compared with 1957. It will be seen that a significant increase occurred towards the end of 1957 (November-December) which rapidly rose to reach its peak towards the middle of March. There was a rapid decline during the last week of March and the month of April; a slight gain in the early part of June; with a further decline from the second week of June onwards until the low post-epidemic level was reached in August.

# Dysentery in Day Nurseries.

Six small outbreaks of Sonne dysentery occurred in five day Dysentery in nurseries, making a total of 84 cases. Two of the outbreaks occurred Nurseries in the same nursery. This is double the number of cases last year

(42 cases). This increased incidence of dysentery is parallel with the overall increase of cases within the City generally. It is thought that there would have been more cases within the nurseries but for the stringent measures first instituted in 1955. These measures are as follows:—

To eliminate outbreaks caused by symptomless or convalescent carriers and amongst newcomers to the nursery, stool specimens are examined for an week before the child is due to enter. By this means, a considerable of 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 separates occasions following the initial occurrence of infection. Every case of the diarrhoea (even quite mild) in a day nursery is always stooled and 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 Spotting Scheme.

Influenza Spotting Scheme

The special measures for the detecting of influenza first instituted in the winter of 1954-1955 by arrangement with the Medical Research Council, and continued during the winter of 1956-1957, were continued up to the onset of the 1957-1958 influenza A epidemic.

Influenza A reached epidemic proportions in Liverpool early in September, 1957, following its pandemic spread from North China and Hong Kong through India, Africa, Europe and so to Gt. Britain. The peak was reached in Liverpool on the 27th-28th September, 1957. By November, the epidemic had settled, although immediately after Christmas there was a slight increase in first sickness claims. By the second week of January sickness claims reached their normal level for that time of year. A full account of this outbreak was given in my Annual Report for 1957.

1958 Statistics During 1958, 128 influenza infections were diagnosed serologically in Liverpool by Dr. G. B. Bruce White of the Public Health Laboratory Service. Of these 117 were due to influenza A and 11 were due to influenza C. The sources of these cases are shown in table 2 almost all being hospital isolations. It will be seen that the majority

occurred during January (32 isolations) and February (34 isolations) due no doubt to the aftermath of the recent influenza A epidemic. This was confirmed by the fact that 44 strains of the influenza virus A isolated from the area of the Liverpool Regional Hospital Board and from the Northern Coastal area of the Welsh Regional Hospital Board were all of the Asian type. Influenza C was first isolated in April (two hospital isolations), again in May, and then monthly from July to November. All were isolated cases which did not spread amongst the population.

TABLE 2
INFLUENZAL INFECTIONS DIAGNOSED SEROLOGICALLY IN LIVERPOOL,
1958

Week- ending	Influenza type	Number	Source	Week- ending	Influenza type	Number	Source
11.1.58	A	10	(F)	19.4.58	A	3	(F)
18.1.58	A A		(F)	2012100	A C A	3 2 5	(F)
25.1.58	- (	1 2 1	(C.H.)	26.4.58	A	5	(F)
		1	(G.P.)	3.5.58	(	1	(W)
25.1.58	A -	1	(S)		A	1	(C.H.)
		1	(R.S.)			1	(F)
		16	(F)	10.5.58	A	4	(F)
1.2.58	A	15	(F)		A C	2	(F)
8.2.58	A A A	9	(F)		1	1	(R.L.C.H.)
15.2.58	A	4	F)	17.5.58	A S	1	(F)
22.2.58	A S	5	(F)		1	1	(S)
	1	1	(C.H.)	8.6.58	A	1	(F)
	(	7	(F)	19.7.58	A	1	(C.H.)
1.3.58	A \	1	(S)		C	1	(J.B.)
		1	(G.P.)	16.8.58	C	1	(H.D.)
8.3.58	A	6	(F)	13.9.58	A	1	(S.G.)
15.3.58	A S	2	(F)		C	1	(S)
	}	1	(W)	27.9.58	C	1	(A.H.)
29.3.58	A }	5	(F)	25.10.58	A C C C A C C C	1	(A.H.)
	}	1	(W)	1.11.58		1	(W)
5.4.58	A {	2 1	(F)	8.11.58	A	1	(C.H.)
10 / 50	, ?		. (W)	6.12.58	A	1	(C.H.)
12.4.58	A	2	(F)				

A=INFLUENZA A C=INFLUENZA C

Key to Sources;

F=Fazakerley Hospital

C.H.=Chest Hospital

S .= Stanley Hospital

G.P.=General Practitioner

R.S. = Royal Southern Hospital

W=Walton Hospital

R.L.C.H.=Royal Liverpool Children's Hospital

J.B.=John Bagot Hospital

H.D.= Health Department

S.G.=Sefton General Hospital

A.H.=Alder Hey Hospital.

Infectious Disease Consultations Infectious Disease Consultations.

During 1958, 56 domiciliary visits were made by the medical staff at the invitation of general practitioners, as follows:—

Influenza " A "		 	23
Chickenpox		 	15
Staphylococcal dermati	itis	 	1
Poliomyelitis		 	2
Non-Poliomyelitis		 	10
Rheumatic Fever		 12.1	2
Herpes Zoster		 	3

# RADIATION MONITORING

Atmospheric contamination by radioactive fall out produced by nuclear bomb explosions or from accidental happenings at nuclear reactors demonstrated, during 1958, the need for local authorities to possess efficient monitoring systems. The main purpose of these monitoring systems is the establishment of a base line of environmental radioactivity so that any variation would be detected as soon as it occurred. It had been recognised, following the "Windscale incident" (10th October, 1957) that in the event of accidental release of radioactivity, speed of ascertainment was a vital controlling factor. Accordingly, in Liverpool, a scintillator for measuring levels of radioactivity was purchased (February, 1958) for the City Analyst's department. This instrument would give accurate measurements of radioactivity, and commencing in August 1958, monthly reports upon the radioactivity of the City's Water supplies were made by the City Analyst.

These results are recorded in Table I. There were six sources from which water samples were obtained and examined, namely Rivington reservoir; Lake Vyrnwy reservoir; Deep well water at Dudlow Lane and Green Lane, Liverpool; the River Dee at Eccleston; and the tap supply from the City Laboratory, Liverpool.

It will be seen from this Table that:-

- (a) The deep well water was not appreciably active.
- (b) Both the Rivington and Lake Vyrnwy supplies were well below the limits prescribed by the Medical Research Council for River Thames water, which is one quarter of the International limit.
  - (There is normally a safety margin of ten times when these limits are decided on.)
- (c) The Welsh upland surface sources appeared appreciably more active than the northern ones, and this was confirmed by the River Dee and the mixed tap supply results at the City Laboratory, but are still well within safety limits.

Certainly on no occasion of examination, has there been a dangerous or really significant increase in radioactivity and strontium 90, in the Liverpool water supplies. It is also of interest to record that there is no greater prevalence of leukaemia in Liverpool than in towns deriving their water supply from deep wells where there is even less radioactivity than that present in the Liverpool water supply which comes mostly from upland sources.

TABLE 1
RADIO ACTIVITY OF WATER SUPPLY

August-December, 1958

Radioactivity in terms of 90 Sr micro-micro-curies per litre

Source of Water	August	September	October	November	December
Rivington	4 (5%)	ments of ra	4 (5%)	5 (6%)	6 (7%)
Dudlow Lane, Liverpool  Vyrnwy	7-9 (8-11%)	6-9 (8-11%)	1·5 (1%) 7 (8%)	1·5 (1%) 6 (7%)	6 (7%)
River Dee, Eccleston	6 (7%)	7 (9%)	5 (6%)	6 (7%)	6 (7%)
City Laboratory, Liverpool	5 (6%)	5 (6%)	5 (6%)	4 (5%)	4·5 (6%)
Green Lane, Liverpool		tedl side?	zidi me	be seen it	fline all

Figures in brackets show percentage of the International Maximum Permitted Limit for Radio Activity in drinking water.

# IMMUNISATION AND VACCINATION

Poliomyelitis Immunisation.

The immunisation of children with poliomyelitis vaccine, commenced Poliomyelitis in 1956, continued throughout 1958. As in previous years the immunisation consisted of two inoculations of 1.0 c.c. of the vaccine into the left arm at intervals of not less than three weeks and in Liverpool were carried out at the school and child welfare clinics. Later in the year (1st October) the Ministry of Health recommended a third injection to ensure maximum protection against poliomyelitis. This injection is to be given approximately seven months after the initial course of two injections.

Immunisation

Early in the year (January) the Ministry of Health extended the age groups to include all children up to the age of 15 years. A further extension was made in September to include all young persons up to and including 25 years. With a view to encouraging young persons within the new age group to take advantage of the facilities offered, from 1st October arrangements were made for poliomyelitis immunisation to be carried out in the Health Department daily, Monday to Friday during lunch hours (12.00-2.00 p.m.), for those employed within the "city area". The management of some 5,000 industrial firms throughout the City, together with all general practitioners, were informed of these lunch time facilities. The results, so far, have been encouraging, over 1,200 persons being immunised up to the end of the year. Arrangements were also made, with the co-operation of the University, to offer poliomyelitis immunisation to all students and university staff within the new eligible age group at sessions arranged both at the halls of residence and the School of Hygiene.

The supply of vaccine continued to improve during the year, being mainly of American and Canadian origin and tested in this country before being released for general use. Supplies of British vaccine were still very limited although an improvement was noted by December.

It is recommended by the Ministry of Health that no smallpox Relation to vaccination or other immunisation should be carried out during the immunisation time when the vaccine is being administered, and for two weeks after Procedures the final injection, and that this should be extended to four weeks after the final injection in the case of B.C.G. and yellow fever vaccination

Statistics

During 1958, a total of 53,659 children up to 15 years of age completed the course of inoculations. Of these 42,191 (78.6%) were inoculated at the Health Department clinics, and 11,468 (21.4%) were inoculated by general practitioners.

The number of adults inoculated during 1958 was 5,178, this comprises 1,398 expectant mothers and 3,780 in the 15-25 years age group. It addition 25,600 booster doses (3rd injection) were given during the year. Since the scheme started in 1956, the total number of person inoculated is approximately 83,000 and it is estimated that 39% of the child population have received two injections during this period.

The following table gives full details of those inoculated during the year.

POLIOMYELITIS INOCULATIONS GIVEN DURING 1958.
TABLE 1

and the same of the same of		IA	BLE 1	Shain say, Nothing
Year of Birth	and	Immunised at Clinics	Immunised by Private Doctors	Total Number of completed inoculations
1943		4,055	679	4,734
1944		5,243	680	5,923
1945		5,112	772	5,884
1946		6,365	1,046	7,411
1947		3,168	729	3,897
1948		1,815	584	2,399
1949		1,737	551	2,288
1950		1,544	653	2,197
1951		1,805	678	2,483
1952		1,659	791	2,450
1953		1,666	761	2,427
1954		1,809	785	2,594
1955		1,839	839	2,678
1956		2,003	919	2,922
1957		2,072	905	2,977
1958		299	96	395
Totals		42,191	11,468	53,659

During 1958 three children who received immunisation injections developed confirmed poliomyelitis.

#### Diphtheria Immunisation.

Diphtheria immunisation has continued to be carried out at child welfare clinics, schools, and by general practitioners in the City. The total number of children immunised for the first time during 1958 was 14,938, and 4,381 received a booster inoculation. The age groups of the children inoculated during the year and an estimate of the percentage of the child population immunised during the past five years are given in the table below:—

TABLE 2

pilontates the number of	Under 1 year	1-4 years	5-9 years	10-14 years	Total under 15 years
Primary Inoculations completed in 1958	8,546	3,321	3,071	171	14,938
Booster Inoculations completed in 1958	denna sa	116	3,420	845	4,381
Percentage of child population immunised during past five years	54.8%	48.9%	39-	5%	breeder Cal
Percentage of child population immunised	50-19	%	83-6	5%	

It will be seen that it is now estimated that 83.5 per cent. of the child population aged 5-14 years are at present protected against diphtheria by immunisation and that 50.1 per cent. of the children aged 0-4 years are similarly protected.

A complete table of the number of primary immunisations carried out in the City and the exact places where these immunisations were given, follows:—

TABLE 3

NUMBER OF PRIMARY DIPHTHERIA IMMUNISATIONS

Where or by whom immunised	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
Immunisation Clinics	9,824	8,219	5,973	6,442	5,316	4,896	3,920	3,974	4,547	4,479	6,86
Schools	5,510	3,471	2,858	2,941	3,307	3,586	3,732	2,943	2,070	3,008	2,316
Medical Practitioners	688	1,617	2,066	2,396	2,579	2,694	2,973	3,212	3,702	3,713	5,761
Miscellaneous	208	228	322	283	109	-	-	744	-	-	-
Totals	16,230	13,535	11,219	12,062	11,311	11,176	10,625	10,129	10,319	11,200	14,93

In addition to the above immunisations, 4,381 previously immunised children received a reinforcing injection either at school or at one of the clinics during the year.

It is interesting to note that the number of children immunised against diphtheria has not only been maintained, but substantially increased by 3,738 over the 1957 figure of 11,200. The increase has been carried out at clinics and by general practitioners.

diphtheria immunisations were given using the combined whoopings cough/diphtheria vaccines. The combined vaccine means that the child can be fully protected with half the number of inoculations compared with separate vaccines. This change has produced a most satisfactory result for it has proved to be much easier to get mothers to bring their children on only two occasions for immunisation compared with four visits. This is very encouraging, especially when parents are erroneously inclined to regard diphtheria as a "disease of the past", and when other immunising procedures (e.g. poliomyelitis) receive such nationwide publicity.

Schick Testing of Nurses

During 1958, a total of 40 probationer nurses were Schick tested at the Royal Southern Hospital. Of these, 20 were Schick positive and susceptible to diphtheria and 20 were Schick negative and immune The 20 susceptible nurses were offered protection with P.T.A.P. Whooping Cough Immunisation.

During the year the immunisation campaign against this disease was Whooping continued. The same arrangements used for diphtheria immunisation Immunisation were carried out and whooping cough immunisations were offered at child welfare clinics and by general medical practitioners. By the end of the year, 12,832 children had been immunised under this scheme, being 55.1 per cent of infants under one year as against 31.6 per cent in 1957.

The increased number of children so protected was reflected in the fall in the number of whooping cough cases during the same period (cf. page 47).

Smallpox Vaccination.

Vaccination of infants against smallpox is carried out at special Smallpox clinics and by general practitioners in their own surgeries. Table 4 Vaccination illustrates the number of births and the number of primary vaccinations given during the past three years.

TABLE 4

		1956	1957	1958
Births	 	15,944	16,044	15,662
Number of primary vaccinations	 	7,414	8,250	11,112
Number of re-vaccinations	 	202	107	4,128
Number insusceptible	 		_	-
		7,616	8,357	15,240
Number vaccinated at clinics	 	3,413	3,614	9,914
Number vaccinated by private doctors	 	4,203	4,743	5,326
		7,616	8,357	15,240

Note: 8,832 vaccinations of children under one year.

During 1958, 15,240 persons were vaccinated against smallpox. This was an increase of 6,883 (82.4%) over the 1957 figure of 8,357. This increase was due in no small measure to the landing of a case of asiatic smallpox in the port of Liverpool (May 1958) and the subsequent small outbreak of smallpox, which occurred in Bebington. During the months of May and June a total of 8,385 (56.0% of the year's total) vaccinations were carried out in Liverpool; both at the Health Department, Hatton Garden and at Public Health Clinics and also by general practitioners

within the city. Of this total 4,282 were primary vaccinations and 4,103 were re-vaccinations. A full account of these vaccinations is shown in Table 5.

It is of interest to note the very small number of "no reactions" that occurred in both primary and re-vaccinations. All those inoculated at the stores, and at the health department, which included students, health visitors, ambulance drivers and hospital staff were either known contacts of a confirmed case of smallpox or may become at risk as a result of their duties. (A full description of the small smallpox outbreak is recorded on pages 38-43.)

In retrospect it cannot be emphasised too strongly upon the citizens of a major seaport such as Liverpool, that there is always the danger of smallpox being landed by sea or air from infected foreign countries and that a population with a low rate of primary vaccination runs and unnecessary risk of a smallpox outbreak.

TABLE 5

VACCINATIONS CARRIED OUT BY HEALTH DEPARTMENT AND GENERAL PRACTITIONERS, ETC., DURING MAY AND JUNE 1958—ARISING OUT OF SMALLPOX CASE IN s.s. "CIRCASSIA"

e si da celtare ces cei dio ca	161		Primary	Buttopou	intenti	and he	Result *	ult *	o to us	Revaccina- tions	maind	Result*	alt*	1,02	Total Primary and
Age Groups	7	1	2.4	5.14	15+	"A"	"B"	"C"	"D.,	15+	"A"	"B"	"C"	"D"	tions
General Practitioners		86	65	92	677	2,037	11	1	00	1.060	249	654	121	36	3,105
	1,203	54	61	30	130	1,472	11	11	9	263	101	107	51	4	1,741
 	1	1	1	i	355	30	1.	1	67	197	180	15	63	1	229
Store D	11	11	11	11	* 8	# 00 #	11	11	11	6	01	16	11	11	171
···	1	1	1	1	9	9	1	1	1	9	5	- 0	1	1	12
Store G	11		11	11	7 =	7 =	11	11	11	8 4 8	4 0	6 9	- 1	11	10
Н Н	1	1	1	1	98	84	1	1	67	291	233	25	4	1	377
Store I Gangard Dublic done of	1	1	1	1	32	30	1	1	-	404	301	86	13	4	436
	1	1	1	1	207	204	1	1	33	428	385	40	10	1	635
Olive Mount Hospital	TI	11	11	11	6 4	9 4	ea	11	- 1	39	1 00	31	70.00	55 52 53 53	48
Admin. Staff— D.P.H. Students, Health	det.	1111			h may	Nami Nami	il m	19	dini	a b	ball.	di n	leni le	State I	para men
Visitors and Ambulance Drivers	1	1	-1	1	82	78	00	1	1	462	153	209	80	20	544
spital	1	1	1	1	57	55	1	1	67	254	106	121	25	57	311
TOTAL	2,316	152	126	122	1,566	4,250	5	1	26	4,103	2,109	1,500	399	95	8,385

Grand Totals:— 4,282 Primary
4,103 Revaccinations

8,385

\*Definition:—
"A" Typical Primary Vaccina (Max. 7th to 10th day)
"B" Accelerated Reaction (Max. 5th to 7th day)
"C" Local reaction without Vesiculation
"D" No local reaction.

#### TUBERCULOSIS

#### New Notifications

It is very pleasing to be able to report a substantial decrease in the number of new cases of tuberculosis notified during the year. In 1958 there were 795 cases of respiratory disease as against 1,021 in 1957. Corresponding figures for non-respiratory tuberculosis were 79 and 96 for 1958 and 1957 respectively. Table 58 in the statistical appendix is a detailed analysis of the 1958 figure, while the accompanying map (A) relates the cases to the ward populations in each of the 40 wards of the City.

The fall in notifications has long been awaited and brings the incidence of the disease more into line with the death date from it. The latter has tended to fall more rapidly of recent years than the notification rate. No doubt we are at last reaping the benefit of the improved tuberculosis welfare services, the housing priorities scheme for tuberculosis patients and the more vigorous follow-up of contacts by the tuberculosis visitors which has been possible since their number was increased to 18 in 1956.

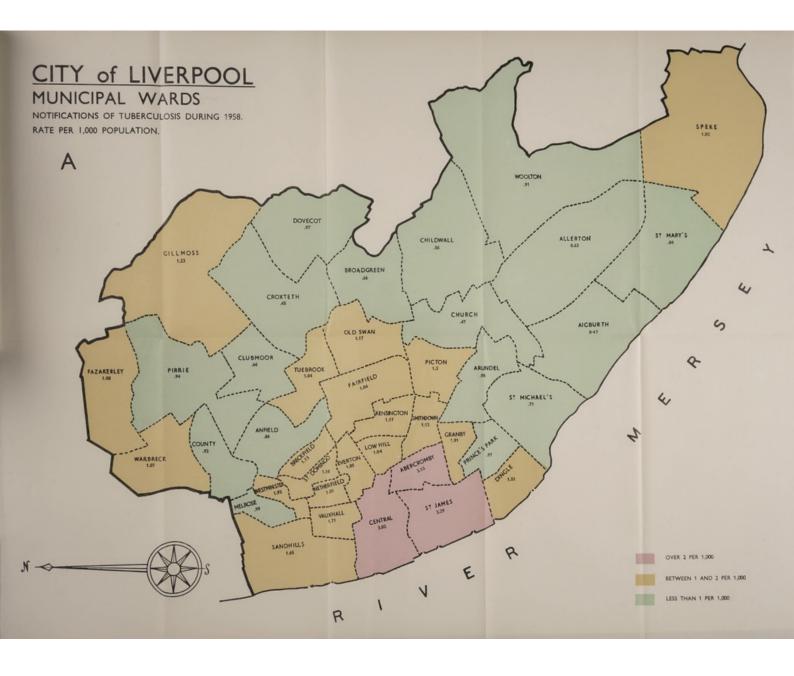
# Distribution

The pattern of distribution which emerges from a study of Map A of New Cases shows little change from previous years. Indeed it is not to be expected that it should as the disease is propagated by contact with established cases and environmental conditions play a most important part. The new cases occur more frequently where living conditions are congested and houses are sub-standard; they are fewest in the residential suburbs where overcrowding is exceptional, housing standards are good and there is adequate space and fresh air. Rehousing largely accounts for the much improved figures since last year in some of the central wards as many of the sources of infection are thereby removed.

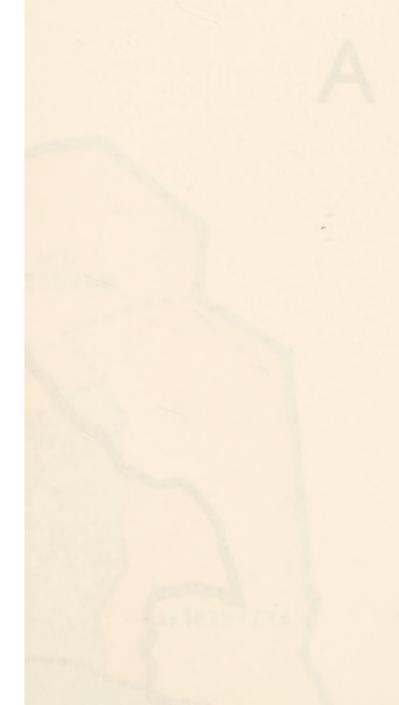
Distribution of total cases on the registers

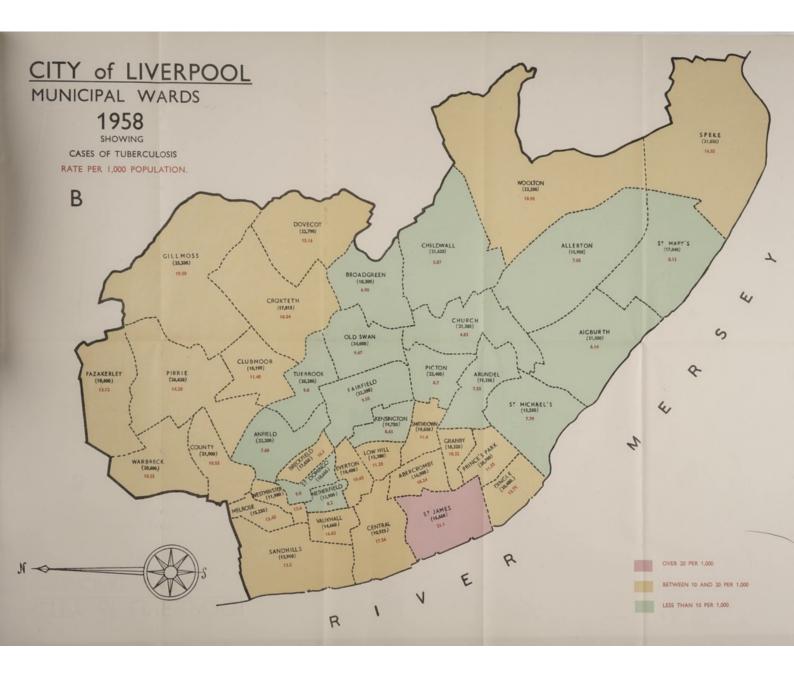
Rehousing of established cases of tuberculosis is also largely responsible for maintaining the high totals of cases on the register in the Corporation estates. It will be seen from Map "B" that most of these estates show a fairly high figure by comparison with the residential areas where there are no large numbers of corporation houses.

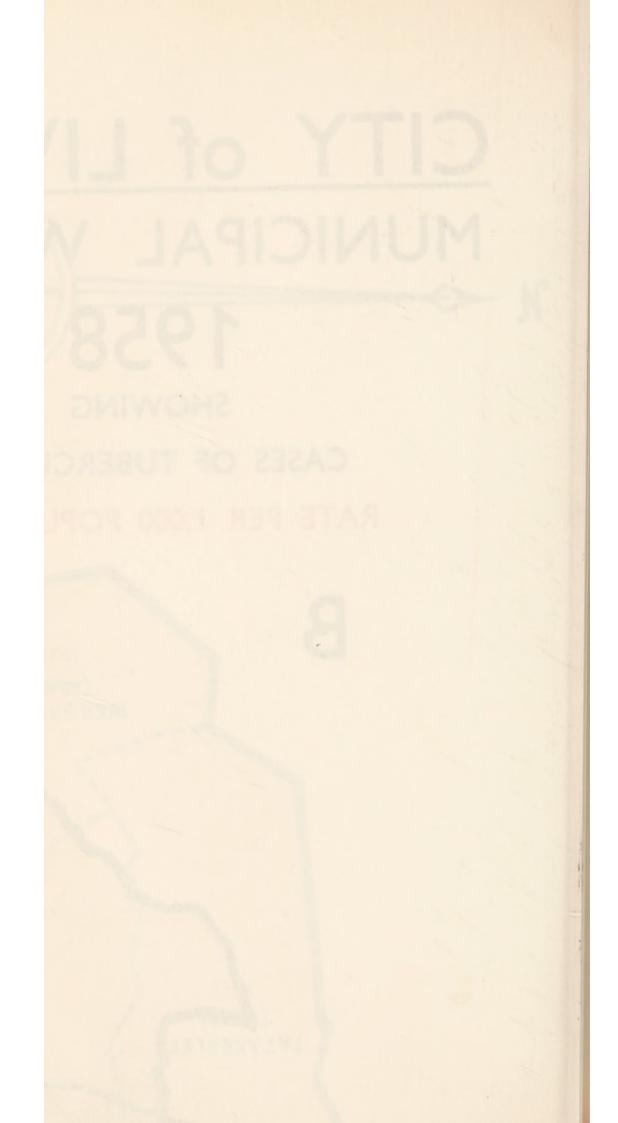
It is impossible to avoid this state of affairs which is more than counter-balanced, however, by the fact that recovery is greatly facilitated in the improved living conditions enjoyed by those who are rehoused and by the reduced danger of their spreading infection to others.

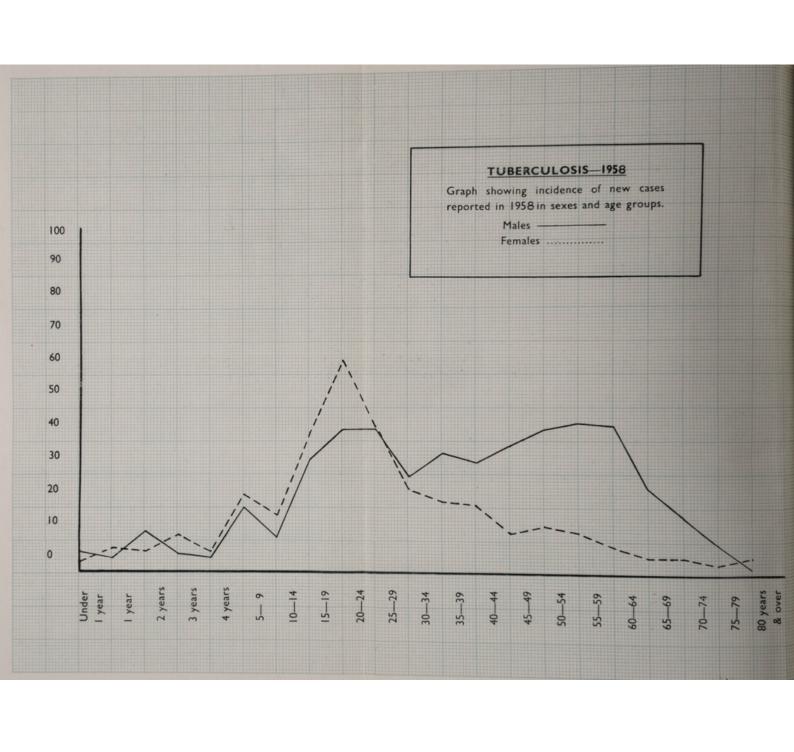


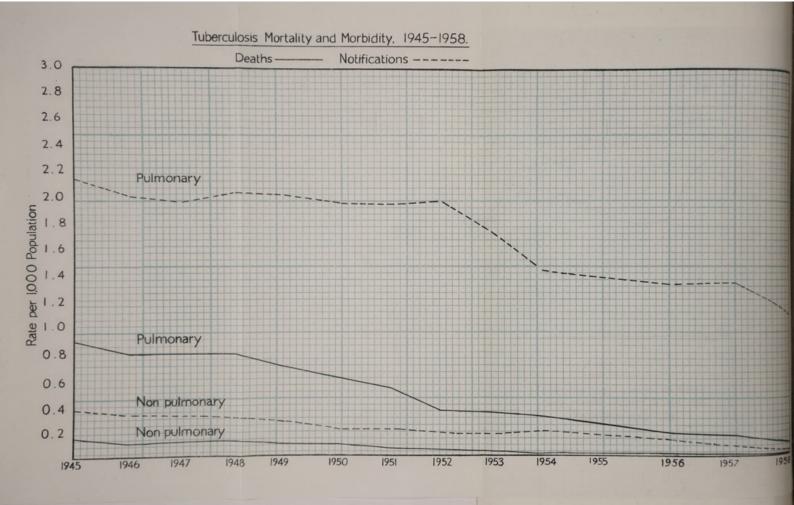
# CITY OF LIY MUNICIPAL VA NOTIFICATIONS OF TUBERS RATE PER 1,000 POPULATION











The high figures in St. James and other central wards are associated with the living conditions and standards of many of their residents, who include the majority of the coloured and "nomadic" elements of the City's population.

Table 58 shows clearly that, notwithstanding the substantial fall in Diagnosis of new notifications, there have been no remarkable changes in the manner in which the disease was discovered. Almost two-thirds of the new cases were found as a result of illness, while rather less than 10 per cent, came to light at examination of contacts. Mass miniature radiography discovered about one-seventh as compared with about one-sixth last year. The school health service found seven cases.

As was expected, social group three contributed almost half of the Relationship new cases, the next highest figure being in group five. Group three is, to Social Groups and of course, far and away the largest of the social groups, so that the Housing figures in fact demonstrate a progressively higher incidence as the social scale is descended. This is well illustrated by the following table which shows that, whereas in classes I and II the percentage of cases is less than half the percentage of the population in these classes, in classes IV and V the percentage of cases is higher than the percentage of the population in the classes. Incidence is, of course, always closely related to living conditions.

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

Social Class	I	II	III	IV	V
Number in each class per 1,000 population*	19	102	503	131	245
Number of cases in each class per 1,000 new notifications (1958)	9	43	463	150	335

<sup>\*</sup>Note: these figures are based on the distribution of the male population (aged 15 years and over) as shown in the last census.

In spite of the greatly reduced number of new cases, there were rather History of more who had a history of contact with an established case than Contact occurred last year. Indeed some 43 per cent. produced such a history as compared with about 28 per cent. in 1957. This indicates a greatly improved control over the disease as it suggests that the reservoir of

unknown cases has been substantially reduced. It is a most encouraging finding, especially as the benefits of the X-ray Campaign in this direction have yet to come.

#### Age and Sex Incidence

These figures are given in Table 58 of the appendix. The preponderence of males over females is rather more marked than last year, 59 per cent. compared with 54 per cent. The peak incidence for women was again sharp and occurred between the 20th and 24th years. This is, of course, associated with the extra stresses which are common at this period of a woman's life. 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 15 years to 64 years. These points are well illustrated in the accompanying graph.

#### Tuberculosis Death Rate

There were 109 deaths from respiratory tuberculosis and 7 from nonrespiratory disease during 1958. These figures represent 0.143 and 0.0098 per 1,000 population respectively. They are compared with those for the preceding eleven years in tables 21 and 22 of the appendix, while table 188 gives details of the ages at death from the various forms of tuberculosis.

#### Morbidity and Mortality Compared

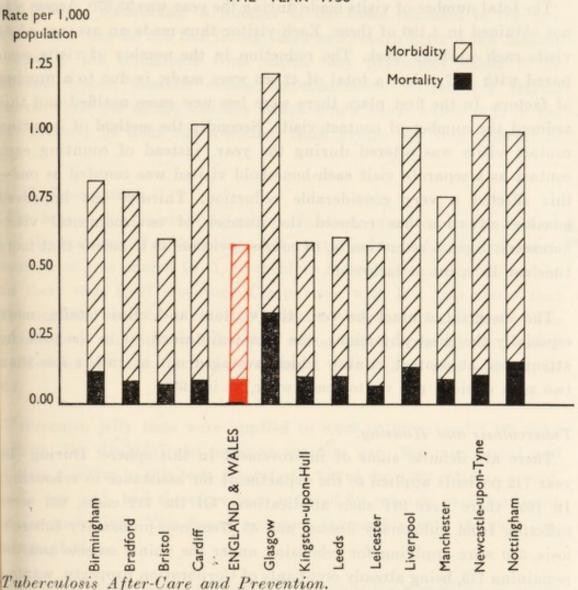
The incidence of and deaths from tuberculosis in Liverpool for the last 13 years are illustrated in the accompanying graph. As has already been mentioned, the morbidity has fallen sharply since 1957 and the figure of 1·15 per thousand brings Liverpool more into line with other large cities in the United Kingdom. Next year, of course, the figure will be abnormally high as a result of all the cases which will be discovered during the X-ray Campaign. Thereafter we hope to enter a period of progressive improvement which will reduce the problem of tuberculosis to a level consistent with modern methods of diagnosis, treatment and after-care.

#### Comparison with Other Local Authorities

The following histogram relates the morbidity and mortality rates of some of the larger local authorities with the rates for the United Kingdom as a whole. It will be seen that the mortality rate for

Liverpool is higher than those of any of the other cities except Glasgow and Nottingham while our morbidity rate is exceeded by those of Glasgow, Newcastle, and Cardiff.

CHART SHOWING MORTALITY AND MORBIDITY RATES FOR RESPIRATORY TUBERCULOSIS FOR A NUMBER OF THE LARGER AUTHORITIES FOR THE YEAR 1958



No changes have been made in the visiting staff during 1958. eighteen visitors, fifteen female and three male, work from the four Visitors 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. While the number varies to some extent from clinic to clinic, on average each visitor has some 180 cases to look after. About two-thirds of these are quiescent and are visited at home twice a year while the remaining third, being active, are visited at home once every two months. Visits are allocated centrally using a Cope-Chat Card index system. This ensures that no known cases

are missed and that visits are paid at fixed intervals of time. In

The Work of the Tuberculosis

addition to these regular visits, the visitors made many others: to contacts, following discharge from hospital, because of non-attendance at clinics, to investigate housing applications and for a variety of other reasons.

The total number of visits made during the year was 35,670. Access was not obtained in 4,196 of these. Each visitor thus made an average of 41 visits each working week. The reduction in the number of visits compared with 1957, when a total of 42,063 were made, is due to a number of factors. In the first place there were less new cases notified and this reduced the number of contact visits. Secondly the method of counting contact visits was altered during the year, instead of counting each contact as a separate visit each household visited was counted as one—this effected a very considerable reduction. Thirdly, 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 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 1957.

Tuberculosis and Housing.

Housing of Tuberculous Patients There are definite signs of improvement in this sphere. During the year 712 patients applied to the department for assistance in rehousing. In 1957 there were 941 such applications. Of the 712 cases, 667 were suffering from pulmonary disease and 45 from non-pulmonary tuberculosis, 539 were applying for rehousing under the points scheme and the remaining 173, being already occupants of Corporation property, wanted transfers. Recommendations were made in 164 cases, 113 for priority within the allocation group, 8 for submission to the Allocation (Special) Sub-Committee and 43 for transfer. It must also be remembered that a large number of other cases of tuberculosis are rehoused solely because of the additional points they receive on account of their disease and without any special recommendation being necessary. Indeed the addition of five extra housing points brings a very substantial percentage of cases into the allocation group and this accounts for the small large number submitted to the Sub-Committee.

This encouraging picture does not, of course, mean that there is any cause for satisfaction. There are still very large numbers of patients living in poor housing conditions. Nevertheless, progress has been made and the priorities scheme has ensured that the most deserving cases are being dealt with as they come to light. Other aspects of this problem must also be considered. A number of the cases rehoused to the new estates find they do not like living there and return after a few months to exactly the conditions from which they previously asked to be removed. Other families refuse accommodation offered for trivial reasons while yet others will not accept a new house unless it is in the near vicinity of their old dwelling. Such people are very difficult to help.

#### B.C.G. Vaccination.

The scheme for vaccinating school children, operated under Section B.C.G. in 28 of the National Health Service Act, continued to be highly successful. Schools Vaccination was offered to 11,408 children between the ages of 13 and 14 and there were 8,587 acceptors. Comparison with last year shows that 8,214 accepted out of a total of 11,524 to whom it was offered. The percentage of acceptors was therefore rather higher although the number eligible was 116 less. Actual percentages were 75.3 in 1958 and 71.3 in 1957.

Tuberculin jelly tests were applied to 8,929 children and 1,428 were positive. The doubtful and negative reactors were Mantoux tested and 292 were positive to this test. A total of 1,720 of the 8,929 children tested, or 19.2 per cent. had therefore been infected by tubercle bacilli at some time in their lives. This figure compares favourably with the 1957 percentage of 21.5.

The positive reactors were X-rayed to exclude the possibility of active tuberculosis and the negative reactors were given B.C.G. In all 6,736 children were vaccinated. This was 1,172 more than in 1957.

B.C.G. was again offered to the babies born at the Sefton General Vaccination Hospital maternity unit into non-tuberculous households. Of some 2,100 of New Born to whose parents the offer was made 1,088 (about 45 per cent.) accepted and the babies were vaccinated during their first week of life. As the Ministry have ruled that follow-up skin tests are not necessary in these cases the mothers were asked to bring their babies back, for inspection

only, after six weeks, 780 did so, while 26 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 also given to 140 babies born in the maternity unit at Walton Hoospital.

Compulsory Admission to Hospital.

Magistrates Orders under Section 172 of the Public Health Act, 1936

It was invoked for the first time for many years in Liverpool in 1957, when a case was brought before the magistrates and committed to hospital for a period of three months. Three extensions of this particular order were obtained so that the patient was compulsorily detained for a total of twelve months. He twice absconded, but on each occasion reported to the police within 48 hours and was duly returned to hospital. At the end of the fourth three-monthly period it was decided that no further improvement in his condition could be hoped for without recourse to surgery, which he absolutely refused. As his sputum had been rendered negative, a further extension was not asked for and he was discharged. This man had bitterly contested each application at the magistrates' court, yet within a week of his discharge he had applied both to this department and to the chest clinic for readmission to hospital.

Four other cases were admitted to hospital on magistrates orders and during 1958, two male and two female. In only one of these was an extension to the order required. In fact the other three cases seemed to be rather thankful that they had been forced to enter hospital and cooperated very well in accepting treatment. Several other patients were threatened with action under this Section of the Act, but agreed to enter hospital voluntarily rather than appear before the magistrate. Indeed any reasonably intelligent person will take this course once it is known that court orders have been readily granted when the cases are serious of the cases are serious of the court order have been readily granted when the cases are serious of the court order discharge himself at will, while a court order allows to complete control for a period of three months.

The scope of action under Section 172 is strictly limited by the facts that the patient must be shown to be "in an infectious state." This means, in a legal sense, that his sputum must be positive. It is well

known that a single specimen of sputum may give a negative result even in cases where copious excretion of bacilli occurs and it is often difficult to persuade recalcitrant patients to provide even one specimen, let alone several. In other cases sputum alternates between the negative and positive states. It might seem that the necessary safeguards to the rights of the citizen, in this instance, mitigate against the most effective application of Public Health Act.

## Liverpool Show.

A small exhibit on tuberculosis was included in the Health Depart-Liverpool ment's display at the Liverpool Show. One side of the central panel in the marquee was devoted to the subject and included a preliminary announcement about the X-ray Campaign. The tuberculosis visitors were on duty and a register was opened for voluntary workers. About 250 names were recorded. There was a small section on B.C.G. vaccination and one on the work of the tuberculosis visitors. The majority of the material was produced by a professional commercial artist and looked very well.

# Mass X-ray Campaign, 1959.

Following the final approval of the scheme in June by the City Mass X-ray Council, preparations for the campaign went forward with all speed. The Campaign, 1959 Corporation were responsible for the selection and preparation of the unit sites, all publicity arrangements and the recruitment and organisation of voluntary workers.

The first of these had been taken in hand when the project was first mooted so that a number of sites had already been selected. This was fortunate as it proved no easy matter to find the remainder. However, by Christmas they had all been arranged and approved by the Regional Hospital Board.

Publicity arrangements were evolved in consultation with the Ministry of Health and the Central Office of Information. A Publicity Committee was formed which included representatives of the Press, B.B.C., I.T.V. and industry. A small number of posters were put up towards the end of the year, but the main publicity drive was reserved until a week or so before the start of the campaign so as to have the maximum psychological effect.

The recruitment and organisation of voluntary workers was, in many ways, the most important and difficult task the department had to undertake. It was felt that without house to house visiting it would be impossible to secure a good response from the general public and in order to achieve this some 11,000 voluntary workers were required. These were recruited on a ward basis, the number required in each of the City's 40 wards being calculated so that each worker would have about 20 houses to visit, and they were asked to pay one visit each week for five weeks.

A publicity office was opened in each ward at the beginning of November. During the second and third weeks of that month a public meeting was held in each ward. They were addressed by either the Medical Officer of Health or the Deputy Medical Officer. Each ward formed a committee and these 40 committees met individually later in the month to discuss ways and means of recruiting volunteers and for coping with such problems as the provision of baby sitters, motor cars for the aged and infirm, loudspeaker vans, etc. In general the ward committees were found to be very helpful.

Each ward was allocated a health visitor and a public health inspector; and the recruitment of volunteers became the prime responsibility of the former. It was largely due to their untiring efforts that the results were so good.

The wards were grouped into five sectors, a central one of three wards, three with nine wards and one with ten. A medical officer was placed in full administrative control of each sector and the health visitors and others workers were directly responsible to him. A large number of volunteers were secured by the medical officers and health visitors addressing meetings, such as mothers unions, and social gatherings, etc. The majority however were secured by the health visitors personal contact, either by visiting or at the clinics. By Christmas the total number of voluntary workers recruited was rapidly approaching 12,00 and several wards had already reached their individual targets. The final total of workers considerably exceeded 13,000.

The campaign officially started on 1st October and three inaugural meetings were held in the Town Hall during that month. These were presided over by the Lord Mayor and were addressed by prominent local personalities, the audiences invited being representatives of the medical profession, clergy, known voluntary agencies, trade, industry and commerce. All persons X-rayed after October 1st were included in the survey total and were asked by letter not to attend for a further X-ray during the actual campaign. They were all provided with X-ray badges.

A complete report of the campaign and its results will be given in the 1959 Annual Report.

## X-ray of Aged Persons.

Arrangements were made to send a mobile unit to Westminster House Westminster in September to X-ray the old folk who had not previously been done. The opportunity was taken to include residents in other hostels who had not been X-rayed on admission. They were taken to and from Westminster House by ambulance and the arrangement worked well, there being no undue difficulties. A total of 247 films were taken during the day, made up as follows:—

From Westminster I	House	Male	Female
(a) Residents		 70	95
(b) Staff		 10	3
From other hostels	***	 22	47
		102	145

There were 40 recalls: 30 (16 male, 14 female) from Westminster House and 10 (6 male, 4 female) from other hostels. There were no recalls amongst the staff of Westminster House.

The large films of the Westminster House recalls were read at the North Chest Clinic and 20 were called up for examination.

The results are indicated below:-

Pathology	Male	Female
Active tuberculosis. Admitted to hospital	1	M Tro
Active tuberculosis. To be further investigated	1	-
Tuberculosis. Possibly active	2	BOILD THE
Doubtful tuberculosis	1	1
Possible secondary carcinoma. No action	-	1
Bronchiectasis	4	2
Chronic Bronchitis	1	er Halan
Cardiac failure	1	Tomas A
Inflammatory Changes	1	-
Not yet diagnosed. Further investigation	2	1
No significant chest abnormality		1
TOTAL	14	6

The results of the 10 large films of the residents at other hostels were communicated to the individuals' own doctors. Of these, six were referred to one or other of the chest clinics and findings were as follows: one was already on the register at Central Clinic with quiescent tuberculosis; a second had active pulmonary tuberculosis and was admitted to the Chest Hospital; two had suspected tuberculous lesions requiring further observation but no treatment; the fifth had a suspected neoplasm; the sixth had an enlarged heart requiring no treatment.

# Work of the Chest Clinics.

Reports of the A statistical survey of the work done during the year at the four Chest
Physicians chest clinics is given in Table 19 of the appendix.

The chest physicians and tuberculosis officers have kindly contributed the following reports:—

# Dr. Crawley, South Chest Clinic.

This year there has been a considerable reduction in the number of patients on the Tuberculosis Register, largely due to the assessment of final cure during the year of 397 patients, i.e., 20 per cent. of the

registered total. The majority of these were patients who have been thought to be cured, but in whom further precautionary supervision was thought advisable beyond the normal five years after the disease has been considered to be under full control. It cannot therefore be expected that subsequent years will show the same percentage of removals from the Register.

A satisfactory feature this year has been the reduction by 85 to 232 in the number found to have active disease, but an increase from 37 to 51 in the number of deaths indicates that all efforts in early detection of the disease must continue unabated, and to this end the coming Mass Radiography Campaign will be of great value.

The efforts of the health visitors in the home have resulted in an average of five contacts attending for each new notified case. This reflects both the persuasive efforts of the visitors and also the increasing awareness, through their efforts, that the presence of disease in any member of the family is a potential danger to the others.

Nearly 500 contacts were found to be suitable for B.C.G. vaccination, and the popularity of this vaccination, as a voluntary procedure, in newly born babies at Sefton General Hospital continues and must be encouraged so long as the incidence of tuberculosis in the City remains at a high level.

Dr. Osborne Hughes, East Chest Clinic.

The work of the East Chest Clinic during 1958, showed increases in numbers of patients seen and in the number of B.C.G. vaccinations carried out.

The number of new patients diagnosed as tuberculous fell. There were however slightly more deaths and this fact together with the removal of recovered patients from the Register has meant that for the first time the total register of patients has been reduced over a twelve months period.

Five tuberculosis visitors carried out over 12,000 visits between them during the year. One of the visitors was absent through illness for three months and the result was that the remaining four were overworked in order to cover holidays and sickness. It is felt that this area requires a minimum of six visitors.

The Mass Radiography Campaign will result in a considerable increase in the patient's Register and in the work of the health visitors, an increase which will be maintained for some years.

#### Dr. F. J. Welton, Central Chest Clinic.

By the time this report appears, the most vigorous effort in the history of the campaign against tuberculosis in Liverpool will have resulted in the notification of numerous new cases, many quite early, requiring short-term treatment, which otherwise would not have been revealed until a much later date. During the year under review the attendance figure for the clinic was 6,970 (old and new cases), and of these 6,582 were either tuberculous cases or contacts. The small remainder, 388, were attendances made by non-tuberculous chest disease cases; the heavy preponderance of tuberculous disease dealt with at this clinic is its: distinctive feature, and is due to the fact that it is situated within the curtilage of the Liverpool Chest Hospital, which has its own outpatients' sessions, and is centrally placed in relation to the three largest teaching hospitals. The incidence and more especially the mortality of tuberculosis is falling, but in Central Liverpool there are: many factors still operating which will continue to favour its spread for years to come. Some drop in attendance figures has been due to improved treatment with modern drugs, as a result of which collapse therapy with its need for periodic refills and X-ray examinations has become unnecessary. The number of refills dropped from 1,020 in 1957 to 330 in 1958, while corresponding figures for screen examinations were 1,414 and 931. In view of the expected increase of new cases following the Mass X-ray survey, the register has been "pruned" of as many cases as possible who would not be required to attend again, and 156 names were removed as "recovered"-more than twice the number for the previous year. There was a significant and welcome drop in the number of new cases seen during the year, 284 new cases in 1958 as compared with 324 in 1957. It will be remembered that the 1957 figure represented an increase of 50 new cases over the number for 1956. As a result of the Mass Radiography Survey this figure will again rise next year, but what cannot be recorded in mere figures is the type of disease which is coming to light. While much of it is of the early type, responding quickly to treatment, cases of advanced disease are constantly being revealed, and after the survey it is anticipated that there will still be a residual pool of infection, calling for sustained and vigorous casefinding and treatment. Some indication of the gravity of this problem may be seen from the fact that during 1958 there were 247 patients on the clinic register who were known to be infectious, and in whom tubercle bacilli were to be found in the sputum. In some cases these germs had become resistant to modern drugs, an added danger which must be faced and tackled in the future.

The four health visitors attached to this clinic paid a total of 8,811 visits to patients' homes during the year, a further increase of 200 visits over the 1957 figure. As a result of their work, astonishing in view of its very uphill nature, 829 contacts were persuaded to attend, a slight increase on the previous year, and 535 protective vaccinations with B.C.G. vaccine were carried out following the results of 860 tuberculin tests. In addition to the routine Mantoux test, the Heaf multiple-puncture test was introduced during the year, and 273 tests performed by this method were considered satisfactory and reliable.

This report would be incomplete without reference to the continuing help and encouragement for tuberculous patients and their families provided by the Health Committee (free milk), Assistance Board (extra allowances, etc.), Personal Service Society (grants to necessitous cases), Queen's Nurses (general nursing care and drug injections, etc) and the Disablement Resettlement Officers of the Ministry of Labour (returning patients to work). While the advice of the latter officers is appreciated, the fact that it is becoming increasingly difficult to place ex-patients in suitable employment is ominous; more particulary men of middle age and older find suitable employment very hard to come by following the long period off work which is still frequently required to treat their tuberculosis. This problem still requires urgent attention, and is likely to be enhanced rather than diminished as a result of the intensive Mass Radiography Survey.

Finally, it should be noted that there are still very many patients, adults and children, living in conditions of squalor and overcrowding, despite the efforts of the City Housing Committee to give priority in rehousing to tuberculous families. Together with the tuberculous vagrants occupying common lodging houses these patients present a challenge to all who have at heart the welfare of the community. While preventive and curative medicine must be continually and energetically applied, there must be constantly borne in mind the deeper need for

education and enlightenment, the elimination of any sense of complacency and the creation and keeping alive of a public conscience which refuses to acquiesce in the continued existence of these black spots in the community.

Dr. Gray, North Chest Clinic.

The number of patients on the tuberculosis register at this clinic, who live in Liverpool, has fallen from 2,106 to 2,044, but there has been an increase of 146 on the Kirkby register and most of these, of course, have removed out there from Liverpool. The number of new cases notified as suffering from tuberculosis during 1958 has decreased from 230 in 1957 to 180, continuing the favourable trend of the last three years.

The number of attendances at the clinic was 6,974 as compared with 7,380 in 1957. 404 contacts were examined for the first time, eight of whom were found to have tuberculosis requiring treatment. 922 tuberculin tests were performed and B.C.G. was given to 284 children at this clinic. In addition, 140 were given B.C.G. in Walton Hospital.

The number of patients in Liverpool found to have a positive sputum during the year while they were at home is 61 and special attention is being paid to the contacts of such cases.

### 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 1958 this unit made 43,733 such examinations, of which 26,450 were referred by general practitioners, 9,660 were National Service recruits and 7,623 were from business firms.

All prospective employees of the City Nursing Services are X-rayed by the Hood Street unit before their engagement, as are candidates for employment 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 schools and other premises when cases of tuberculosis have been discovered there. Routine examinations are also made at the schools, but these have largely been replaced by a more selective examination of those children who are found to have positive Mantoux reactions at the routine annual testing of the 13-14 year age group.

During 1958, 413 cases have been the subject of reports to the National Tuberculosis Assistance Board with a view to determining their eligibility for the Welfare special rates of allowances applicable to cases of tuberculosis. The National Assistance Board's review survey of persons in receipt of allowances, requesting confirmation that the individuals are still receiving treatment under the supervision of the Chest Physician concerned, continues.

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

1	Summary of cases dealt with during the year 1958:-		Rehabilitation
A.	Total cases referred by Ministry of Labour to Tuberculosis Officers	435	
	(a) Examined and found fit for light, part-time or full-time employment .	414	
	(b) Not fit for employment	8	
	(c) Failed to attend for examination	9	
	(d) Certified as non-tuberculous	6	
В.	Letters sent by Tuberculosis Welfare Section to patients, offering advice an assistance to obtain suitable employment	id 104	
li	Number availing themselves of this assistance and referred to Ministry		
	Actual number of patients reported by Ministry of Labour as placed i		
	employment	79	
Fot V	al number of cases dealt with under Rehabilitation Scheme by Tuberculos Velfare Section (A+B)		
		539	

At the end of the year, seven patients were undergoing rehabilitation at the Tuberculosis Colony, Great Barrow, two at Papworth Village Settlement and one at the Enham-Alamein Village.

Deaths without notification.

Notification and Deaths During the year, 6 persons within the City died from tuberculosis, 5 respiratory and 1 non-respiratory, without notification having been effected prior to death. These figures represent 5.5 per cent. of the totall respiratory and 14.3 per cent. of the total non-respiratory deaths, as marked decrease over last year's figures.

The result of enquiry into the reasons for such failure to notify are summarised in Table 20. The contacts of these cases were called in forrexamination in the usual way.

# 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.

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 for further investigation who, having been referred to the clinics have failed to attend, and generally assisting patients where social problems exist, especially so when these would appear to interfere with clinic attendance. At all times, close co-operation with the medical officers of the various treatment centres is maintained.

The following tables and graphs illustrate the pattern of incidence in early syphilis and acute gonorrhoea for the immediate pre-war full year, peak year 1946 and subsequent years to that under review. In considering the ratio of male to female it is interesting to note that a considerable number of male patients are seafarers having been infected abroad or at other seaports. This ratio demonstrates an interesting variation, for example, in the case of gonorrhoea (1957), males produced a substantial increase on the 1956 figure, with a smaller decrease in the figures for females. During 1958 males showed an increase of slightly less than 3 per cent. of the 1957 figure, females an increase of 21 per cent., and although this is a substantial increase following upon two consecutive years of decline, it is nevertheless considerably lower than the increase of almost 94 per cent, shown in 1955 over the total in 1954. It will be seen that a sustained increase in male cases has taken place also over the past four years but to a lesser overall degree, and it would be reasonable to assume that the ratio of male to female patient is affected in some measure by the fact that facilities for treatment elsewhere than at a clinic are more readily available to the male.

Table 'A' compares the age groups for acute gonorrhoea during 1955 and 1958.

For comparison, over the five year period 1954-58, the male incidence increased by 33.45 per cent., and the female by 97.3 per cent (Table C).

With regard to the major disease, syphilis, it is gratifying to note that although there was a marked percentage increase in 1958 over 1957 nevertheless the incidence has fallen to a great extent when compared with 1938 and 1946; the extremely low female incidence is particularly welcome from the aspect of possible subsequent pregnancy.

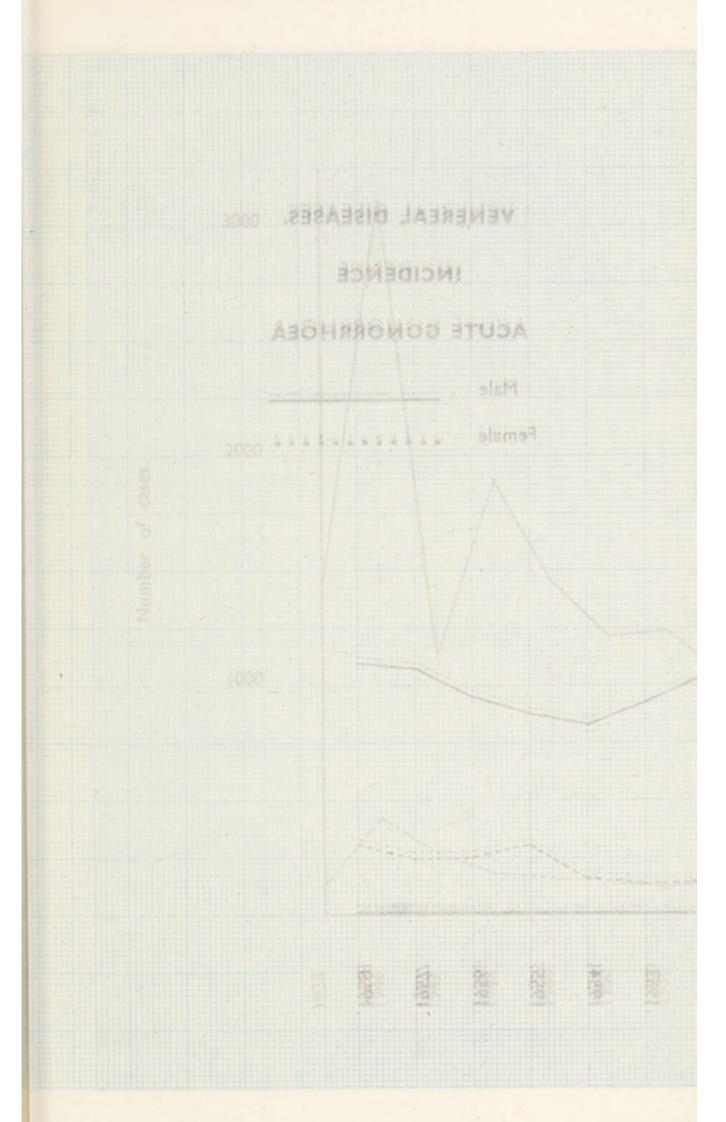
# The Teenager and Venereal Disease.

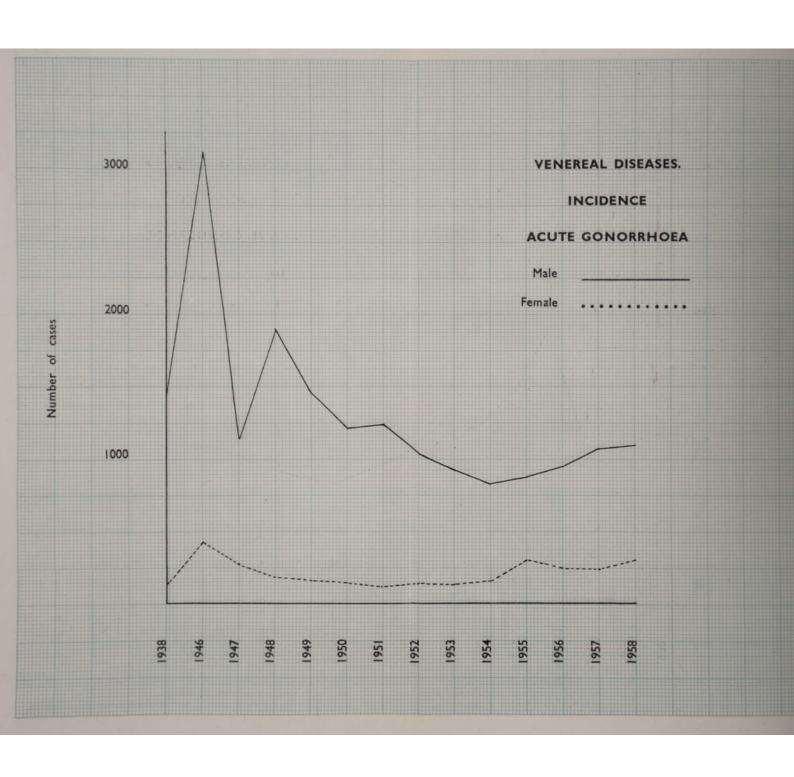
Table 'A' also illustrates that the female teenage incidence in acute gonorrhoea is relatively high.

Evidence provided over a number of years, through the medium of a contact notification, would suggest that a great many teenage girls frequent cafes, coffee or milk bars, clubs and certain public-houses in or near the city centre for such rendezvous have most frequently been a specified in notifications as 'place of encounter.'

TABLE "A"

		19	)55	1958		
nad mivad erez	ST.nos	97.0	Male	Female	Male	Female
Under 15 years			ridT	6	rodto	4
15-17 years			20	31	15	43
18-20 years			113	63	138	77
21-25 years			237	78	359	73
26-30 years			194	56	256	52
31-35 years			148	30	155	23
36-40 years			71	10	91	9
41-45 years			35	6	35	6
46 years and over			44	7	40	5
TOTAL			862	287	1,089	292





VENEREAL DISEASES. INCIDENCE \*\*\*\*\*

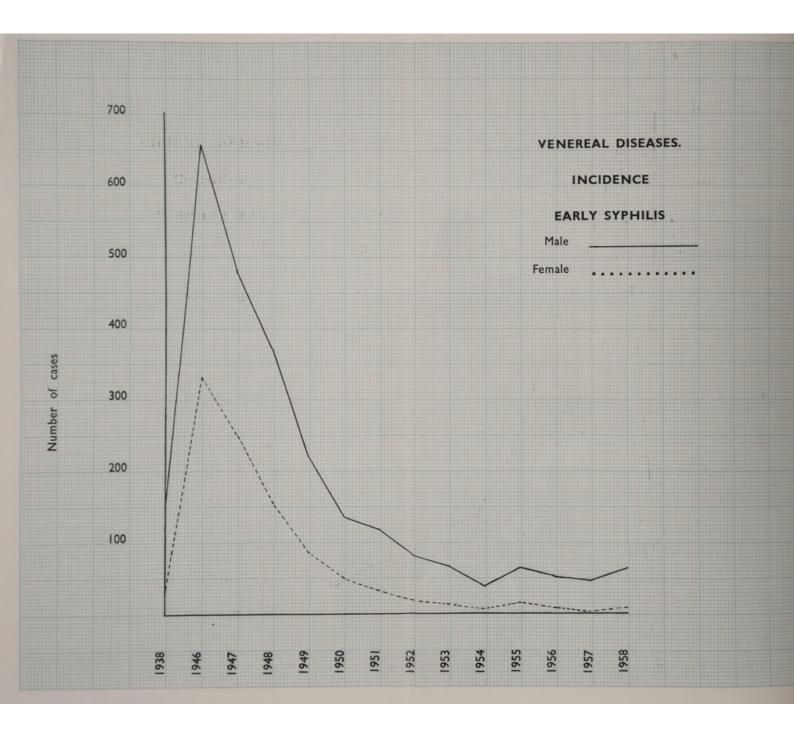


TABLE "B" EARLY SYPHILIS

er al the tour			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 7	
1958		 	62	7	

TABLE "C"
ACUTE GONORRHOEA

			Males	Females
	1000			
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

# Contact Tracing.

The total number of reports of possible sources of infection received during the year revealed a decrease of 58 per cent. on the figure for 1957. All these reports concerned females with one exception, an American serviceman. This information was passed to the appropriate authority.

The number of contacts reporting to clinics remained low but the following gives some indication of the difficulties involved. In 10

instances only was a full name and address supplied, three being entirely false; in two, name but no address; in 30, christian name only and in four, neither name nor address.

Results obtained are shown in Table 1.

### Patient Defaulters.

In spite of advice regarding the importance of continuity of attendance until assured of effective cure, many patients defaulted and some did so repeatedly.

Recall was attempted firstly by letter to which quite a reasonable response was obtained. After failure to respond home visits were carried out.

Because of the many uncertainties of habit and movement, (e.g. items 5 and 6 in Table 3), failure to contact the patient occurred all too often, but, in spite of these and other factors, every effort was made to reestablish contact where there was thought to be reasonable hope of success.

#### Case Illustrations.

- I. One partially successful case concerned a mother and her two children who had defaulted during 1955, the elder child was treated for congential syphilis but not declared cured. The younger was unfortunately not fully investigated before defaulting. Renewed contact was established but the mother was found unwilling to attend. Eventually she was prevailed upon to allow her sister to escort both children to the clinic and the result was that (a) It was possible to cure the elder child, (b) the younger child was non-infected. As a result both children were struck off the register. It is hoped that further efforts will eventually bring the mother under control at the clinic.
- II. The following case history serves to demonstrate the need for absolute discretion in this sphere of follow-up. A patient required for recall because of positive serology was visited by the male welfare visitor. The wife was recognised, having originally been a victim, but was thought to be a cured patient. In her case she had been infected by her previous husband and although no obvious recognition was made at the time, nevertheless the wife realised the nature of the welfare visitor's call.

The husband who was duly interviewed, reported for a re-test and he was found to be in urgent need of treatment. This was instituted forthwith, and the wife was persuaded to attend the clinic with her two children of the marriage and both happily found free of infection. By the discreet handling of both husband and wife there was no resultant discord.

Results of home visits are shown in Table 3.

# Cases referred by Ante-Natal Clinics.

Twenty-six cases were referred by the various ante-natal clinics for further investigation following upon doubtful or positive serology revealed on routine test or through clinical symptoms suggestive of infection requiring specific treatment. In all cases where this was found to be necessary treatment was instituted, and in the case of those patients suffering from syphilis, family investigation was subsequently carried out; in each case with negative findings.

In no instance of those referred to the clinic as being in need of treatment had the condition been previously brought to notice.

End results are shown in Table 4.

# Cases referred by Maternity Units.

Five infants suffering from severe gonococcal ophthalmia neonatorum were transferred from maternity wards, in each instance with the mother, for in-patient treatment. Investigations revealed that three mothers only had regularly attended ante-natal clinics, one had attended once, the remaining case had received no ante-natal care. In no instance was the mother a defaulting patient of a V.D. Clinic.

# General After-Care.

A variety of calls are made upon the section for assistance in resolving problems especially with regard to in-patients of the V.D. Wards.

"This concerned a male patient suffering from neuro-syphilis whose Case I wife, as a temporary measure, had been given employment by the husband's employing authority. It was felt, because of deterioration in the patient's condition, that he would be incapable of resuming his original post and to reduce the risk of possible hardship the section was requested to take some action.

The employing authority was duly approached and gave sympathetic hearing to the case as presented. In consequence, an assurance was given that the wife's engagement would be extended and that if no suitable alternative post could be found for the husband then indeed the wife's appointment would be maintained on a permanent footing."

Case II

"This further case concerned a male in-patient, who was critically ill, and for whom it was found necessary to issue an 'urgent note'. The wife's whereabouts were not known but a disinterested brother was known to be in the city; it was also known that he had refused to have anything to do with the patient. When approached, he was initially adamant, but following prolonged discussion he was persuaded to co-operate by accepting responsibility for the patient and visited the hospital on the following day."

Not infrequently a great deal of time and effort is expended on a case, the end often resulting in little progress.

Case III

"A case of this type concerned a single girl of 20 who, having roamed around the countryside, eventually arrived at the V.D. Ward, pregnant and suffering from acute gonorrhoea. Following delivery and cure, the V.D. after-care section was requested to keep her under surveillance. Investigation revealed that the patient, placid and of pleasing personality, was a native of Glasgow whose parents had died when she was a toddler and her elder sister had since assumed the role of 'parent'. As sher baby was coloured, the patient felt in no circumstance that her sister would entertain thoughts of her return home but was persuaded to allow the V.D. welfare visitor to make suitable contact and enquiry on her behalf. This was carried out and the sister agreed to both the patient and her baby coming home. All arrangements were made, including an escort to the station and provision of sustenance for both on the journey.

Unfortunately, some weeks later the mother departed abandoning the baby with her sister. The welfare visitor learned of this happening from a clergyman who, with his wife, had temporarily taken over the care of the infant, and who was concerned as to the best course of action for him to adopt. Advice was given and at a later date he was eager to arrange for the child to be adopted. It was suggested by him that the

mother may have returned to Liverpool but after lengthy investigations along these lines no trace could be found of the patient. Further negotiation is still taking place with regard to the adoption of this child. It is hoped finally that this will be successfully accomplished."

"A female patient aged 29, suffering from neuro-syphilis, was Case IV required to be re-admitted to hospital for further treatment. It was also necessary to arrange for her two children, aged 9 and 6 years to attend hospital as out-patients for investigation. Unfortunately, the patient's husband, who was unco-operative, was difficult to persuade to attend for investigation and the patient herself was incapable of making decisions due to her neurological condition. As a result, the home conditions were appalling and the children were constantly absent from school.

Numerous visits were made by the welfare visitor and eventually one child was placed temporarily on a Court Order in a Boys' Remand Home.

This enabled the welfare visitor to arrange for both children to attend a clinic for investigation which, happily, proved negative. The mother was later persuaded to re-enter hospital for treatment."

TABLE 1

bornel process a total of the contract of	Females	Males
No. of reports of possible source of infection	46	1
No. of cases traced and interviewed	8	_
No. of cases traced, not yet interviewed	2	-
No. of cases who reported for investigation	7	-
No. of cases in which information was passed on to other Authority	2	1
No. of cases already in the Register of a Liverpool Clinic	2	_
No. of cases untraced, due mainly to insufficient information	36	_
No. of cases who refused to attend for investigation	1	

TABLE 2

J1116	Male	Female	Con- genital	Total
	549	793	93	1,435
	617	1,649	202	2,468
	314	552	37	903
	44	35	-	79
	-	3		3
		549 617 314 44	549 793 617 1,649 314 552 44 35	549 793 93 617 1,649 202 314 552 37 44 35 —

### TABLE 3

one planetes or hos pissage seatless add go	Male	Female	Con- genital	Total
No. of cases visited	203	209	27	439
No. of visits made	257	563	91	911
No. of cases attending following visits	66	95	18	179
No. of cases promising to attend but failing to do so.	24	30	4	58
No. of cases removed or not known at address given	40	47	1	88
No. of cases not contacted, no access, away from home, etc	64	24	4	92
No, of cases who refused to re-attend	8	7	-	15
No. of cases removed to other districts transferred for follow-up	-	5	_	5
No. of cases deceased	1	1	e lo <u>st</u> tog	2

### TABLE 4

the foreign date, and a	Congenital	Early	Latent	Acute	Non-
	Syphilis	Syphilis	Syphilis	Gonorrhoea	Veneral
Cases referred by ante-natal clinics found to be suffering from	1	1	4	3	17

# MENTAL HEALTH SERVICE

The present mental health service has been in existence for ten years. Prospect of Before another year passes it seems certain that the laws under which new Legislation it largely operates—the Lunacy and Mental Deficiency Acts—will have been replaced by the new legislation which is before Parliament as this report is being written. It is interesting to glance back over the decade as well as to review the past year's work. The provisions of the Bill will also be indicated in general terms.

Broadly speaking it may be said that the development of a national The Last mental health service has been rather slow. Shortage of money and Decade materials prevented much expansion in the first few years and we are still feeling repercussions of this in, for example, the lack of hospital accommodation of modern type.

Nevertheless, development has been solid and a great deal of valuable work has been done. This is reflected in a striking change in public opinion-from being a darkly hidden secret, mental illness has become news; people everywhere are discussing it frankly, realistically and hopefully and it is in this climate that the new Mental Health Bill has been introduced.

The Bill has received a great deal of publicity since its introduction The Mental and it has generally been acclaimed as a real advance in the field of Health Bill mental health.

When the new Act is introduced, a new era in mental health services will be started and this will involve local authorities in much new and interesting work.

The main changes which the new Act will introduce include the following: -

The present power of the duly authorised officer in relation to the compulsory removal of patients under Section 20 Lunacy Act, 1890, will be removed by the proposed legislation. The decision as to compulsory removal will in future be a medical one but it seems likely that the mental welfare officer will still have the responsibility of taking at least some, and probably the most difficult, patients to hospital. At present the decision to remove under Section 20 rests solely with the

duly authorised officer but in future it would seem that he will have no discretion once the medical recommendation has been made that the patient should be compulsorily removed.

Under the Lunacy Act, 1890, an order by a Justice of the Peace is necessary to compel a patient to remain in hospital for an extended period. This "certification" procedure has been the target of much national criticism of the existing law, but in Liverpool the work of the Justices has been well done. They have been impartial at all times and have considered the social as well as the medical factors in every case. As it seems certain that they will disappear from the scene with which they have been associated for so many years, it is fitting that this report should pay tribute to their integrity and hard work.

The Mental Health Bill

The proposal for the future is that "detention" will not be "ordered" by a Justice but be "recommended" by medical practitioners and it will only be in certain circumstances that the judiciary will be brought into the proceedings before a patient is compulsorily admitted to and detained in hospital.

The Bill retains the new group of patients included in the Royal Commission's recommendations, namely the psychopaths. The inclusion of this group is probably one of the controversial aspects of the Bill since there is likely to be disagreement among the medical profession as to what does or does not constitute a psychopathic personality.

The grades of mental defect as we know them today will be replaced in the new Act, by the following groups, severely subnormal, subnormal, or psychopathic personality. Irrespective of terminology the problems from the medical and social view point will remain the same but it is to be hoped that the stigma attached, quite unjustifiably, to the old terminology will never be attached to the new. With the more enlightened attitude to this problem and the provision of greater facilities for the occupation, training and employment of the mentally retarded there seems no reason why many of them should not take a much fuller part in community life than they have in the past. Recent investigations have shown that the work-potential of many of them is far higher than was once believed and the new Act should give local authorities the means of providing for this neglected section of the community.

The new legislation will still mean, of course, that a proportion of mentally retarded patients will have to be admitted to hospital in the future. Despite advances in this field, there will still be a considerable number of cases for whom hospital care, sometimes of many years' duration, is the only satisfactory answer. Careful selection and placement will have to be exercised to prevent a great deal of harm being done to the proposed mental health organisation by the behaviour of patients who should still be in hospital but for one reason or another have been allowed to remain in or return to the community.

It is anticipated that a number of patients in mental and mental The Mental deficiency hospitals will be recommended for return to the community Health Bill and the local authority will have to provide hostel accommodation for those who have no homes of their own or whose homes are unsuitable or whose relatives refuse to accommodate them. Any scheme to return patients from the often isolated life of an institution to the community is an advance but it is important that full provision be made for ensuring these patients have some form of occupation in addition to the mere provisions of hostels.

It would not be right to conclude this very brief summary of some of the provisions of the Bill as they affect the local authority without paying tribute to the immense amount of work by the members of the Royal Commission and to their courage in tackling the problem of

The way has been indicated to us and it is hoped that each section of the health service concerned with mental health will co-operate to the fullest extent to ensure that the new spirit abroad in relation to this subject is fostered and that conditions for the mentally disordered are greatly improved.

mental disorder in such an enlightened manner.

In the past year this authority has been endeavouring to anticipate some of the provisions of a new Mental Health Act and some mention is made of the steps so far taken in this respect.

Over the past few years training centre provision in the City has Training been inadequate and efforts to provide further centres have, for various Centres reasons, been unsuccessful. During the past year it was agreed that six cottages at Fazakerley Cottage Homes could be adapted for use as

training centres to cater in the first instance for approximately 300 children and adults. This would bring the number of centres in the City to nine and should meet all the needs of the City for some considerable time. An area of land at Fazakerley is also to be taken over and it is hoped that industrial units will be erected there. This will mean that in time full facilities will be available for occupation, training and sheltered employment.

In addition, most of the remaining cottages have been earmarked for use as hostels so that eventually there will be a self-contained unit at Fazakerley providing residential facilities in addition to those mentioned above.

It is hoped that a start will be made in the coming financial year with the adaptation of cottages for use as training centres.

There will also be a need for more intensive community care of the mentally disordered. As a first step towards this end, the committee decided to augment the staff of mental welfare officers by eight additional officers to a total of 26 officers, with a view to reducing case loads and permitting these officers more time to spend on individual cases. The training of these officers has also been considered and three were seconded to the National Association for Mental Health refresher course at Leeds. It is anticipated that all our mental welfare officers will be given the opportunity of attending a similar course.

With these thoughts about the future in mind the work of the past year can now be considered under the usual headings as follows:—

# Mentally ill people—emergency admission to hospital.

Section 20

1,353 persons were referred to the service during the year and were visited by a duly authorised officer. In 865 cases the officer exercised his emergency power under Section 20 of the Lunacy Act to effect an admission to hospital (See Table 24). Taking the ten-year period 12,541 patients have been referred in this way, of whom 6,704 were admitted under Section 20.

Bearing in mind that the officers try to avoid using compulsory powers wherever possible it will be realised from these figures that the emergency admissions represent a most important part of mental health service work.

Compulsory stay in hospital for an extended period involves action Section 16 by the Justice of the Peace, whose work has been discussed earlier. Examinations carried out under this heading were as follows:-

No. examined		Orders made under Section 16
Following Section 20 procedure Without previous Section 20	 474	383
procedure	 45	19

### Care and training of mentally defective people in the community.

At the end of 1958, 1,773 people were under supervision in accordance Supervision with the provisions of the Mental Deficiency Acts. 7,002 visits were paid to them during the year. The "statutory" nature of visiting will almost certainly disappear in most cases under the new legislation, and rightly so-parents in the main accept the visiting officer as a friend who can help them and if they are not willing to co-operate supervision cannot be satisfactory whether it is labelled statutory or not. There may well, case in fact, be less visiting of the ordinary family in the future but more Conferences intensive care of "problem" families. One of the most pressing questions is the co-ordination of social effort for these families and an important development in this connection has been the institution of caseconferences attended by all the interested agencies, at which a concerted policy can be decided upon.

The number of children reported as ineducable and "ascertained" Ascertainwas 56, a strong contrast to 1949 when 134 were reported. It is evident that all children who can possibly benefit by formal education are retained within the school system. This is shown from a different angle by the fact that only one case was referred back as having become educable after previous notification. In the last ten years 15 such cases have been referred back out of a total of 824 referred as ineducable.

The department's future duties have not been clearly defined regarding what is probably the most difficult group to supervise, namely, those children leaving school (usually special school) who are considered to need help because of their mental disability. At present they are taken under statutory supervision but with varying degrees of success according to whether the parents co-operate or not. 93 children were referred in this way in 1958 (as compared with 73 in 1949). There is general agreement that friendly help during adolescence can be the making of these mentally subnormal individuals but often those most in need are the most loth to accept visits.

The steps being taken to remedy the deficiencies in accommodation for training are described earlier in the report. In the meantime the three existing centres have continued to function along well-established lines. Criticism of the inexperience of some of the staff has been voiced by the Ministry's Inspectors in recent reports and, though it is felt that any deficiencies in the actual training are due mainly to over-crowding and lack of suitable facilities (e.g. space for outdoor recreation), the seconding of officers to the full-time diploma course of the National Association for Mental Health has been authorised.

Training

The impression should not be given that the last ten years have seen no progress in training. Two centres have been opened, 300 are on the rolls as against 50 in 1948, transport (5 buses) and meals facilities have been provided and many other improvements have been made in structures, equipment and curriculum. In fact it is felt that nearly all that can be done in the existing buildings has been done.

Nevertheless with a waiting list which at present stands at 118 and with the knowledge that the work potentialities of some defectives are higher than has been previously realised, further development of training is imperative and urgent.

Institutional Care The shortage of hospital accommodation has been the theme of this section of the report every year and the signs of improvement now evident are very welcome.

The waiting list (see Table 26) was at its peak in 1955 when it included 93 cases of top urgency. This figure has been reduced to 39 at the end of 1958. The reduction is due mainly to the opening of Greaves Hall.

There can, however, be no complacency whilst there remain on the list to patients who have been waiting for admission since 1950. One such case has been the subject of correspondence with the Regional Hospital Board recently—that of John, now aged 15, who comes from a good home. The mother has always been in indifferent health and has had in addition another mentally defective child to contend with. As he has grown John has become more and more a burden. He is active and restless, spastic, incontinent, and has now not only got beyond parental control but has caused such a marked deterioration in the mother's health that she is constantly under medical care and has threatened suicide..

The Bill very much favours community, as opposed to hospital, care but it is unlikely that there will be very much reduction in the numbers requiring hospital admission in the near future. In the vast majority of cases admission has proved to be in the best interests of the family as well as the patient—there are few parents these days who wish to "get rid of" a defective for purely selfish reasons.

The Royal Commission realised that no change in the law was necessary to admit more patients informally. This view was embodied in a Ministry circular and, as a result, of 68 patients admitted to hospitals in 1958, 35 were admitted informally, while another 11 were "placed" cases, i.e. with formalities but without judicial order. In 210 Liverpool cases already in hospital the Order was discharged and the patients remained informally.

The same circular also resulted in a number of guardianship orders Guardianship being discharged and only 23 patients are now subject to such orders as against 65 at the end of 1957.

The Bill proposes to allow local health authorities to undertake guardianship in a manner somewhat similar to that exercised under the Children's Act and a particularly interesting proposal is to allow such powers over the mentally ill in certain cases.

Guardianship to be successful must, however, be linked with adequate hospital facilities and the provisions of hostels.

This is a steadily developing service which has received little Short-term publicity but has considerable possibilities for further expansion as an alternative to more extended hospital care.

The Voluntary Home, Orchard Dene, has once more been very useful in this connection. 56 patients have been admitted there for a total of 131 weeks' stay. Other voluntary Homes have taken 9 patients for 16 weeks and the Regional Hospital Boards have done their share in providing 55 patients with 198 weeks' accommodation in mental deficiency hospitals. The total cost to the local health authority of maintenance at voluntary Homes was £1,200, towards which parents contributed £130.

Such temporary care was primarily intended to tide over a domestic crisis, e.g. during the mother's confinement. It has, however, been extended to cases in which it enables parents to have a holiday or a rest. In the case of John who, as quoted above, has been on the waiting list for institutional care for many years, short-term care has to some extent helped to alleviate the mother's worry.

### Care and after-care work.

This part of the service's work, which has been steadily developing, will undoubtedly be more prominent still under new legislation, though the fact that some provisions are intended to be permissive is open to criticism if a national service of a uniform standard is to be developed.

Value of After-care Not all people discharged from hospital are completely recovered. Some need a period of convalescence, some have to learn to live in the community despite permanent impairment of health, some have recurring symptoms that must be watched and dealt with. This is true of physical as well as mental illness but in the latter case the condition is so liable to be affected by environment that support and advice are doubly valuable and must often be regarded as a continuation of treatment.

18 officers are already devoting a large proportion of their time to this work and at the end of the year 1,141 people were on the active visiting list. Nevertheless, a good deal more must be done if the Royal Commission's recommendations are to be carried out. Case-conferences, intensive visiting of difficult patients, liaison with the patient and his family while he is in hospital, increased contacts with the clinics, industrial concerns, and general practitioners, will all form part of the pattern for the future.

Hospital Discharge The administrative machinery is here very important. Contact with the patient before discharge from hospital may be a desirable development but in the absence of this it is certainly necessary for a visit to be paid soon after discharge. Particular attention is therefore necessary to the discharge notices sent by the hospitals—if these fail to arrive promptly or are deficient in information, after-care may get off to a bad start or not start at all. This difficulty did in fact arise during the year in respect of one hospital but following correspondence the position improved considerably.

As has been emphasised previously one cannot expect to obtain spectacular results in the majority of cases; in fact it is usually not possible to assess the results at all in concrete terms; but nobody who reads the reports written by the visiting officers can fail to be impressed by the many small services that can be done and the friendly terms established between patient and officer.

The number of people placed in employment (33) or employed Employment following consultation (15) was less than last year which probably reflects the general increase in unemployment on Merseyside. The employment officer had 369 names on his register at 31st December. Though the service is of course much smaller that the official Ministry and Youth Employment Services, experience has shown that it is a real aid to them and the question of extending it should receive consideration in the near future.

As usual the year's work shows many disappointments—an employer, for example, gave a vacancy after a painstaking approach had been made by the Employment Officer but the defective chosen failed to turn up and was found still in bed when a visit was made to his home. The attitude of parents is often the factor which determines success or failure and unfortunately they do not always give the sustained encouragement necessary.

On the other hand there are heartening successes such as that of Miss A, who suffered a serious breakdown twelve years ago and was for three years in a mental hospital, where she had a leucotomy operation. After discharge she had a further year in another hospital under treatment for tuberculosis. She was then visited and encouraged in every way possible for some years while she looked after her elderly father, to whom she was devoted. He died in 1957 and it was obvious that the period immediately afterwards would be one of great stress for her. The best prospect seemed to lie in finding her suitable employment and at length a typewriting course was arranged. At first she was rejected but following strong representation she was allowed to take the course and completed it. A post was then found and she has been working happily and successfully for the past three months, with every prospect of continuing to do so. It is pleasant to record the success which has attended this careful "nursing" of a patient over such a long period.

### Staffing.

It has been mentioned above that the Committee have anticipated an increase in community care (on which the Royal Commission placed so much emphasis) by authorising the appointment of more staff. Eight additional appointments are to be made, making a total of 26 visiting officers.

This is probably the last report in which the duly authorised officer will figure under the present title and duties and it is opportune, therefore, to note the valuable work done by these officers. Perhaps the older officers with long service who came over in 1948 from posts as relieving officers may be specially mentioned—they have adapted themselves to their changed duties admirably.

Early in the year an officer was commended for skill and fortitude in dealing with a mentally disturbed man who had attempted to commit suicide. In trying to restrain the patient, who was bleeding profusely from a throat wound, the officer was himself injured but continued to render first-aid until he saw the patient safely into an ambulance; he then lost consciousness and was himself taken to hospital.

### Mental Health Education.

Education

There have been many signs this year that the general public is beginning to have a better understanding of mental disorder. Well planned television programmes have done much to foster this and the interest shown is reflected in the number of enquiries which always follow each programme. At the local level, the department's exhibition in connection with the Liverpool Show had an outstanding success.

Educative work goes on all the time within the department, not only by means of instructions, practical and theoretical, given to the growing number of social workers who seek guidance, but also through the talks visiting officers have with patients' relatives. A quiet chat can often do more than a formal lecture to dispel the false values engendered by fear and ignorance.

# AMBULANCE SERVICE.

The number of patients carried by the Ambulance Service again Increase in increased. Only once since 1948 have the figures shown a decrease and Number of Patients this was in 1957, when the decrease was very slight (0.3 per cent). The Moved total number of patients moved during 1958 was 217,979, an increase of 2.3 per cent, representing 4,948 patients.

The ambulance vehicles travelled 960,264 miles using 64,164 gallons Decrease in of petrol and 3,105 gallons of diesel oil. When compared with the previous year, this shows a reduction of 3,607 gallons of fuel whilst the vehicles travelled an additional 992 miles. This result is largely due to the use of ambulances fitted with diesel engines which have a fuel consumption of 27.7 miles per gallon whilst the fuel consumption of the same type of vehicle fitted with a petrol engine is 11.35 miles per gallon of petrol. The use of multigrade oil also contributed to better fuel consumption. Whilst the better quality oil cost approximately £135 more for the year, the records revealed a 6.6 per cent improvement in fuel consumption, an approximate saving of £650.

The servicing and maintenance of vehicles is carried out at regular intervals by a skilled mechanic, an oiler and a greaser. Each vehicle is subject to a rigid system of inspection and a report compiled from which preventative maintenance is carried out. A monthly performance record is maintained for every vehicle from which the Chief Ambulance Officer takes all necessary steps to rectify any poor results.

The average mileage per patient again showed a slight decrease of 0.1 per cent to 4.4 miles per patient. When compared with the year 1948 (when the average miles per patient was 8.89), the decrease is substantial and accounted for by the increased volume of work, the transporting of large numbers of patients at one time and the use of radio telephony.

The co-operation between local health authorities is essential and much can be done by Ambulance Officers in working together without a rigid application of boundaries.

The Headquarters switchboard with six exchange lines has proved Communicaadequate. Four large hospitals, the Police Control Room and Emergency tions

Bed Bureau are connected by direct lines. One telephone switchboard operator and two female telephone attendants are employed to cover the message room from 7 a.m. to 11 p.m.

For many years the use of radio telephony has proved both economical and efficient. To provide for improved reception and transmission, the main transmitter/receiver has been moved to a new site. It is now installed on a nine storey block of flats situated in the highest part of the City and connected to the remote control unit at Ambulance Headquarters by land line.

Removals to Places Outside the City The large number of specialist hospitals in this City providing treatment to patients from distant places presents a problem when patients are ready to return to their homes.

Although the regulations provide for the Ambulance Service of the area where the hospitals are situated to carry out this work and charge the cost to other authorities, is it considered, in the interests of national economy, to use the vehicles of other authorities returning to their areas. To achieve this, the Ambulance Headquarters Control acts as a 'clearing house' for all hospitals and requests are passed to the appropriate authority. The North Wales Scheme, by which all ambulance vehicles returning to North Wales are used for returning patients, is operating very successfully and conveying 90 per cent of the patients returning to their homes.

Whenever possible and where a through service is available, arrangements are made for patients to travel by train. During the year 628 patients travelled in this manner and the co-operation of the staff of British Railways has been very much appreciated.

From April 1958, special records have been maintained in respect of patients travelling to and from Clatterbridge Hospital for radio-therapeutic and general treatment. This has revealed that 46 patients were conveyed for general treatment whilst 183 patients were conveyed for radiotherapeutic treatment. The estimated increased mileage is 1,592 miles.

Transport of patients from overseas and requiring transport to distant places has decreased. When required, train transport is used for this purpose.

A special reserve of equipment consisting of first aid materials, Major stretchers and blankets is held in reserve for major civilian disasters. Civilian Disasters A scheme has also been devised whereby individual tasks are allocated to senior staff. This scheme has been tested several times when reports of "Aircraft in Distress" have been received.

A separate staff and vehicles provide transport for infectious patients. Infectious The demand upon this section has decreased considerably and is mainly Patients concerned with the transport of tuberculosis patients. Special clothing is available for use when conveying patients suffering from, smallpox, typhus, etc.

The vehicle fleet now totals 76 vehicles, consisting of 50 stretcher Resources ambulances, 16 sitting case ambulances, 9 sitting case cars and one Available specially designed dual purpose vehicle.

Seven of the stretcher ambulances are fitted with B.M.C. 3.4 diesel engines. The machines are extremely economical in fuel consumption and require considerably less maintenance. No complaints have been made relative to noise and smell.

The specially designed dual purpose vehicle is the "Shooting brake" type and by alteration to the rear seat it has been possible to provide accommodation for a stretcher. It is proposed to replace all sitting case cars with this type of vehicle.

An operative staff of 118 male and 20 female driver/attendants perform duty on a rota system covering Headquarters, two ambulance stations and four accident stations, and provide a minimum of eight fully manned ambulances throughout the night and the balance between 7 a.m. and 11 p.m.

Whilst practically all the driver/attendants are qualified in first aid, it was considered desirable to encourage them to a better standard. A team was entered in the Ambulance Competition organised by the National Association of Ambulance Officers and they were successful in vinning the North West Region Trophy.

To overcome the difficulty of shortage of first aid materials in ambulance first aid boxes, a supply of first aid haversacks have been provided. All drivers reporting for duty are now issued with a sealed haversack containing all types of first aid materials and are required to hand the haversack in on completion of duty. A considerable reduction in the consumption of dressing etc. has been revealed.

The normal "flock" pillow has now been replaced with special plastic pillows filled with foam plastic. These pillows are used together with a linen pillow slip and have proved very efficient. Pillows soiled by blood etc. are very easily cleaned, whereas the flock type had to be destroyed.

All accident ambulances are fitted with Oxygen Therapy Flowmeter Outfits and polythene masks are used for each individual patient. In addition, a Stephenson Minuteman Resuscitator is held centrally.

Heated cots for premature babies have been frequently used. The cots secons is to fastrong wood box in which a strong canvas sling is suspended from metal rods running along each side of the box. Pockets in the side and foot of the sling hold five hot water bottles (2 at each side and one at the foot)). A plastic mattress is fitted in the bottom of the sling.

**Out-Patients** 

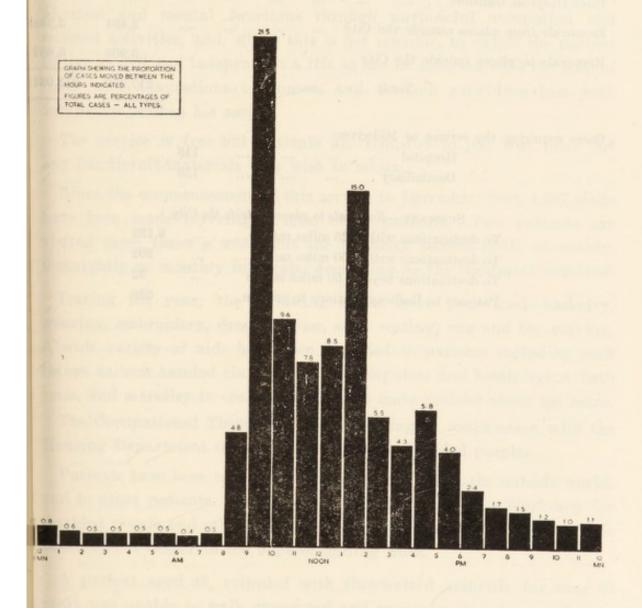
The fleet of sitting case ambulances has been able to cope with the large number of persons receiving out-patient treatment. The system of collecting up to twelve patients from one district at the same time has made it possible for patients to arrive for treatment at reasonable times. The return trip to their homes is not so easy and sometimes patients are subjected to long waits, often causing distress and inconvenience.

As an experiment, a shift leader has been placed at a large hospital from 10 a.m. to 5.30 p.m. each week day. All requests for transport are dealt with by this man and all ambulance crews report to him. The result has shown a very marked improvement in patients returning home. The ambulance "turn round" has been speeded up and, by coordination, the journeys to different parts of the City have been reduced.

Ministry of Health Circular 5/56, recommends that hospitals should appoint such an officer, but few, if any, have done so. The responsibility

for ordering transport is frequently left to the Almoners and merely provides a medium for passing the orders to the Ambulance Service, often through a very junior clerk. The importance of having a responsible person at the hospital cannot be stressed too highly. This person should have knowledge both of hospital and ambulance problems and do everything possible to promote efficient removal of patients, together with economical use of the Ambulance Service.

The hourly demand on the Ambulance Service work is shown on the following graph.



# STATISTICAL REPORT

							YEAR 1958	YEAR 1957
Non infectious cases remov Home to Hospital Hospital to Home Maternity Cases	ed from	n: 					97,186 79,956 6,513	92,953 75,507 6,952
Infectious cases removed for Home to Hospital	rom:			oton Matth	***	5 5Hd	3,848	4,463
Mental cases removed from Home to Hospital	h: 						640	566
Accident cases removed from Home, Streets, etc., to		tal					10,065	10,202
Inter-Hospital transfers							11,399	12,383
Removals from places outs	ide the	Cit	у				2,464	3,348
Removals to places outside	the Ci	ty					5,908	6,657
	Total						217,979	213,031
Cases requiring the service	of Mid	lwiv	es:					
Hosp	ital					118		
Domi	ciliary					139		
an the soul of a place								
	RY—Re							
To destinati							8,138	
To destinati	ons wit	hin	50 mile	s radius	S		202	

32

628

To destinations beyond 50 miles radius

Patients to Railway Stations to entrain

# OCCUPATIONAL THERAPY

The Occupational Therapy Department was started in March, 1958, with an Occupational Therapist working single handed. From an office in the Health Department, Hatton Garden, the Occupational Therapist goes out to visit patients in their homes all over the City. It was proposed that the Occupational Therapist should divide her time equally between the physically handicapped, mental, and tuberculous patients, but the response for her services from the general practitioners was such, that she soon found her time almost completely devoted to the physically handicapped.

The aim of occupational therapy is, where possible, to restore physical and mental functions through purposeful occupation and selected activities, and, where this is not possible, to enable the patient to live as full and independent a life as can be achieved with the help of 'aids' and adaptations to houses, and through providing him with occupation within his scope.

The service is free but patients are required to pay cost price for any handicraft materials they wish to retain.

Since the commencement of this service to December, 1958, 1,087 visits have been made covering a total of 60 patients. Two patients are visited three times a week, but the majority receive visits at weekly, fortnightly or monthly intervals, depending on the treatment required.

During the year, the following crafts have been used—basketry, weaving, embroidery, dress making, stool seating, rug and toy making. A wide variety of aids have been supplied to patients including such things as 'one handed tin openers' for amputees and hemiplegias, bath seats, and a trolley to enable a patient to move articles about the home.

The Occupational Therapist is also working in conjunction with the Housing Department in adapting houses for disabled people.

Patients have been taken out and re-introduced to the outside world, and to other patients. One has been found a place in a Workshop for disabled people and others have been put in touch with the Disablement Resettlement Officer in the hope of finding work.

A patient aged 48, crippled with rheumatoid arthritis for over 20 years was unable to walk unassisted and was in a very depressed state when first visited. There were typical rheumatoid contractions of the

legs and hands and the patient spent only a short time out of bed each day. She felt that life was over for her, and that she was a burden on her family. Exercise for her hands and arms was started through the medium of weaving, and as movement increased a different type of loom was provided requiring stronger movement. The patient was encouraged to move about and was taken out for short walks. A sling was provided to enable the patient to stand at the sink, and with the aid of a bath seat she was able to have a bath for the first time for many years. She is now doing rug making and canvas embroidery and is able to walk unassisted and even carry a loaded tray a short distance. This patient has received many orders for her work and life has taken on a new meaning for her.

Another patient, aged 36, was bedridden with tuberculosis for 14 years, and during this time she saw nobody but her family and eventually lost all contact with the outside world. This patient did nothing and lived in fear that any movement would make her condition worse. Eventually, the doctor got the patient up and taught her to walk again, and then occupational therapy was prescribed to rehabilitate her. She was taught toy making and embroidery to arouse her interest and create a feeling of achievement. The Occupational Therapist took her out by car at first and later for short walks in the parks. Before Xmas she was taken to the shops and made her first purchase for 16 years. She is being introduced to other patients and is gradually gaining confidence. It will take a long time to wipe out all the years of fear and withdrawal, but it is hoped that eventually this patient will be able to take her place in the community once again.

A man of 50, paralysed in the right hand and arm as a result of a cerebral haemorrhage, had a very slight movement in the limb, but had become completely left handed. This patient was started with finger weaving requiring both hands, which he did with great difficulty. Gradually movement and strength increased and he was taught hook rug making requiring a strong grip. When he had mastered this, he progressed to another type of rug making requiring finer finger movements. This patient has also done sanding and stool seating, to increase upper arm movement and now has good movement and a fair degree of strength in the limb and is hoping to return to work soon.

With the appointment of two assistant occupational therapists for 1959, it is hoped to develop the service and to open centres where patients can receive advanced treatment not possible in the home, and where group therapy can be carried out.

# WELFARE SERVICE

Residential Accommodation.

As in previous years the problem of providing adequate residential accommodation continued during 1958 to be of the utmost importance. In a City which has a population of approximately 90,000 persons who are over pensionable age there is likely to be a large number of elderly persons who need care and attention, and all practicable steps are being taken to meet this need. With the new outlook in regard to care of the aged the traditional suspicion of the large establishment is being broken down and there is a steady increase in those coming forward to be considered for admission to an old persons' home.

Table 28 of the appendix shows the total accommodation available for Residential use on 31st December, 1958, as being 1,291. The previous year had seen Accommodation a reduction in the number of persons on the approved waiting list for admission to residential establishments as in that year three new hostels were opened. It had not been possible, unfortunately, during 1958, to start any new projects and for this and other reasons the waiting list increased from 90 to 232 at the end of 1958. The Department is constantly on the look-out for large houses of the older type which would be capable of conversion into hostels for aged persons, but suitable premises only come on the market at infrequent intervals. The position is also explored of convenient sites on which new buildings could be erected.

Owing to the natural concern at the increase in the numbers on the waiting list consideration was being given towards the end of the year to the possibility of making arrangements to help old people to find living accommodation in private households. The possibility was being explored of operating a pilot scheme for a period in co-operation with a voluntary body when "boarding out"-for want of a better phrasewould be tried as an experiment in a number of selected cases.

During the year 404 persons were admitted to residential accommodation and from particulars contained in Table 29 it will be seen that 84 houses and flats were vacated which became available for families in urgent need of housing accommodation.

The programme of upgrading Westminster House was resumed when Westminster the necessary loan sanctions were forthcoming in respect of the adaptation of House 12 and a start was made on the work in November. It is

also proposed to adapt two further units in 1959 but in the meantime steps are being taken to instal modern furniture and fittings as far as is practicable pending structural alterations. A new lift was installed in the main building towards the end of the year which will greatly facilitate the work carried on in this large establishment.

Hostels

The loan sanction having been received for the construction of a lift at "Lismore", it was hoped to make a start on this project early in 1959. When completed it would have the effect of providing the equivalent of ground floor accommodation at this hostel.

It is very pleasing to be able to report that owing to a still further generous gesture on the part of the Merseyside Hospitals Council it was possible to instal, at some of the new hostels where they were needed, new television receivers, modern radio sets and new pianos. These amenities are keenly appreciated by the residents.

The staffing of the hostels by supervisory officers still continued to present a problem, but during the year it was found possible to engage female attendants, some of whom expressed a willingness to reside at the hostels during times when the matrons or assistant matrons were away on annual or sick leave.

In addition to the direct provision of residential accommodation made by the City Council for the aged and infirm, a number of voluntary organisations in the City provide similar facilities in return for an appropriate financial contribution by the Council to enable the residents to meet the agreed cost of maintenance. There are 144 Liverpool residents provided for in this way, particulars of which appear in Table 30. All these admissions are subject to prior consultaion with the Welfare Service Section of the Department, and the Homes are subject to regular inspection by the Chief Welfare Officer and the Senior Welfare Visitor.

Inspection is also made of nine privately-run Homes for the aged or disabled in the City as referred to in a later section of this report.

Chest X-Ray of Residents During the year steps were taken to implement the Council's decision that every person should undergo a chest X-ray before admission to a residential establishment. In the autumn a mobile X-ray unit visited

Westminster House to examine the old folk from that establishment, and also the hostels, who had not been X-rayed before admission. Thirty residents from Westminster House required further investigation, and eventually two were found to have active tuberculosis, one to have tuberculosis, possibly active, and one to have doubtful tuberculosis. Ten of the residents from the small hostels were reported upon in the usual way to their own doctors. One was found to have active pulmonary tuberculosis and another with doubtful activity; a third had a healed tuberculous lesion and a fourth a lesion which might prove to be tuberculous. A fifth was already on the register of the chest clinic and the remaining five were to become the subject of further examination. The necessary steps were taken to admit patients to hospital for treatment, or to refer other for further investigation.

Arrangements are now in force for every new resident to have a chest X-ray before admission to any residential accommodation.

# Temporary Accommodation.

The Liaison Sub-Committee of the Health Committee continues to deal Lower Breck energetically with the question of temporary accommodation; and the Road numbers of persons accommodated from time to time do not appear to be excessive for a city and port the size of Liverpool.

During the year accommodation was provided for 164 women and 373 children. The highest number at any one time was 111 (including 29 women and 82 children) and the lowest recorded was 18 (including 7 mothers and 11 children). The greatest number ever housed in the Temporary Accommodation was 219 in May, 1952. The daily average throughout the year was 63 including 18 women and 45 children, and the average length of stay of the families was 12 days, the longest being 284 days.

It was necessary to accommodate an Anglo-Indian family which had been repatriated from Burma to this country. The husband was found accommodation outside but his wife and child were still in the temporary accommodation at the end of the year. It appeared that the husband had served in H.M. Forces during the war and later in the Burmese forces. As a British subject he experienced difficulties following the changed political conditions in Burma and, as he could not get regular employment, asked for an assisted passage to England.

Later in the year a man aged 54 years, a British subject who had lived in the United States for several years, was deported because he became unable to support himself. He was provided with temporary accommodation for a short time and then accommodation was found for him in a lodging house.

From the 5th July, 1948, to 31st December, 1958, a total of 85 persons have arrived in Liverpool from overseas having been deported or repatriated for various reasons and been provided with temporary and/or residential accommodation.

Particulars showing the numbers of persons admitted to and discharged from the temporary accommodation during 1958 are contained in Table 31.

# Domicillary Welfare Service.

The work of the Welfare Visitors continued to increase during the year when the staff of nine field workers were engaged in visiting, investigating and following up the general care of old people and the handicapped in their own homes. In a City of approximately 90,000 old people it is not possible to provide a comprehensive visitation service and the field workers have necessarily had to concentrate their efforts upon those who needed immediate care and attention. In the course of this work many and varied tasks are performed and if a need has been brought to the notice of the department an investigation will have been made to ascertain the right course of action or the most appropriate service required (e.g. Home Help, home nursing, medical services, National Assistance, Ministry of Pensions and National Insurance, etc.)

During the year it has been possible to see the setting up of the first District Council under the Liverpool Old People's Welfare Council. This scheme, when fully developed, will provide the necessary coordination of voluntary effort on behalf of the elderly in their own homes and this will undoubtedly be of great assistance to the department. Welfare visitors will be members of their own district council in order to effect a permanent liaison between the local authority and the voluntary bodies. The Chief Welfare Officer has served as a member of the Executive Committee of the Council.

The department is continually publicising the help which can be given to elderly persons and further steps in this direction are contemplated in the next twelve months when it is hoped that co-operation with the Liverpool Old People's Welfare Council will provide a better source of information as to persons in need of welfare services. There are, unfortunately, many instances of old people living alone where home conditions are far from satisfactory; and occasionally the individual has to be removed to residential accommodation in a very neglected condition or dealt with under compulsory powers as referred to in a later section of this report. Some old folk are found who, unfortunately, have deteriorated to the stage where it is almost too late to be of help to them.

The following are seven selections from the many problems dealt with during the year by the welfare visitors:—

1. An old lady who has a paralysed arm, but in spite of this handicap does look after her little flat extremely well. She has a home help who comes in once a week to do the hardest jobs for her and she also receives mobile meals from the Health Department three times a week. These aids are of tremendous help to her, because without them she would not be able to live alone, and they are an example of the domiciliary services which a local authority can provide to enable elderly persons to continue living in their own homes.

The little flat is in a large block built in the middle of the 19th century. The interior, like the rest, has been transformed by the Corporation into one of comfort for her at a rental of 6s. 8d. a week.

2. An old lady who had managed a private hotel for many years. In the last year or two she declined in health and deteriorated mentally. She became a victim of an unscrupulous lodger who let off the house illegally and withheld the money he received.

The police eventually removed the lodger and the old lady was subsequently persuaded to enter hospital as she was by this time living alone. There were no grounds for removing compulsorily the old lady, and the department could only provide regular visitation and supervision in conjunction with relatives who, unfortunately, lived at a distance.

3. Mrs. S. had been having dizzy spells for some time and finally she was admitted to hospital with a cerebral spasm. She made a good recovery and was nearly ready to come home when there was a very severe water burst in her home. The hospital almoner asked what we could do. After seeing the house and the neighbours it was arranged that a home help would be sent in every day for an hour to light fires, to air the house and dry it out. A visit was made to Mrs. S. in hospital to settle her and stop her becoming restive and she remained in hospital for a further three weeks while her house was made habitable for her.

Mrs. S. is now home again and settling in happily.

4. This old lady was anxious to enter the British Red Cross Hostel in Portmadoc, North Wales, and all necessary arrangements for her admission were made but at the end she changed her mind. She decided instead to take an old age pensioner's flat and very soon she was able to do this and quickly settled down in her new surroundings, arrangements being made for domestic help. The old lady wished to retain her name on the waiting list for an Old People's Home as she was becoming rather feeble.

A vacancy at a hostel subsequently arose and was offered to Mrs. — On visiting it was learned that the old lady had changed her mind and did not wish to enter a hostel.

Regular visits were made over seven months after which the old lady decided she would like to enter a hostel and her name was once more added to the waiting list.

Mrs. — later entered hospital for a short period and by contact with the almoner the welfare visitor was advised when the old lady was due for discharge. After her return home again Mrs. — stated that she wanted to be admitted immediately to a hostel. There was no vacancy at the time, but later on all arrangements were made for her admission and once more the old lady changed her mind at the last minute and refused to go. She was, however, transferred to a ground floor flat which became vacant immediately below the one she previously occupied and she appeared to be happily settled.

Regular visits were paid for a further eight months and the old lady once again decided she would like to enter a hostel and her name was added to the list.

Visited again. She asked for a vacancy in Westminster House and finally she was accompanied to that home where she appears to be quite content.

5. An old gentleman called at the office applying for admission to Westminster House. He was extremely deaf and had a speech defect which made conversation difficult.

He had been living in a room for 15 years but was anxious to leave because his landlady had, he claimed, become strange in manner. He was very active and had made enquiries at various homes without success. He wanted a room where he could take his furniture, and it was explained that this was not possible in accommodation provided by the Liverpool Corporation. He was very annoyed and left stating that he was not interested any further.

A long letter was received from this old gentleman by the Medical Officer of Health asking for accommodation and a further visit was paid to his home address. The landlady appeared to be reasonably clean and alert, but she was having a great deal of trouble with her tenant and had given him notice on many occasions but he had refused to leave.

Following further visits the old gentleman now felt that he should be admitted to hospital for thorough rest and investigation and he was advised to see his own doctor.

'A telephone message was later received from the Liverpool Personal Service Society regarding this old gentleman who had been to see them following his discharge from hospital, complaining that his landlady had lost or stolen his pension book. He was never at home when the welfare visitor called at the house.

The old gentleman's landlady died and he stated that he was refusing to leave and that the estate agents were putting the matter in the hands of the solicitors.

A message was received from a welfare visitor, Dock Labour Board, that the old gentleman had called there regarding admission to a local authority home and been requested to call at the welfare service office. The old gentleman called and was offered a vacancy at Westminster House following satisfactory medical certificate and X-ray report.

A message from the almoner, Royal Southern Hospital, stated that the old gentleman had called there demanding admission. She was not able to admit him and suggested he should call again at the welfare service office for admission to Westminster House. He said he would not consider this and after further enquiries a Church Army Hostel, who had a vacancy, agreed to admit him.

- 6. Mrs. N. has been known to the Department for two years, and during that time she has steadily deteriorated. Her sons, who do not live in Liverpool, have tried in vain to persuade her either to live with them or to go into residential accommodation, but she has lived in the house for 50 years and is determined to stay there. About Christmastime, the old lady fell on the fire sustaining burns on the head and the right arm. Her own doctor advised hospital treatment, but Mrs. N. refused to go in the ambulance when it came for her, so the district nurse continued treatment at home. Mrs. N. complains to all her visitors that she has no money and no food, but in actual fact, two ladies from the nearby R.C. Church each call on alternate days and one of them draws Mrs. N.'s pension, pays her rent and buys food. Meals are taken in to her every day by these friends, and without their practical help, she would have been a case for forcible removal. The house is in a neglected state, and Mrs. N. has lost all sense of time and often comes to the door most inadequately dressed.
- 7. Miss W. was first known to the welfare service section when her room required cleaning prior to her return from hospital after an accident over three years ago. Her furniture was all in the centre of the room and piled high with old newspapers. Every chair had clothing, etc., piled on it. Sometimes the furniture was covered in sheets, although Miss W. recently said she urgently needed sheets for her bed.

Although she constantly expressed her inability to continue living in these conditions and with the present cost of living, Miss W. refused hostel vacancies, giving various reasons. Her room was recently decorated but she complained about the way it was done. She refused domestic help and discouraged a friendly visitor from calling.

A holiday was arranged for her but she decided not to go and a certain amount of extra furniture was supplied, but the items supplied have not been put to use.

# Removal to Suitable Premises of Persons in need of Care and Attention.

During the year it was necessary to remove, from their homes compulsorily, thirteen persons under the provisions of Section 47 of the National Assistance Act, 1948. 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 for compulsory removal to hospital accommodation or residential accommodation. Six of the patients subsequently died, four were still in hospital at the end of the year, one was transferred to residential accommodation from hospital, one was still in the residential accommodation to which she had been admitted, and one had returned home after three weeks in hospital. In 1957 six persons were the subject of compulsory removals, eighteen in 1956 and twelve in 1955.

# Rest Centres for Elderly Persons.

The River View Rest Centre at the Pier Head has continued to River View provide a much needed social and communal centre for aged and Rest Centre handicapped persons. It has not only been most successful in providing for 500 persons per day, but it has also been of great value in helping to keep alive the interests of the elderly in various indoor games, reading, etc. During the year a chiropody class began each week and enables the elderly to have treatment without the necessity of visiting the Foot Hospital.

The Aged Persons' Services Sub-Committee of the Health Committee is most anxious to proceed with the provision of more of these centres. The centre in Sheil Park will be erected in 1959 with the aid of a grant from the King George VI Foundation. Other centres are being sought in existing premises and it is hoped that progress will be made in this direction in 1959.

#### Mobile Meals.

It has long been recognised that domiciliary services provided by the local authority can help considerably in preventing elderly persons from deteriorating to the stage where they need residential care and attention. For this reason consideration has been given to extending the present service which is based on Westminster House and operates to the benefit of an increasing number of elderly persons who receive a hot mid-day meal which they are unable to prepare themselves. At the end of the year about 100 meals were being supplied on each of three days a week, the servers being members of the Women's Voluntary Service. This compares with 68 meals in 1957. During the year 1959, it is hoped that the Health Department will be able to have the use of two more vans from its own resources together with one from the Women's Voluntary Service to extend the supply of these mid-day meals over a wider area. As and when any new hostels are being built for elderly persons consideration is also being given to basing a district service on the establishment, where possibly a van could be garaged and the kitchen and its equipment arranged to provide for the additional supply of meals to elderly persons in the neighbourhood.

## Registration of Disabled Persons' and Old People's Homes.

At the present time there are 26 homes registered, 17 being administered by voluntary bodies and the remainder by private individuals. The homes are inspected by officers of the welfare service section at regular intervals to ensure that the standard of accommodation is being maintained in accordance with the requirements of the City Council.

# Welfare of Handicapped Persons.

Towards the end of the year, the Health Committee considered the further steps to be taken to implement the approved scheme for the welfare services to be provided for handicapped persons. This step was taken in the light of the Ministry of Health Circular 16/58 which referred to the conclusion and recommendations of the Committee of Inquiry on the rehabilitation, training and resettlement of disabled persons, and drew attenion to the need for fuller and better provision and scope for considerable development. The Committee decided to pay particular attention to those handicapped persons who are capable of

work in day centres, at home or incapable of work. Proposals which were under consideration included the provision of four social and handicraft centres in convenient situations in the City, with the cooperation of the Merseyside Joint Committee for the Welfare of the Physically Handicapped and from other interested voluntary bodies towards disposal of articles made, the promotion of exhibitions and/or sales of work and providing social helpers for the centres.

The following organisations concerned with the welfare of handi- 100 Walton capped persons have continued to make use of the premises 100 Walton Village which were placed, free of charge, at their disposal, a few years ago:-

Infantile Paralysis Fellowship (Merseyside Branch).

Merseyside Hard of Hearing Club.

Merseyside and Wirral Group Invalid Tricycle Association.

Liverpool Spastic Fellowship.

War Pensioners' Handicraft Club.

Merseyside Epileptics Association.

The premises are in regular use in the evenings, frequently on Saturday and Sunday afternoons, and on two afternoons a week a small number of spastic children are conveyed in a brake subscribed by voluntary effort for the Spastic Fellowship and some occupational therapy is undertaken under supervision. Occasionally, members of the staff of the welfare service section of the Health Department meet members of the various organisations to discuss matters of common interest involving the use of the premises.

It was mentioned in a previous report that a club for epileptics had been established in the City, and the members now use the Walton Village premises on one evening a week for social and recreational purposes. It also became possible to open an additional club in the south end of the City where a handicrafts class is conducted by an experienced teacher who had been obtained through the Education Department.

During the year 162 persons were referred to the Department because Blind their vision was so defective that they might be regarded as blind or Welfare partially sighted. Arrangements were made for them to be examined by

ophthalmic surgeons and 112 were found to be blind, 40 partially sighted and 10 not blind. During the last three years results of examinations of this kind are shown in table form as follows:—

Year	lidlds	Number Examined	Registered as Blind	Registered as Partially Sighted	Not Blind
1956		231	154	51	26
1957		181	127	52	9
1958		162	112	40	10

It will be noted that over this period there has been a marked reduction in the total number referred for specialist examination. So far as the number registered as blind are concerned the main decrease was in the upper age groups. For example, in 1956, 96 persons in the age-group 70 upwards were found to be blind whereas in 1958 the number was 75. In regard to the partially sighted, the biggest fall was within the age-group 5-15 years when 6 were registered in 1958 compared with 18 in 1956. An observation register is maintained in respect of the partially-sighted persons and similar services are made available to them as for the blind.

Particulars of the numbers of registered blind and partially sighted persons in the various age groups are contained in Tables 33 and 35. Statistics are also given showing, by age-groups, the numbers of newly-blinded and partially sighted added to the registers during the year (Tables 34 and 36).

Table 37 shows a summary of the reports received during the year indicating, under the headings of cataract, glaucoma, retrolental fibroplasia in premature infants and other causes, whether treatment was recommended and, if so, whether it was medical or surgical.

# Blind Employment.

Blind Employment At the 31st December, 1958, the following numbers of blind persons were engaged in the various trades operated in the blind workshops:-

Vorkshops for the Blind, (	ornwants Street.		Blind
*Basket Making Brush Making Mat Making Upholstery	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	o, the "Gits", Lo es, that the fine of \$1,000 was	Workshops
		72	
atholic Blind Institute, B			
unione Deine Institute, D.	runswick Road.		
Basket Making	runswick Koad.		
Basket Making Mat Making			
Basket Making	3		
Basket Making Mat Making	3 1	5	
Basket Making Mat Making	3 1 1		
Basket Making Mat Making	3 1	5 77	

\* Includes one employee, partially sighted.

The following numbers of blind persons were engaged in sighted Sighted industry:—

Industry

Basket Making				1
Clerks/Typists				5
Dealers, Tea Agents,	etc.			3
Factory Operatives				49
Home Teachers				4
Legal Profession	***			1
Masseur			***	1
Musicians and Music		er		3
Porters, Packers, Clea School Teachers	aners			6
Telephone Operators	***		***	2
Open employment				15
Miscellaneous				3
	27 844	N'You	***	1
				100

The following blind persons were engaged in the Home Workers' Scheme and their incomes supplemented by the City Council:—

		300	8
Newsvendor and Hawker			1
Musicians and Music Teac	her		3
Machine Knitter			3
Braille Copyist			1

# Sir Robert Jones Workshops.

Previous reports have dealt at some length with the activities of these workshops, founded in 1902, which provide sheltered employment for about 50 severely handicapped persons in the trades of book binding, printing, boot and shoe repairing and Christmas card renovation.

In 1954 the authorities of the Workshops appealed for financial assistance to the City Council and as it was clear, after the necessary inquiries, that the financial position of the undertaking was precarious, a grant of £1,000 was made, and this has been continued annually since then. As time went on it became apparent that further financial assistance would be necessary if the workshops were to continue in existence, and accordingly additional amounts were paid which provided for a revised salary and wage structure for the employees. At a later stage the Organisation and Methods team of the Town Clerk's department carried out an investigation of the workshop activities, and suggestions were made with the object of bringing about an improvement in the financial position. Corporation departments were also asked, wherever possible, to make use of the services of the workshops. Early in March of 1958 the position was again reviewed and additional payments made by the City Council in respect of increased salaries and wages and the employment of an additional supervisor in the bookbinding department. At the present time the total annual payment by the City Council to the workshops is just over £5,000.

#### Deaf and Dumb Welfare.

The Liverpool Adult Deaf and Dumb Benevolent Society and the Catholic Deaf and Dumb Society of St. Vincent de Paul continued to provide efficient welfare services on behalf of the City Council to about 600 Liverpool residents who were on the register at 31st December, 1958. During the year the grant by the City Council was continued at the rate of £3 10s. 0d. per head per annum, allocated appropriately between the two societies bearing in mind that some individuals are cared for by both bodies. It was decided to increase the per capita grant to £5 for the financial year 1959/60. There are five constituent local authorities in the Merseyside area which contribute to the funds of the two bodies referred to, and in November a meeting was held in Liverpool of the local authority representatives followed by a joint meeting with representatives of the vountary bodies. The meeting was held to receive an aide memoire from the Liverpool Adult Deaf and Dumb Benevolent Society regarding the increased costs of the services for the deaf. The representatives were entertained to a luncheon by the City Council, following which the afternoon session took place when the voluntary bodies and local authority representatives had a talk on the welfare of

the deaf given by the Superintendent of the Liverpool Society. This talk was followed by a discussion on matters of common interest and it was decided that this annual meeting should take place in each of the Merseyside County Boroughs.

### Epileptics.

Adult epileptics needing residential care and attention continue to be Epileptics admitted at the cost of the local authority to colonies established for this purpose, and 25 persons were allocated vacancies during the year.

The Merseyside Epileptics Association, the formation of which was referred to in last year's annual report, has continued to hold meetings at regular intervals. Miss Baines, a member of the Welfare Service staff, was appointed Hon. Secetary of the Association and the Deputy Medical Officer of Health and the Chief Welfare Officer are members of the Executive Committee. A number of organisations interested in this subject, including local authorities, hospital almoners, Ministry of Labour etc. are thus brought together to discuss matters affecting the welfare of these handicapped persons.

The local voluntary organisation concerned with the welfare of spastics secured large premises which were capable of adaptation for residential and recreational purposes, and it is hoped that the building will be ready for occupation during 1959.

At the end of the year there were 117 persons accommodated at the Accommodacost of the City Council in establishments administered by other local capped authorities and voluntary organisations. Details of the various homes Persons) where the handicapped persons are accommodated are contained in Table 38. The City Council is planning to build in due course in the Sefton Park area a hostel designed specially to accommodate a number of handicapped persons.

> Protection of the property of persons admitted to hospital or residential accommodation.

During the year 124 cases were referred to the welfare service section Protection of where it was necessary, due to no other suitable arrangements having Property been made, to take steps to ensure the safety of persons' property. Houses and flats were made secure, inventories taken of the contents, and cash, personal documents, securities, jewellery etc.: retained in safe-keeping

by the local authority until the owner was able eventually to resume custody of his belongings. In 22 cases furniture was removed to store, and in a few instances the Court of Protection was consulted in regard to the disposal of furniture belonging to persons unable to conduct their own affairs.

#### Estates of Deceased Persons.

In 94 instances where the burial or cremation of a deceased person was undertaken by or through the agency of the department some action was taken in regard to the effects, involving contact with the next of kin, legal personal representatives and, where the estates were solvent and there was no will or next of kin, the Duchy of Lancaster. This is a marked increase on the 67 cases involving action of this kind in the previous year.

Over £1,152 in cash was recovered during the year from persons' effects and placed in safe-keeping for the time being with the City. Treasury.

Among the total cases dealt with of all kinds were 49 referred by the police, namely, 31 of persons who had been found dead at home or elsewhere and 18 who had been taken ill either at home or outside and removed to hospital.

### Problem Families.

A number of case conferences were held during the year, at the instigation of various Corporation Departments or voluntary organisations, in regard to difficulties arising in connection with problems families in the City.

From time to time various sections of the Health Department have been represented as well as the following Departments of the Corporation, Town Clerk's, City Treasury, Housing, Education and Children's, together with statutory and voluntary bodies, doctors, Crime Prevention Department (Juvenile Liaison Service) etc. From the information available from many of the interested bodies concerned with a particular family it was possible to obtain a composite picture of the problem and suggest a reasonable solution in each case. Occasionally it was found necessary to hold more than one conference on an individual case.

# HOUSING POINTS SCHEME

During 1958 a total of 5,231 general medical cases, 667 pulmonary Statistics tuberculosis and 45 non-pulmonary tuberculosis cases, applied for assistance in rehousing, there being an increase of 1,028 (24.2 per cent) in the number of general medical cases, a decrease of 195 (21.4 per cent) on the cases of pulmonary tuberculosis and a decrease of 26 (32.9 per cent) on the non-pulmonary tuberculosis case figures for 1957.

1,406 general medical cases were awarded points; 18 of these were Medical recommended to the City Architect and Director of Housing for submission to the Allocation (Special) Sub-Committee.

The tuberculosis cases were awarded up to 5 points each by the chest Tuberculosis physicians. Eight of these were recommended to the City Architect and Director of Housing for submission to the Allocation (Special) Sub-Committee, and 113 were recommended for special priority within the Allocation group as they had sufficient points for them to be already included in this group.

1,348 general medical cases applied for transfer during the year. Of Transfers these, 615 (45.6 per cent.) were recommended to the City Architect and Director of Housing; 43 tuberculosis cases were also recommended for transfers.

A further 471 applications were received in respect of non-medical Overcrowding cases and reports concerning 281 grossly overcrowded families were forwarded to the City Architect and Director of Housing.

The allocation of points is designed to enable the Medical Officer of Method of Health to give assistance in those cases which, for reasons of health, Allocation of should receive some degree of priority in rehousing. There are two forms which this assistance may take:—

(1) Additional points may be awarded and added to the applicant's pasic 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 prings the applicant into the allocation group and he is assured of rehousing. A close liaison exists with the Housing Department, and nany such cases are given priority within the actual allocation group on the recommendation of the Medical Officer of Health).

Allocation (Special) Sub-Committee (2) Cases of special urgency may be brought before the Allocation (Special) Sub-Committee. If approved, they are offered rehousing within approximately one month.

Six Cases

A sample of six cases dealt with in 1958 are as follows:-

- (1) A man, who was suffering from active pulmonary tuberculosis lived and slept in one room with his wife and child. His parents, who lived in the same house, were also suffering from pulmonary tuberculosis. He was recommended for special priority rehousing.
- (2) A woman lived with her husband and twin babies in one room in a small house where there were nine other members of her family living. This woman and three other adults were all suffering from pulmonary tuberculosis. She was recommended for special priority rehousing.
- (3) A man, suffering from paraplegia as a result of an accident at work when he sustained multiple injuries including fractures of his spine and pelvis, was living in one room with his wife and two children. He was severely disabled and was permanently confined to a wheel-chair. As his accommodation was approached by 14 stairs, he was recommended for ground floor level accommodation with downstairs toilet and bathing facilities.
- (4) A woman, suffering from post-poliomyelitis paralysis, was living in one top floor room with her husband and two children. She was very severely incapacitated with very little muscle power in her legs and wore calipers at all times. Even so, she could only walk unaided for very short distances and she had the greatest difficulty in negotiating the stairs to her room, having experienced a number of nasty falls down the stairs. This lady was recommended for a ground level flat.
- (5) A three-year-old girl, suffering from a severe spinal defect, lived with her parents in two rooms situated above a shop. Her condition, which affected both her feet and legs was progressive, and she had to be carried by her parents up and downstairs at all times. This task was becoming increasingly difficult for the parents as the child grew bigger and heavier. The family were recommended for ground level accommodation.

(6) A man, who had had his left leg amputated, was suffering from peripheral vascular disease with severe vascular impairment in his right leg. He lived with his wife and child in one top floor room and he had to go downstairs whenever he wished to use the lavatory and kitchen which were shared with the tenant of the house. Owing to his disabilities, this man could not walk without assistance and to negotiate stairs caused him great distress. He was recommended for a ground level flat.

In all the general cases a medical certificate (form H.1) submitted by their medical practitioners serves as the starting point of the enquiry. Most tuberculosis cases are also initiated by a form H.1, the remainder being first brought up by the tuberculosis visitors. 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.

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. At this stage each case is submitted for assessment to a medical officer. Extra housing points may be awarded as already indicated, while those cases which appear to be sufficiently urgent are visited personally, with a view to submitting them to the Allocation (Special) Sub-Committee or recommending special priority within the allocation group. 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 Residents housing estates outside the City boundary and is on the City housing Boundary register, contact is made with the local authority concerned and a housing report and medical certificates obtained. The case is then assessed in the usual manner.

For housing applicants who already live in Corporation property Transfers 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.

# MEDICAL EXAMINATIONS

Commencing on 3rd March, 1958, the medical examinations of Corporation employees were undertaken by the Health Department. These examinations consist of three classes:—

- 1. For entry in the Corporation service.
- 2. For entry into the Superannuation Scheme.
- 3. By reason of extended medical sickness.

For this purpose a special medical examination suite was prepared on the 4th floor of the Health Department building, Hatton Garden, consisting of two medical examination rooms, interviewing room, waiting room and special testing laboratory. The staff consists of two assistant medical officers, a nurse and the necessary clerical staff who work under the general direction of the senior medical officer. Medical examinations are carried out daily, Mondays to Fridays, and include a chest X-ray of all those examined, which is carried out by the courtesy of the Liverpool Regional Hospital Board at the Mass X-ray Unit, Hood Street, Liverpool, 1.

#### Statistics.

During 1958, 1,766 medical cases were dealt with by this section from all Departments of the Corporation (1,532 medically examined; 153 arranged but later cancelled; and 81 reports obtained from hospitals). 368 were for new appointments, 860 for admittance to the superannuation scheme, and 271 for extended medical reasons. In addition, 33 medical examinations were arranged for Mersey Tunnel workers who have a half-yearly check because of the nature of their work (namely, working in the polluted atmosphere of the Mersey Tunnel). For full details, see Table I.

TABLE I

MEDICAL EXAMINATION OF STAFF AND ENTRANTS
TO THE CORPORATION SERVICE

Department	New appoint- ments	Half- Yearly Check	Extended Sickness	Suitable to Continue	Super- annuation	Total
Mersey Tunnel	2	33	1		0	44
ar a m	51	99	1	1	8 9	44 61
	1			1	5	6
Health	100			11	53	164
Contatuated	10		7.0	11	- 33	104
1 10 1	21		2	9	59	91
C4 T ! 14'	1		2	2	30	33
Baths and Washhouses	1		1	2	27	31
ibraries	47	m la Terita		4	1	52
lity Architect's	2	present l		33	117	152
children's	50			12	3	65
ire Service	7			2	3	9
ity Engineer's	20	The same of	86	42	121	269
01.11	17	_	- 00	2	121	19
ity Analyst's	3	D. T. S.	gabay hadi	-		3
	3			3	12	15
Veights and Measures	2			0	12	2
ducation	2		2	14	51	67
uilding Surveyor's	3		2	14	91	3
7 . 77	5		14	2	39	60
ater Engineer's assenger Transport	9		2	19	308	329
mt Clallana	1		4	2	3	6
1. 45 11	15			3	14	32
ity Police	10			0	14	02
	359	33	108	163	860	1,523
rranged for other authorities	9	-	-		and the said	9
Total	368	33	108	163	860	1,532

 Unfit for work
 ...
 ...
 106

 Unfit for superannuation
 ...
 31

 Unfit for appointment
 ...
 6

 Total unfit
 ...
 143

It was decided, after examination, both by consultation with the candidate or patient's own doctor and/or hospital, that 106 were permanently unfit for work and should be retired, 31 were unfit for entry into the superannuation scheme and 6 candidates were unfit for their new appointments. This totals 143 persons (10.788 per cent of total examined) who were declared unfit during the year. A list of their medical conditions is enumerated in Table II below:—

TABLE II
MEDICAL REASON FOR BEING DECLARED PERMANENTLY UNFIT

JUNGS	Chronic bronchitis an emphysema	d	34	ORGANS	Female— Carcinoma of uterus 1
	Pulmonary tuberculos	sis	4		Carcinoma of breast 1
	Asthma		1		-Innm
	Bronchiectasis		3		Male-
	Carcinoma		4		Testes 1
					Prostate 1
TEART	Coronary thrombosis		6		10 ymmen Ty
	Angina pectoris		6	BRAIN	Cerebral thrombosis 1
	Mitral stenosis		1		Cerebral tumour 1
	Cardiac failure		19		Epilepsy 2
	Hypertension		23		Paranoia 2
	Myocardial degenera-		-		Pseudo hypertrophic
	tion		2		distrophy 1
BONES	Osteo-arthritis		5	HERNIAS	Inguinal 1
ND	Rheumatoid arthritis		4		.00 and
JOINTS	Invertebral disc		2	BLOOD	Varicose veins 1
	Severe injury		1	VESSELS	Off stormer 20
	Tuberculosis		1		and in the second state of the second
	Gout		1	SKIN	Varicose eczema 1
EYES	Glaucoma		1	OTHERS	Diabetes 1
1-50-1	Blindness		2		Nephritis 1
					Chronic malingering 1
EARS	Chronic otorrhoea		1		Retroperitoneal
	Chronic otitis media		2		sarcoma 1
	Menieres syndrome		1		The street was the said

It will be seen that chronic bronchitis and emphysema (34 cases) was the main reason for the declaration that a patient was unfit, hypertension (23 cases) and cardiac failure (19 cases) being second and third respectively. It is of interest to note that there were 4 cases of carcinoma of the lung and 4 cases of pulmonary tuberculosis; 1 case of carcinoma of the lung and 2 cases of pulmonary tuberculosis being discovered solely by the chest X-ray which is a compulsory feature of these medical examinations.

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 change to the designation of Public Health Inspector is now proving its worth, for in addition to the improvement in the recruitment of trainees the irritating difficulties formerly associated with the old term of Sanitary Inspector are fast disappearing.

This was particularly noticeable during the smallpox incident when full co-operation was given by contacts to inspectors carrying out the daily routine examinations which were necessary, and also during the course of their other enquiries. During previous incidents the public have failed to associate the designation 'sanitary inspector' with the duties necessitated by an outbreak of infectious disease.

A heavy demand was placed upon the inspectorial staff, following the discovery of a case of smallpox in a neighbouring authority. A considerable amount of the investigation had to be done outside normal working hours as many of the contacts of the patient were employed in a factory in Cheshire and, therefore, these persons were not available for interview during the daytime. The investigation continued over two weeks including the Whitsuntide holidays.

The investigation occurred at a time when public health inspectors were also committed to extensive duties in connection with the administration of the Rent Act, 1957.

During the year eleven assistant inspectors completed their training Recruitment and obtained the certificate of the Public Health Inspectors Education and Training Board qualifying for appointment as public health inspectors. Fifteen qualified inspectors obtained the Meat and Other Foods Certificate of the Royal Society of Health and are now carrying out food inspection duties at the Abattoir and markets.

The inspectorate now comprises 114 qualified inspectors, assistants and trainees.

The increase in the number of qualified inspectors has made it possible to extend the arrangements whereby district inspectors undertake all duties including food inspection, smoke abatement, market supervision in respect of food hygiene and slum clearance.

General Health Education Increased interest on the part of certain sections of the public in the activities of the department concerning health matters are reflected in the number of requests for speakers to attend various types of organisations.

Facilities were provided for the training of inspectors and health visitors and lectures to catering staffs, trade associations and other organisations were given on the various aspects of the work, including food hygiene, slum clearance and smoke abatement.

Liverpool Show The Liverpool Show provides a unique opportunity for focusing the attention of the public on important matters affecting the health and comfort of the community. Smoke abatement was highlighted at this year's exhibition. The causes of atmospheric pollution and its effect on persons and property were vividly illustrated by the use of photographs and working models. A number of the models were made by members of the staff, whilst other material was loaned by various firms and their assistance was appreciated.

Summary of Inspection It was necessary to arrange for 110,170 visits to be made to dwelling-houses in connection with 30,122 complaints received from occupiers. Priority attention is given to this type of complaint, and as far as a possible a visit is made within 24 hours of the complaint being received.

1,744 complaints in respect of shops, cafes, public houses and other premises were also investigated. In all, 290,597 visits and inspections were carried out and 29,368 notices were issued under the various acts and byelaws.

Legal Proceedings Where owners fail to comply with notices, the local authority are empowered to take legal action. During the year 268 prosecutions were taken under the Public Health Act, Shops Act, Food and Drugs Act and local Acts, and penalties amounted to £606. This is a considerable increase in the number of prosecutions taken during previous years.

Work in Default In certain instances, where repairs to dwellinghouses have been requested, the work may be carried out forthwith, and the costs incurred are recoverable from the owner. Where notices are ignored, where property has been abandoned, or where an owner is unable to pay for the cost of repairs, arrangements are made for the work to be carried out in default. This procedure materially assists occupiers who may otherwise suffer discomfort. In this way repairs have been carried out

to 260 dwellinghouses involving the expenditure of approximately £2,000, all of which will be subsequently recovered.

The cost is recovered through the procedure incorporated in the Recovery of Public Health Act, 1936. The amount concerned is also registered Cost against the property in the Local Land Charges Register in accordance with the Land Charges Act, 1925. This provides for ultimate recovery and therefore there can be no loss to the local authority.

The provisions of Section 19 of the Liverpool Corporation Act, 1955, Choked authorises the Corporation to clear drains after giving 48 hours' notice Drains of their intention. This procedure ensures the clearing of drains in a relatively short period, either by the owner or the Corporation. Notices were issued and 1,665 choked drains were cleared during the year. 163 drains were cleared by the local authority in default of the owners and the costs will be recovered in accordance with the provisions of the Act.

Rodent infestation is often due to rats gaining access to buildings Drain through defective drains. In connection with rodent infestation, perco-Testing lations of water, and subsidences, etc., 1,279 drainage systems were tested. Notices were issued in respect of 733 drainage systems which were found to be defective. The assistance of the City Engineer and Surveyor's Department has been utilised whenever flushing has been required. 36 defective public sewers requiring urgent attention and 19 other defective public sewers were referred to the City Engineer and Surveyor's Department under the provisions of Section 24 of the Public Health Act, 1936.

The value of the weekly meeting of the Special Sub-Committee cannot Meeting of be over emphasised. This Committee authorises immediate action to Sub-Committee clear choked drains and to remedy other urgent defects. The Committee also authorises the spending of sums of money to alleviate distress when owners default or houses are abandoned. All urgent matters under the various enactments requiring the service of notices are dealt with by his Committee. The Committee have also dealt with all applications or the various certificates under the Rent Act, 1957.

It is pleasing to record the assistance given by other departments Departmental vho co-operated by forwarding 14,627 references in respect of various References natters requiring the attention of the inspectors, and 7,404 references vere sent by the Health Department to other departments.

Infectious Disease Enquiries The following table indicates visits made by inspectors to houses where infectious disease has occurred and the number of enquiries made regarding contacts of infectious disease.

No. of investigations relating to cases of infectious disease 3,217 No. of enquiries regarding contacts of infectious disease... 10,244

These figures are a substantial increase on 1957 results when the visits were 2,129 and enquiries 5,354.

Food Poisoning Extensive work in connection with investigations of outbreaks of ingestion disease enquiries has taken up much time of the inspectorate. The work necessitates specialised knowledge and more men have become proficient in this type of work due to the operation of the training scheme. 12,082 specimens from 5,917 persons were submitted for bacteriological examination; 2,492 specimens from 1,406 persons proved positive. Detailed enquiries were made into all confirmed cases of Salmonella infections. Again this is a considerable increase on the 1957 figures when 6,422 specimens were collected from 4,777 persons.

Record maps have been used throughout the year to indicate the location and extent of infections and have proved to be most valuable in linking infections.

Moveable Dwellings There are no licensed camping sites within the City but itinerant traders occasionally park caravans on unfenced land on the outskirts of the City. 47 visits were made to such sites and all the caravans were removed by appropriate statutory procedure.

Common Lodginghouses There are 13 registered common lodging-houses in the City, 12 providing accommodation for 934 males and 1 providing accommodation for 94 females. Applications for renewal of registrations were received in respect of these 13 registered common lodging-houses in the City. Applications were also received from the 13 keepers of such lodging houses for renewal of registration as keepers and were granted for a further period of twelve months. The public health inspectors made 240 visits both by day and by night, resulting in 61 notices being served in respect of bye-law infringements. A total of 13,103 beds were examined 56 were found verminous and these were cleansed by the local authority and 56 lodgers found to be verminous were also cleansed by the local authority.

There are 16 seamen's lodging-houses on the register, seven of which are Seamen's not licensed under the byelaws as seamen's lodging-houses. Accommoda-houses tion is provided for British, Chinese, Arab, Somali and Indian seamen. The total accommodation available is 950. Public health inspectors made 143 day and night inspections. Bye-law infringements were dealt with either verbally or by the service of notice. The inspectors examined 3,593 beds and appropriate action was taken where necessary.

Official notice was received in respect of three fumigations under the Cyanide regulations and inspectors attended the fumigation of the premises in (Fumigation each case.

of Buildings) Regulations, 1951

Under the terms of licences issued from the Home Office, inspectors Removal of supervised the exhumation of six bodies during the year. The remains of three persons were shipped abroad, one to Jamaica, one to Antwerp and one to Israel.

The Docks and Inland Waterways Executive, North Western Division, Canal Boats 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 this authority are indicated in Tables I and II.

TABLE I				310	Number of
Boats on register, 1st January, 1958	 		415		Boats
New boats registered Boats removed from register	 211	***	Nil		
Boats on register 31st December, 1958	 		20 395		

Twenty boats ceased to be used as dwellings during the year and were removed from the register at owners' request.

that was sourced out [ 3)	TABI	E II				Torre of David
Number and type of boats	regist	ered:				Type of Boat
Motor-propelled boats			***	 	100	
Steam-propelled boats				 	62	
Motor-towed boats	11000			 1.01	46	Infections
Steam-towed boats				 	123	
Horse-drawn boats		***		 7.074	64	
				_		
		To	otal	 	395	

Number of Boats Inspected 321 inspections of canal boats were made during the year and the places of registration of boats visited were as follows:—

#### TABLE III

Number of boats visited				 	159
Registered at Liverpool				 	130
Registered at Runcorn				 	9
Registered at Manchester				 	5
Registered at Leeds				 	1
Boats not registered and n	ot used	d as d	wellings	 	14

All boats were "wide" boats, 53 being motor propelled, 8 steam propelled, 59 motor towed, 39 steam towed.

Contraventions

Contraventions of the Act and Regulations were found on 32 boats of which number two were registered by other authorities, the contraventions being shown in the following Table:—

TABLE IV

Nature	of (	Contravent	ion			nin	Reported	Remedied
No certificate of registration	n on	board				ò	21	16
Registration lettering and n	um	bering not	legi	ble or in	correct		7	5
Leaking decks							2	2
Defective stove or stove pip	oes						7	7
Cabins requiring repainting						***	7	5
Defective water tanks							1	1
Miscellaneous							4	2
				Totals			49	38

32 written notices with respect to the contraventions were sent to the owners concerned and 24 notices have been complied with.

No information was laid during the year against either owners or masters for infringements of the Act or Regulations.

Inspections by Port Health Authority The inspectors of the Port Health Authority made 321 inspections of canal boats in the docks during the year, 37 contraventions were found 26 of which were subsequently dealt with. The figures are included in Table IV.

Infectious Disease No case of infectious sickness was reported as having occurred during the year on any canal boat visiting the district.

Population of Canal Boats The number and sex of the persons found in occupation of the 159 canal boats used as dwellings are included in the following Table:-

#### TABLE V

Population of Canal Boats:	Men Women Children	***	 	318 Nil Nil
	Total	ı	 	318
Distributed as under :			d) li	in abi
Males over 14 years of age			 	318
Males over 5 years of age a	and under 14	years	 	Nil
Males under 5 years of age			 ***	Nil
Females over 12 years of a	ge		 	Nil
Females over 5 years and	under 12 year	rs	 	Nil
Females under 5 years			 ***	Nil

NOTE: Males attaining the age of 14 years and females on attaining the age of 12 years, living on a canal boat are regarded as adults and recorded as such in the foregoing Table. No children of school age were found on canal boats during the year.

There are 55 licensed piggeries in the city with accommodation for 3,372 pigs. The majority of the piggeries have been in existence for Licensed many years and originally were sited on farms and smallholdings away Piggeries from residential areas, but due to the development of the city, 49 of the piggeries are now surrounded by dwellinghouses.

A special survey carried out at the beginning of the year revealed that many sites required reconstructing and notices were served upon the owners of the premises concerned intimating that the necessary works must be completed to comply with the terms of the licence issued by the local authority.

It was necessary to withhold the licence in respect of one piggery which is sited on land owned by the Corporation. The farm buildings which had been converted into styes were aged and worn out and it was estimated that the necessary repairs would cost approximately £4,000.

Arrangements were made for the defective buildings to be demolished and therefore it has been necessary to modify the licence to reduce the number of pigs permitted to be kept from 230 to 100.

# Public Health Act, 1936, Section 54.

Inspections of trial holes were made on 38 filled-up sites to ascertain Filled-up whether the ground was free from faecal or offensive animal or Ground regetable matter, and that the sites were suitable for building purposes.

#### Miscellaneous

The number of occupied stables has been reduced to 66 and the frequent stables emoval of manure from these premises ensures that they can no longer outding. e considered a source of fly infestation.

Marine Stores Poultry Stores Routine visits were made to 28 marine stores and three poultry stores.

Schools

Schools were visited for observing the general sanitation of the premises, also for the inspection of canteens and kitchens under the provisions of the Food Hygiene Regulations, 1955. Regular inspections were made and the standard of cleanliness was found to be satisfactory.

### Housing

Since the end of the second world war activity in slum clearance has increased progressively. The need for this action is now generally accepted.

Though tremendous strides have been made to wipe away the smear of slums from the landscapes of our great cities, much work remains to be done before the aim of every person concerned with housing is achieved.

Difficulties of Slum Clearance Over many years of experience the legal and technical difficulties of a slum clearance have been surmounted, but another and more difficult to obstacle has developed in recent years, that of shortage of land for a housing development. Many methods are being tried to overcome this serious problem, such as the construction of multi-storey blocks and the erection of new towns.

This problem of building land shortage must lead to a reduction in the number of houses which can be cleared away in any one year and this in its turn must affect the number of houses represented to the local authority as unfit.

Houses Surveyed and Represented

The survey of dwellinghouses to discover their suitability for representation in clearance areas continued during 1958 and 1,398 such dwellings were examined for this purpose. During the year 554 houses were included in 24 clearance areas represented to the Council.

Orders Made

The year has seen 623 houses which were included in 18 clearance areas, made the subject of orders and a further 2,749 houses which are included in 60 represented areas held pending further action.

Compulsory Purchase Orders Ten compulsory purchase orders comprising 18 clearance areas were submitted for confirmation to the Minister of Housing and Local Government.

Four public inquiries and two hearings in respect of six compulsory Public purchase orders were held during the year.

Hearings

Confirmations of six compulsory purchase orders containing 517 houses Orders were received from the Minister during the year.

These figures of houses represented and the number of orders made and submitted for confirmation, indicate the marked reduction caused by the limited quantity of land available for housing development, both within the city boundaries and beyond its boundaries in overspill areas.

The shortage of land demands that the closest liaison between the various technical officers of the departments concerned must continue to ensure the limited land available for development is used in the most advantageous way.

Where houses contravene the standard of fitness but are not on land Individual zoned for housing the individual unfit provisions of the Housing Act are cedure utilised. Ninety-nine houses sited on land zoned for other purposes than Unfit Houses housing were represented to the Demolition and Closing Orders Represented (Special) Sub-Committee as unfit for human habitation.

The condition of properties represented during 1958 and in the Demolition previous year were considered by the Committee. As a result, eight orders made properties were made the subject of demolition orders and a further 97 during the were made the subject of closing orders.

An undertaking can, however, be given by an owner of a property Undertakings which has been represented in accordance with this procedure. Two such given not to undertakings not to relet the premises for human habitation were given to the local authority in 1958.

Of the houses which were made the subject of orders 59 were demol- Houses ished and 132 were closed. The Committee had the condition of 14 Subject to Orders houses still to consider at the close of the year.

Demolished or Closed

Basements or parts of premises which are used as living accommoda- Closing tion can be closed in accordance with the procedure laid down in Section 18 of the Housing Act, 1957, and closing orders were made in Parts of respect of parts of 48 such dwellings.

Premises

The condition of 51 of these lettings represented in the current or previous year were considered by the Demolition and Closing Orders (Special) Sub-Committee who determined to make closing orders in

each case. The condition of nine properties remained to be considered by the Committee at the close of the year.

Families Re-housed as a result of such Orders Unfit Houses Restored During the year the occupants of 48 of these tenancies were rehoused and the rooms in which they had been living closed.

In four instances where closing orders had been made in respect of three houses and of part of one other house, the owners carried out works which rendered the premises fit for human habitation and accordingly upon the owners' application the orders were raised.

Sub-standard Property— Protection of Purchasers Slow progress in slum clearance continues. Many thousands of unfit houses remain to be dealt with in the future. In the meantime, however, to protect the interests of persons proposing to purchase such premises, the Council have publicised the consequences of such purchases and have offered their assistance and guidance to any potential purchaser of such property. Many thousands of enquiries were made during the year by people intending to buy property, which has been found, upon investigation, to be sub-standard, and the register compiled from the Housing Survey of 1954 has assisted in answering these enquiries.

The Rent Act, 1957 The Rent Act, which came into operation on the 6th July, 1957, continued to be a predominant feature of the department's work. As each phase of the procedure came to an end more and more tenants called upon the local authority for assistance and advice.

The complexities of this piece of legislation have entailed the retention of inspectorial staff in the office to deal with the many difficult technical queries which were and still are arising.

Total Number of Visits made to Properties under the Rent Act Procedure

Due to the tremendous surge of applications for certificates of disrepair and for certificates as to the remedying of defects enumerated a upon undertakings given by landlords, a large number of inspectors a have been engaged full-time on the requisite inspections and visits to properties concerning these matters.

A total of 17,391 visits were made to properties in 1958 concerning the Rent Act procedure which has resulted in a vast number of properties being restored to a reasonable standard of repair, thus reducing the possibility of their progressive dilapidation and so preventing their becoming so far unfit as to be incapable of repair at reasonable expense.

The tenant of a controlled tenancy can serve upon his landlord a Rent Act list of repairs, which he considers reasonable. If such a notice is Procedure received the landlord must, within six weeks, either carry out the repairs or agree with the tenant regarding the items he is to repair and give an undertaking upon the prescribed form 'H' to do the repairs within a period of six months from the service of this undertaking.

If the works are not executed, or an undertaking is not given within Applications this period, the tenant may apply to the local authority for a of Disrepair certificate of disrepair and 3,803 such applications were made to the local authority during 1958. As a result of these applications a public health inspector visits each property and examines its condition in relation to the defects specified in the tenant's 'G' form.

After inspection the matter is reported to Committee who determine "J" Notices to issue a notice of their intention to issue a certificate of disrepair and this has entailed the service of 3,435 'J' notices upon landlords.

An undertaking may be given, however, by the owner to the tenant "K" undertakings and the local authority and provided it is issued within the 21-day period laid down, and covers all the items in the local authority's 'J' form, it must be accepted. This has entailed the scrutiny of many thousands of documents of which 2,647 'K' undertakings were accepted.

At the end of the six-month period if the landlord has failed to repair Failure to all the defects which he has promised to remedy in his undertaking, the Comply with undertaking tenant is, in accordance with the Act, entitled to reduce his rent. Provision is, however, made for the local authority to issue a certificate confirming that on a particular date either all or some of the defects specified in the undertaking are still outstanding.

Although this certificate is not specifically required in the procedure, Value of a it is, of course, in the interests of the tenant to be in possession of such Certificate a document. To obtain one of these certificates the tenant has to apply to the local authority upon the prescribed form 'O' together with a copy of the undertaking and the required fee of 2/6d,

Procedure on "0" Application

On receiving the application a public health inspector visits the Receipt of an premises and examines the property in relation to the items specified on the undertaking. If any of the defects are outstanding the matter is reported to the Committee and a certificate issued by the local authority to that effect.

The Effect of a " P " Certificate

In any future Court proceedings the evidence contained in the certificate must be accepted by the Court until the contrary is proved. During the year 1,933 'P' forms certifying that items are still outstanding were issued to tenants. The landlord is also entitled to apply for a 'P' certificate where he is of the opinion that all the works specified in the undertaking have been remedied and a further 548 'P' forms were issued by the local authority in respect of such applications.

Certificates of Disrepair Issued

Where the works are not completed within the 21-day period, or an undertaking is not given during this time, a certificate of disrepair is issued. In 1958, 1,104 certificates of disrepair were issued. Where a certificate is issued the rent must be reduced in accordance with the requirements of the Rent Act and cannot be increased again until such time as all the defects specified in the certificate have been repaired. This entails an application being made by the landlord to the local authority upon the prescribed form 'M' for the cancellation of the certificate.

Applications for Cancellation of Certificates of Disrepair

During 1958, 395 applications were received from landlords for the cancellation of certificates of disrepair. This requires the service upon the tenant of a notice of the local authority's intention to cancel the certificate, in which the tenant is informed that should he desire to object to the cancellation of the certificate, he must inform the local authority of his objection within a period of 21 days of the service upon him of this document. If an objection is not received within this period the local authority is required by the provisions of the Act to cancel the certificate, but if an objection is received, the public health inspector visits the premises and ascertains if all the defects have been satisfactorily remedied. If any of the defects have not been repaired, or have not been properly remedied, the tenant's objection is sustained by the local authority and the certificate continues in force until the works have been completed to the satisfaction of the local authority.

During the year 303 certificates of disrepair issued under the present Certificates of Act and the Housing Repairs and Rents Act, 1954, were cancelled in Cancelled accordance with this precedure.

Provision is made for both landlord and tenant to appeal to the Appeals to County Court against a decision of the local authority, either as to procedure or proper inclusion of a particular item in any of their certificates.

Though some appeals have been heard the Courts have not, so far, been called upon to decide as to any points of procedure which concern the local authority, nor have the Courts had to determine an appeal on the grounds of the proper inclusion or exclusion of items set out in a certificate issued by the local authority.

All the appeals so far have been concerned with the proper service and other technicalities of the Act required to be fulfilled by the landlord or tenant before the local authority became involved in the procedure.

Many of the older houses in this city are suitable for conversion into Improvement smaller self-contained dwellings, and a number of smaller houses are likewise capable of being brought up to modern standards by the provision of a bathroom, internal water-closet accommodation and hot water supply. On the 23rd October, 1958, the Housing (Financial Provisions) Act, 1958, became operative and superseded the relevant sections of the Housing Act, 1949, which dealt with financial aspects of housing generally. The majority of the applications for improvement grants were made by owner/occupiers. During the year 309 inspections were made following applications received, and grants were approved in respect of 136 dwellings.

Under the provisions of the Housing (Financial Provisions) Act, Loans on 1958, local authorities are enabled to make a loan on mortgage to a Mortgage purchaser of a dwellinghouse.

The local authority must be satisfied that the property is in all respects fit for human habitation and is also a reasonable financial proposition,

All premises are inspected for which an application is received and a schedule of defects submitted to the prospective purchaser of the property. The defects specified must be remedied before the loan on mortgage is allowed, thus ensuring the dwellinghouse is fit, in all respects, for human habitation. During the year 694 houses were inspected for this purpose and 136 applications for such loans were approved.

Overcrowding

The shortage of housing accommodation which exists in this city must occasion overcrowding and it is, therefore, necessary for such premises to be visited as frequently as possible and action taken to alleviate the conditions where a case of gross overcrowding is discovered.

During the year 484 visits were made for this purpose and after investigation 281 cases of gross overcrowding were made the subject of urgent requests to the City Architect and Director of Housing to consider the rehousing of the families concerned, in accordance with the provisions of Section 85 of the Housing Act, 1957.

Cellar Dwellings Section 469 Liverpool Corporation Act, 1921

The number of cellar dwellings in this city has been reduced to a comparatively small figure. The remaining families living in such dwellings are steadily being decreased by the service of notices upon the owners and occupiers of such lettings under Section 469 of the Liverpool Corporation Act, 1921.

Housing Act, 8 and 81

During the course of visits to dwellinghouses inspectors examine the 1957, Sections rent books and ensure that the requirements of Sections 8 and 81 of the Housing Act, 1957 are fulfilled. These sections require that the name and address of the Medical Officer of Health be inscribed in the rent book and that the summary of the legislation concerning overcrowding is also set out, together with the number of persons permitted to occupy the premises. Where any contravention is found, formal action is taken to have the matter rectified.

Houses owned by the Local Authority

The total number of houses and flats owned by the local authority at 31st December, 1958, excluding 3,500 temporary bungalows is 67,100.

The number of houses built in the last three years under the Housing Act, 1957, Part V, is 2,408 and the number of houses built under the provisions of the Housing Subsidies Act, 1956 is 2,184.

During the year 24 Clearance Areas were represented under Section 42 of the Housing Act, 1957, which included 554 houses containing 2,419 persons. Orders in respect of 623 houses containing 2,819 persons were made and six Confirmation Orders in respect of six Compulsory Purchase Orders comprising 517 dwellings and 2,004 persons were received from the Minister.

## COMPULSORY PURCHASE ORDERS CONFIRMED DURING 1958

Date Con- firmed	Order	Cleaman see Area seed Am	Houses	Popu- lation
23.3.58	Anglezark Street Compulsory Purchase Order .	. o / 100	103	350
14.3.58	Carnarvon Street Compulsory Purchase Order .		00	274
19.6.58	Darnley Street No. 1 Compulsory Purchase Order .		6	23
28.6.58	Braemar Street Compulsory Purchase Order		226	907
28.6.58	Windsor Street No. 5 Compulsory Purchase Order.		4	34
30.9.58	Pose Vale No 2 Compulsomy Dunchese Onder		95	416
	Totals		517	2,004

#### CLEARANCE AREAS IN ABEYANCE

Area			SING OF	Houses	Population
Amity Street No. 1 Clearance Area 1958	Barra A			45	176
Amity Street No. 2 Clearance Area 1958				14	43
Anderson Street Clearance Area 1957				53	194
Barlow Street No. 1 Clearance Area 1957				99	361
Barlow Street No. 2 Clearance Area				11	28
Barmouth Street Clearance Area 1957				71	377
Birch Street No. 1 Clearance Area 1958				18	63
	Carried forward			311	1,242

Area				Houses	Populatio
Br	ought	forward		311	1,242
Sirch Street No. 2 Clearance Area 1958				8	42
Boundary Street East Clearance Area 1958				21	77
Soundary Street No. 5 Clearance Area 1957				2	10
Soundary Street No. 6 Clearance Area 1957				3	15
emeas Street Clearance Area		***		43	183
china Street No. 1 Clearance Area 1956				184	803
hina Street No. 2 Clearance Area 1956				9	83
hina Street No. 3 Clearance Area 1956				3	11
hina Street No. 4 Clearance Area 1956		***		3	12
Darnley Street No. 2 Clearance Area 1956				51	208
Darwen Street Clearance Area 1957				33	144
Devonport Street Clearance Area 1958	***	***		30	115
Deysbrook Lane No. 1 Clearance Area 1957				19	45
Deysbrook Lane No. 2 Clearance Area 1957		***		11	34
Deysbrook Lane No. 3 Clearance Area 1957		***		11	19
Deysbrook Lane No. 4 Clearance Area 1957				8	26
den Street Clearance Area 1957				80	293
den Street No. 2 Clearance Area 1957				51	228
Eden Street No. 3 Clearance Area 1957				59	259
'oley Street No. 2 Clearance Area 1958				25	110
dris Street Clearance Area 1957				7	34
ordan Place Clearance Area 1958				68	285
Ling Street (Garston) No. 1 Clearance Area	1957			71	328
King Street (Garston) No. 2 Clearance Area				7	28
Kinglake Street Clearance Area 1956		***		67	291
eighton Terrace Clearance Area 1958				61	287
incoln Street Clearance Area 1958				26	138
Ialta Street No. 1 Clearance Area 1958		***		35	162
Ialta Street No. 2 Clearance Area 1958				12	65
Malta Street No. 3 Clearance Area 1958				7	27
New Henderson Street No. 1 Clearance Area				6	36
New Henderson Street No. 2 Clearance Area				30	131
New Henderson Street No. 3 Clearance Area				14	73
Paget Street Clearance Area 1957				5	22
Potter Street Clearance Area 1957				82	475
Rhyl Street No. 1 Clearance Area 1958				25	116
Rhyl Street No. 2 Clearance Area 1958				15	51
Rhyl Street No. 3 Clearance Area 1958				2	8
Robertson Street Clearance Area 1958				44	192
Rose Vale No. 2 Clearance Area 1955				243	1,042
St. Georges Hill Clearance Area 1956				140	774
Sellar Street Clearance Area 1958				13	59
Smith Street No. 2 Clearance Area 1958				4	15
Snowdon Street Clearance Area 1957				2	6
Jpper Beau Street No. 1 Clearance Area 195				72	373
Upper Beau Street No. 2 Clearance Area 195	56			40	196
Upper Beau Street No. 3 Clearance Area 195	56			273	1,097
Upper Stanhope Street Clearance Area 1957				45	339
Wellington Grove Clearance Area 1956			0.00	52	201
Whittle Street No. 2 Clearance Area 1958				18	61
Windsor View Clearance Area 1957				3	11
Windsor Street No. 6 Clearance Area 1958				13	87
Zante Street Clearance Area 1956				282	1,341
					-,,
				2,749	12,330

### Factory Inspection

The work of the public health inspector in factories has increased considerably during the last few years.

Although the Factories Act, 1937, formerly limited the work of the inspectorate in mechanical factories, the introduction of the Food Hygiene Regulations, 1955, has given the inspector a keener interest in this class of establishment. Today he has become a familiar figure in both non-mechanical and mechanical factories, as a consultant on all matters affecting health and, in the majority of cases, secures his requirements by informal action.

The co-operation between H.M. Inspector of Factories and the public health inspector has increased during recent years and, where special problems have arisen, joint visits have been made with beneficial results.

The duties of the public health inspector in respect of food factories, Food broadly speaking, are two-fold. In the first instance he is concerned with Factories the provisions of the Factories Act, 1937, for those purposes which affect the welfare of the staff, and the Public Health Act, 1936. In addition he is responsible for such Food Hygiene Regulations as may be applicable to the various food processes in the factory.

Both these duties are important and every endeavour is made to give prior attention to these establishments. Therefore, during the year, regular visits were made to food factories in addition to bakehouses and prserved meat premises, which are referred to separately in this report, and 124 infringements were dealt with by either informal action or by warning letter.

### Industrial Nuisances

Complaints of noise emanating from industrial premises are in-Noise creasing. The types of noise vary from the monotonous low humming tone of machinery to the rhythmic beating caused by the use of heavy equipment. Experience has proved that investigating this type of complaint may require prolonged observation as the time factor is important in determining whether the noise is excessive and constitutes a nuisance.

Vapours and Gases The ejecting of steam or waste gases from boilers or condensers, associated with any trade or business, which is likely to be prejudicial to health or a nuisance, is an offence under the Liverpool Corporation Act, 1955.

The management and technicians of a large firm were interviewed concerning the emission of spent steam into the atmosphere from their premises. As a result of this action, the general manager has indicated it is the intention of the firm to carry out extensive structural alterations so as to abate the nuisance.

Fumes

With the exception of the discharge from certain works specified under the Alkali &c. Works Regulations Act, 1906, complaints concerning the discharge of noxious or offensive gases so as to cause a nuisance is the responsibility of the public health inspector.

Recently a complaint was received that fumes emanating from a galvanising factory were causing a nuisance. As the result of observations and with the co-operation of the management, a slight alteration in their processing method resulted in the abatement of the nuisance.

Complaints continue to be received, especially during the summer months, of smells from certain premises where offensive trades are carried on. There has been a considerable improvement in dealing with these complaints due to the installation of fume washing plants and a better understanding by the operators of the machinery in use. The processing of condemned meat on the day it is received and the early disposal of all putrescible products helps to reduce complaints.

Offensive Trades There were no new applications received during the year for consent to establish offensive trades. 869 visits were made to 67 trades in operation and appropriate action was taken in respect of 126 defects found.

Annual Report to Ministry of Labour and National Service Under Section 128 (3) of the Factories Act, 1937, the Medical Officer of Health is required to furnish to the Ministry of Labour and National Service each year information relating to the administration of the Act by the Local Authority.

The prescribed particulars are given in the Tables on Form 572 issued by the Ministry and a copy of this is included in the statistical appendix. (Table 41.)

## Rag Flock and Other Filling Materials Act, 1951.

At the end of the year the number of premises licensed and registered was:—

Number licensed to manufacture Rag Flock			1
Number licensed to sell. Rag Flock			8
Number registered in which filling materials	are us	ed	82

33 samples of filling materials were taken during the year as follows:—

Rag Flock (loose)	 	 	 15
Layered Rag Flock	 	 	 3
Layered Cotton Felt	 	 	 3
Coir Fibre	 	 	 7
Algerian Fibre	 	 	 2
Coloured Mill Puffs	 	 	 1
Woollen Flock	 	 	 1
Feathers	 	 	 1

The results of the analytical tests showed that four samples of rag flock did not conform to the prescribed standard of cleanliness.

One sample taken in the premises of a licensed dealer contained 37 parts per 100,000 of Chlorine in the form of soluble chlorides, in excess of the maximum of 30 parts per 100,000 permitted under the Act. The other three samples were taken from consignments of rag flock being used in the manufacture of upholstery and bedding. One sample contained 41 parts per 100,000 of Chlorine in the form of soluble chlorides, the second sample contained 4.8 per cent. of soluble impurities and the third sample contained 3.2 per cent. of soluble impurities and 47 parts per 100,000 of Chlorine in the form of soluble chlorides. The maximum impurities allowed is 1.8 per cent. Appropriate action was taken in respect of these samples.

Several samples were taken in registered premises being flock produced by the only licensed manufacturer in the City. It is noteworthy that all such samples complied with the regulations with readings as low as 1, 4, 6 and 9 parts of chlorine per 100,000 parts of flock, as compared with 30 parts allowed as a maximum figure under the Act.

#### Employment Agencies

These premises are controlled by bye-laws made under the Liverpool Corporation Act, 1927, and visits were made to ensure that the requirements of the bye-laws are being complied with. Six new applications were received and one registration withdrawn leaving a total of 36 employment agencies on the register at the end of the year.

#### Outworkers

In accordance with Sections 110 and 111 of the Factories Act, 1937, returns are received twice yearly by the local authority from employers engaging this class of labour. All outworkers are visited and their premises inspected to ensure that they comply with the requirements of the Public Health Act, 1936. Details of the returns received are as follows:—

Number of outworkers returns referred to Medical (	Officer of	Health	of	
districts outside City				94
Number of outworkers received from other authorities				3
Number of outworkers returns received	***			413

#### Offices

Complaints and problems continue to be received affecting the welfare and comfort of clerical workers which cannot at the present time be dealt with effectively owing to the absence of legal minimum standards. A Parliamentary Bill dealing with statutory minimum standards of conditions of employment for those who work in offices is at present engaging the attention of the House of Commons. Systematic routine inspections have, however, continued despite the limited powers available.

While factory managers accept normal routine inspections of their premises as part of the modern trend of industry, office managers tend to remain aloof and at times resent the visit of a public health inspector which they appear to regard as an incursion into their privacy. It is sadifficult to convince the office manager who occupies a private office, which is commodious and hygienic, that due to overcrowding, insufficient lighting, or ventilation, some members of the staff are working in substandard conditions.

# Lighting

On account of the height of ceilings and dark and dismal paint work some large offices give the impression of being insufficiently lighted. Closer examination, however, often reveals that the desired concentration of light exists in the working areas, where needed, due to electrical light points being properly sited.

As the result of an inspector using a light meter to determine the lighting in the kitchen of a canteen attached to a large office, he was invited by the office manager to use the meter in the office itself, and although he informed the manager that as yet no legislation exists to control the lighting in offices, he complied with the request, which resulted in showing that the light at desk level in several locations was unsatisfactory. When these conditions were reported by the manager to his principals remedial measures were carried out immediately.

Ventilation is the subject of considerable controversy among the Ventilation personnel employed in offices, particularly those situated in the older buildings and where it is dependent on the opening of windows and chimney flues. The disagreement cannot be divided equally between the sexes, but rather to the siting of the desks in the office in relation to the window openings and flues, or the actual duties being carried out. The person who is forced to remain continually in the same position will very soon complain of a draught, whereas if the same desk is used by a person who has occasion to move about the office it is readily accepted without complaint. Employees however working near to a source of heating often complain of insufficient ventilation.

Suitable and efficient ventilation is important for without proper ventilation the risk of infection is increased. The employer who finds his staff to be lethargic and lacking in concentration in the late afternoon might easily find the solution in a better system of ventilation in the office.

The Factories Act, 1937, defines a temperature of 60° F. after the first Heating hour as being reasonable in a workroom in which a substantial proportion of the work is carried out while sitting and does not involve serious physical effort. The Office Regulations Bill however recommends a temperature of 65° F. and this should be considered optimal for offices.

While complaints regarding insufficient heating in offices are frequent, a complaint of excessive heating is rarely received. Routine inspections have confirmed that a reasonable temperature in many old offices cannot be achieved without difficulty due to the existing overloading of the electrical supply to the building. It is not unusual in these circumstances to see various appliances being used to augment the inadequate facilities provided.

Cleanliness

It is noted that cleanliness in offices is improving generally. In certain offices, however, where a large amount of documentary filing takes place and where storage facilities are limited to the rooms in use, the standard of cleanliness is not satisfactory. The upheaval experienced in re-siting shelves and papers must deter the occupier from carrying out a regular spring cleaning programme.

The cleanliness of passages and staircases used in common leaves much room for improvement and it is hoped that new legislation will assist the inspector by including a cleanliness section similar to that contained in the Factories Act, 1937.

## Workplaces

Office and sanitary accommodation in certain warehouses classed as workplaces are often obsolete. Sanitary conveniences are situated directly off the footwalk without regard for screening or privacy. The offices situated in the warehouses have been converted from switch rooms to form an office merely by introducing a desk and a stool for the warehouse keeper to carry out his clerical work.

Difficulty is frequently encountered in buildings of this kind because of the gangs of casual labour who are engaged from time to time and the accommodation provided is only for the warehouse keeper and his staff of two or three assistants.

After lengthy persuasion one large warehousing firm is planning to modernise all offices and sanitary arrangements at their workplaces and to include where necessary messrooms for the employees. These facilities will be centralised in a block conveniently accessible to all their employees and this arrangement will dispense with the small offices and water closet compartments scattered throughout the area.

Bakehouses

The structure and lay-out of the older buildings used as bakehouses provide difficulty in enforcing the Food Hygiene Regulations, and improvement, if any, after direct action is not always impressive. The difficulty is often due to the premises being inadequate for an expanding trade, hence the inspector finds small bakehouses totally unsuitable for the purpose, although every effort is made to attain a reasonable standard of cleanliness.

The lack of space often prevents the occupier from carrying out alterations and it is not uncommon to find washing facilities sited in a position which is difficult to approach by the food handlers owing to the storage of equipment or raw materials in its vicinity.

Modern bakeries provided with mechanical devices and machinery have produced a high standard of cleanliness throughout their premises. Mechanisation has developed to form a favourable alliance with hygiene and recent discoveries ensuring durable jointless and smooth surfaces have made food preparation safer and the work of the employees considerably easier.

Sanitary

473 visits were made to bakehouses throughout the year and 518 written infringements and 84 verbal infringements were reported.

The brewery companies in the city have continued with alterations Licensed required by this department under the Food Hygiene Regulations. Premises Washing facilities for the employees, suitable locker or cloakroom accommodation for outdoor clothing and first aid equipment have been provided in nearly all the licensed premises in the city.

Health education plays a very important part in routine inspections.

It is not unusual to find wash hand basins being used for miscellaneous purposes, and coats and shoes, not worn during working hours, thrown haphazardly under shelves and into corners behind the service bar,

The disposal of waste beer from customers' glasses and service trays remains a problem. The supervisors of the breweries together with the inspectors have informed managers that all such beer must be thrown away.

even though a cupboard or locker has been provided.

914 visits were made to licensed premises throughout the year and B11 written infringements and 162 verbal infringements were reported.

Made-up commodities, such as meat pies, give rise to the problem of Meat Pies idequate storage. Regulation 25 of the Food Hygiene Regulations tates that food containing meat, fish, etc., which is brought into any food premises shall, unless exposed for sale, be brought to a temperature of not less than 145° F. nor more than 50° F.

Meat pies are often found to be displayed for sale on counters without provision after closing hours for storage within the temperatures mentioned.

Where trade and demand are on the increase the breweries are encouraged to provide refrigerators. On the other hand the difficulty is overcome by arranging for consignments of pies to be delivered daily to the premises from the manufacturers.

#### Sanitary Conveniences

Several public houses are still without separate sanitary conveniences for male and female customers. The alacrity of the breweries concerned to solve this problem is diminished by the necessary extensive alterations to accommodate these facilities and the time-lag involved in the preparations and acceptance of plans. Fortunately, complaints regarding the absence of separate sanitary conveniences are few and the problem is gradually diminishing.

#### Shell-Fish.

Four applications were received during the year for the registration of premises for the sale of shell-fish. In each case the premises were inspected and found to conform with the Food Hygiene Regulations. Registration is made compulsory under the Liverpool Corporation Act, 1955, Section 40. No person shall sell shell-fish in the city unless such person and such premises are registered by the Corporation. No complaints were received of shell-fish offered for sale and found to be unfit for human consumption. 158 premises and 160 persons are registered by the Corporation under this Act.

#### Preserved Meat.

Manufacturers of preserved meat, fish and sausages are required to be registered under the provisions of the Liverpool Corporation Act, 1936, both as regards themselves and the premises in which they conduct their business. There are 228 premises registered in respect of preserved meat and sausages and these include 15 new registrations. Regular visits have been made during the year.

# Administration of the Shops Act, 1950, and Young Persons (Employment) Act, 1938.

The enforcement of the above legislation has received maximum attention throughout the year and the inspectorate have endeavoured to ensure that the progress made during the past few years has been maintained.

There has been some reduction in the routine inspection of shops Effect of throughout the year. This was unavoidable owing to the additional Additional work caused by the Rent Act, 1957, and also by other special duties, such as the smallpox outbreak.

It is regrettable that there is still no indication of new legislation for Welfare the health, safety and welfare of persons in non-industrial employment. The anomalies found continue to cause dissatisfaction to officials and bewilderment to many classes of work people.

The unsatisfactory provision of the Shops Act, 1950, in respect of Closing Hours closing hours and their application to mobile shops has been high-and Mobile Shops lighted yet again in the High Court. Two previous Divisional Court decisions that mobile shops did not come within the scope of the Shops Act, have now been re-affirmed.

This has increased the disquiet already felt about this serious and Unfairness to unjustifiable anomaly, and shopkeepers generally are becoming very disturbed by the unfairness of the legislation which gives so much freedom to the street trader.

This, and other anomalies, have been allowed to continue long enough, Present and steps to strengthen the law are urgently needed. If a complete Legislation re-drafting of the present law cannot be undertaken for some considerable time, a short simple enactment bringing street trading within the provisions of the existing Act would prove entirely practicable.

In accordance with the revised policy affecting duties of inspectors Administrain this city, all qualified staff carry out work under the Shops Act, and tion of Shops
are assisted, when necessary, by assistant inspectors. A small group of
specialist inspectors are available for dealing with any special problems
which may arise.

The Duty of Inspectors

The duties of any official should be carried out with tact, perseverance and consideration for those with whom he is dealing. The enforcement of the Shops Act, especially of those matters relating to closing hours, calls for an even greater exercise of these qualities because this enactment in its present form is particularly unpopular with certain shopkeepers.

Co-operation of Traders

Many retail traders are often provoked by the unfair trading of others into making determined protests, but, nevertheless, the vast majority are always ready to give their complete co-operation to the inspectors.

Complaints Many complaints are received and they are always fully investigated, although, far too often, it is extremely difficult to obtain sufficient evidence to enable court action to be taken. This, however, does not deter the department from fully carrying out its duties in every case.

Inspections

A total of 39,841 inspections of retail shops of all classes, cafes, clubs, hairdressers, warehouses, pet shops and 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 72,111.

Half-holiday Closing

Trading on the early closing day is, on the whole, confined to permitted hours, but some illegal selling occurs during the evening in general shops, and to a lesser extent in sweets and tobacco shops.

Evening Closing

There is an increased tendency for the back-street shops to remain open later at night. This is due entirely to keener competition between traders. This class of shopkeeper is always at the mercy of the local inhabitants, some of whom demand service at any time, even as late as 11.30 p.m. A refusal to serve may cause the shopkeeper the loss of further business.

Sunday Trading

Inspectors are on duty, as far as other duties will permit, each evening of the week, and on Sundays. All contraventions are dealt with Action Taken either by warning letter or court proceedings. In those cases taken to court, convictions were obtained, and fines imposed as indicated in the statistical appendix. (Table 44.)

A number of complaints have been received regarding the trading Street from mobile shops after the general closing hour for shops. Apart from a very limited means of action of an informal character, no effective measures can be taken under the existing law.

## Shop Assistants' Entitlements.

The requirements of the Act relating to the weekly half-holiday for Weekly Half-holiday assistants is generally well observed. The benefits to employees from this compulsory break are incalculable, although a number of assistants feel they should be allowed to work on their half-day if they wish in order to get the extra pay.

The Act does not permit this alternative, and the onus is placed upon Employers' the employer to see that his staff take the weekly half-holiday as indicated on the prescribed notice which must be displayed in the shop.

The detection of infringements of this provision of the Act is usually Detection of difficult, because assistants, who are wrongfully employed on their half-day, are often working behind closed doors and drawn window blinds. It is interesting to note that very few complaints are received from assistants in respect of this matter, except perhaps at Bank Holidays when assistants are permitted to be employed on the half-day before the Bank Holiday, providing they are not employed on the Bank Holiday, and receive their weekly half-day in the following week.

Complaints are occasionally received about employees not receiving Meal Times proper intervals for meals, or not having reasonable facilities for taking their meals in the shop. These matters are fully investigated both on receipt of a complaint or during routine inspections, and where necessary appropriate action has been taken.

All persons employed in a shop open on Sundays for the serving of Sunday customers must be given compensatory holidays according to the period Employment of time they were so employed.

Employers are required to keep a record of Sunday employment Record of wherein the names of employees and the dates of the compensatory holidays given are recorded.

Sundays.

Inspection on The provision relating to Sunday employment is given regular attention by inspectors during the course of their visits to shops on Sundays. Infringements are usually of a technical nature and, as a rule, action by warning letter is sufficient to ensure compliance with the Act.

Employment of Young Persons

An important feature of the Shops Act, 1950, is the control of employment of persons under 18 years of age. While conditions of work today are so much more satisfactory than they were prior to the former Shops Act, 1934, it is still necessary for strict enforcement measures to be maintained.

Supervision Still Essential

There are still employers who are either unaware of the provisions relating to the employment of young persons, or who ignore them if possible. Therefore, every endeavour is made to secure constant supervision of all shops where young people are employed.

Night Employment of Young Persons

The employment of young persons in cinemas, theatres and restaurants is also checked periodically in order to ensure that they are not employed later hours than those permitted by the Act.

# Welfare Arrangements.

Inspections

The work of inspectors in respect of the welfare provisions of the Act continues to be directed to the improvement and maintenance of the various facilities prescribed for the benefit of shop workers.

Law Still Unchanged

Legislative changes as recommended by the Gowers' Committee are not yet forthcoming and consequently there is nothing of significance to report.

Benefits to Shop Workers

Shop workers are more favoured than are the workers in offices and certain other employments, in so far as they are protected in a considerable measure by the welfare requirements of the Shops Act. Assistants are benefiting today from the extensive work carried out by inspectors in the past, and the task of enforcement is now mainly confined to ensuring that these benefits are satisfactorily maintained.

#### Hairdressers and Barbers.

Work in connection with the provisions of Section 42 of the Liverpool Registrations Corporation Act, 1955, in respect of hairdressers, has been confined to Inspections routine inspection of their shops, and matters relating to the registration of new businesses or transfers to new owners. During the year 36 new registrations were recorded and 324 inspections were made. This action resulted in warning letters being sent in respect of 12 premises, mainly dealing with minor matters.

No complaints have been received during the year against hairdressers, Hairdressing or in respect of illegal hairdressing in dwellinghouses. We are still concerned about the carrying on of this class of business in unauthorised premises such as houses, but it is extremely difficult to trace them without the co-operation of the public and members of the trade.

#### Places of Entertainment.

Day and evening visits to cinemas, theatres, dance halls and other Routine places of entertainment have been made during the year in accordance Supervision with the arrangements with the licensing justices. Attention has been given to the cleanliness of the auditoria, seats, sanitary conveniences, staff and projection rooms, and to the maintenance of adequate ventilation and a suitable temperature. There are now 65 cinemas and theatres in the City compared with 81 previously, and there is a further possibility of more cinemas being closed. During the year 287 visits were made to places of entertainment and 41 defects were found and satisfactorily dealt with by the managements concerned.

#### Pet Animals Act, 1951.

There were 69 licences issued to persons carrying on business as Licensing dealers in pets, and during the year 274 visits were made to their premises to ensure that the provisions of this enactment were complied with satisfactorily, and in only four cases was action necessary.

Weakness of the Act

Complaints Received Concern is felt by inspectors and other interested persons over the serious weakness of the Act in connection with the trading of puppies. Many complaints are received each year about puppies being sold before they are strong enough to meet the hazards to which they are subjected, from the time they are taken from the mother by the breeder until they arrive at the home of the purchaser by way of the retailer's shop or premises, and possibly after a prolonged road or rail journey. The Act is grossly inadequate to enable effective enforcement and to give sufficient protection to these animals before they reach the retailer.

Revised Law Needed Revised legislation is necessary to protect every stage of the life of an pet animal which is bred for the purposes of sale, until it reaches the ultimate purchaser.

Keeping of Records It is considered that powers should be given requiring breeders, suppliers and retailers of pet animals of certain classes, to keep complete records of the sources of supply, and for the premises of all persons supplying or breeding animals for the pet animal trade to be registered with the local authority, and to be subject to inspection by enforcement officers. The conditions under which puppies and other pet animals are transported is also a matter demanding adequate control and supervision.

Fire Precautions The requirements of the Act with respect to fire precautions are deal with by the Liverpool Fire Service who recommend measures for reducing fire risk and action to be taken in case of fire. These recommendations are made special conditions on the licences affected and step are taken to ensure compliance.

Sun Blinds

In accordance with the instructions of the Health Committee, action has been taken to have external sun blinds fitted to pet shops no already possessing them, and this matter is also made a special condition on the licences,

## Atmospheric Pollution.

During the year the work of the department in relation to atmos-Clean Air Act pheric pollution and smoke abatement has considerably increased with the remaining sections of the Clean Air Act, 1956, coming into force on the 1st June, 1958. This Act, which was placed on the Statute Book after many years of hard work by the converts to the idea of clean air is now proving its worth. The legislative draughtsmen have provided in the Clean Air Act, the necessary instrument to secure the abolition of atmospheric impurities by the establishment of smoke control areas, restriction on the emission of dark smoke, and the abatement of nuisances from general smoke emissions. The new legislation has brought additional administrative duties and new techniques have been devised to accomplish clean air within the next decade.

The Local Authority may approve installations in smoke control Prior areas. This decision must be made upon technical grounds and the Approval staff engaged on this work must have considerable technical ability.

This aspect involves extra duties in connection with the survey, Preparation or preparation of reports and final details for submission of smoke control of Reports Orders to the Minister of Housing and Local Government for consideration, and, therefore, it has been necessary, during the year, to pread this work amongst the majority of the staff.

During the year the inspectors have carried out additional surveys n the central area adjacent to the (No. 1) Smoke Control Area which was the first area in the country confirmed by the Minister under the Blean Air Act.

Some 5,968 visits were made to premises to investigate com-Statutory laints, advise on technical problems, or secure alterations, improvenents or replacement of appliances with approved smokeless appliances.

Although a vast number of visits were made, and special complaints avestigated, it was only found necessary to issue 18 abatement otices during 1958 as compared with 47 notices served in 1957.

The Clean Air Act requires that statutory action should be taken in the case of smoke in excess of the permitted maximum being emitted, and 27 warning letters under Section 1 were served during the year and in all cases caused an immediate abatement of the nuisance. This warning has been sufficient for the offender to realise that the powers invested by the Clean Air Act are considerable. A former persistent offender installed modern chain grate mechanical stokers to his boiler plant at a cost of £3,500 per furnace, and during the first nine months of operation he claimed to have saved a third of the purchase price in fuel.

Shipping

The owners of vessels using the river daily are aware that the emission of black smoke will not be tolerated. This has resulted in further improvements being recorded during the year, including a number off new oil fired tugs being commissioned to replace the old coal fired vessels.

Observations

One of the most difficult observations to make is on vessels underway,, due to the fact that they pass out of view well within the maximum period allowed by the regulations. The observation points available do not provide the observer with a clear view of the river to enable him to keep vessels in sight for long periods. However, some 556 observations were made and in 36 cases warning letters were sent to the owners.

Improvements

Tugs, dredgers and hoppers used daily on the river are generally not suitable for conversion to oil firing, as, therefore, it will only be by the commission of new vessels that major contributions will be made to help to solve the river problem.

Industrial Smoke Emission The main cause of industrial smoke emission was found to be due to careless firing by untrained staffs or by the burning of low grade fuel on worn out mechanical stokers.

Domestic Smoke Emission The domestic problem is considerable. There are 204,486 residential premises and of these some 90,000 are still burning coal on old-fashioned open grates. These domestic coal fires in sub-standard houses cannot be converted to smokeless combustion without considerable major adaptations and conversions and, therefore, are a constant source of pollution.

Complaints have been received of smoke emissions from railway Railway engines using main lines within the City limits. As will be appreciated, Engines it is extremely difficult to obtain the necessary information in order to take action against the offender. The section of the Clean Air Act dealing with railway engines came into force in June, and they are now under the jurisdiction of the Local Authority (prior to this, the Railway Consolidated Act, 1875, did not permit Local Authorities to take legal action against the offenders). This has resulted in some improvement being recorded, no doubt due to more care being taken, but it is felt that the only satisfactory solution to this problem will be by the electrification of all main lines. During the transitional period of steam Railway to electric locomotion, British Railways have undertaken to introduce progressively diesel electric locomotion. The programme planned will take some considerable time and it necessitates the change over in various stages during the next 20 years.

#### Smoke Abatement.

The introduction of the remaining section of the Clean Air Act on the 1st June, 1958, has given local authorities definite standards and new powers to enforce smokelessness in their areas. New increased penalties are imposed and the emission of dark smoke in excess of the permitted maximum may result in a penalty of £100.

During the year, the survey of a further seven areas has been under- Smoke taken and presented for consideration by the Minister of Housing and Control Areas Local Government. These areas comprise some 4,512 premises and cover 320 acres. They are situated in the central area of the City and as a result of the action of the inspectors many industrial premises in the area surrounding the central area are commencing the installation of improved mechanical stokers and oil fired boilers in readiness for the confirmation of the Order. (See Table 51.)

A preliminary survey on the largest smoke control area in the Preliminary country, situated in the south end of the City was commenced during Surveys the year. The area is included within the following wards-Aigburth, Allerton, Childwall, Woolton, St. Mary's and Speke, comprising some 9,792 acres and approximately 25,000 premises.

In addition to this, a further survey was commenced in the area adjacent to Clarence Dock Power Station and it is anticipated that if the industrial premises within this area are controlled, the only problem remaining will be the power station.

Height of Chimneys

Where plans for the erection or extension of a building are deposited with the local authority in accordance with building byelaws, and the plans show that it is proposed to construct a chimney for conveying the products of combustion from the building, the chimney must be of sufficient height to prevent, so far as practicable, smoke, grit and dust from becoming prejudicial to health. During the year, 55 plans were examined and in seven cases the chimney height, as shown, was in-In two of these cases, the plans were withdrawn and the remaining five amended the height to conform with the requirements.

New Furnaces

It is an offence under Section 3(1) to install certain new furnaces which are not capable so far as practicable of operating continuously without emitting smoke. This Section also requires the person proposing: to install the furnace to give notice of intention to the local authority under penalty of £10 if he fails to give the required notice. The details may be submitted for approval if desired but this is not compulsory.

During 1958, 48 Notices of Proposal to Install were received and in 27 cases details were submitted and approved.

## Clarence Dock Power Station.

Report Central Electricity Generating Board

This power station still continues to be the major source of pollution Received from over the central area of the city and on the 1st June the responsibility for supervision was transferred from the Local Authority and placed under the control of the Alkali Inspectorate. On the 20th December, 1958, a special report concerning the period 27th March, 1958 to 12th December, 1958, was received. The report gives details of the work carried out during the year, prior to March, 1958, the main experimental work being undertaken was by the addition of additives to neutralise the SO3 content of the flue gases. At the beginning of the year it was decided to tackle the difficult task of a full investigation of the methods of operation and combustion techniques of the boilers in No. 2 Station.

Establishment of Working Party

A working party was set up on the 17th March, 1958, composed of engineers and chemists, to work full time on combustion problems and plant operation. It was decided to allocate No. 13 Boiler to the working party for experimental work. This boiler was entirely under their control, and between the 17th March, 1958 and the 13th May, 1958, repairs and modifications were carried out on this boiler-particular attention being given to grit arrestors and secondary dust collectors.

During this period special instruments and equipment were assembled and it was arranged that a higher state of maintenance be maintained than had been hitherto possible, because of the previous demand for steam to meet the station's electrical load. From 14th May, 1958 to 29th November, 1958, the experiments continued and it was found necessary to operate the boiler plant with the highest possible carbon dioxide in the waste gases to reduce acid formation. A high degree of maintenance of boilers was carried out during the summer months at a cost of approximately £35,000.

#### Industrial Processes.

In order that an area of land situated to the north-east of Fleming Road, Speke, could be considered for housing development it was necessary to carry out a series of observations together with the introduction of instruments for measuring the sulphur content of the fumes being emitted. Owing to the chimney heights in this area being controlled by statutory regulations due to the close proximity of the airport, prevailing winds cause the fumes emitting from low chimneys to descend to ground level in close proximity to the factory premises concerned. The special tests are still continuing and a report will be published on the progress in the near future.

# Atmospheric Pollution Measurement.

The measurement of atmospheric pollution has continued during the pepartment year in close co-operation with the Department of Scientific and of Scientific Industrial Research, in order to ascertain the total amount of Research impurities being deposited.

The special scientific instruments used to measure atmospheric pollu-Scientific tion have been continually in use. These instruments consist of electri- Investigation cally driven air pumps which draw a measured quantity of air through a standard filter paper. These filter papers are despatched, after being exposed for a period of one or two weeks according to the particular

location of the instrument, to the Fuel Research Station, Greenwich. After being examined photometrically for total smoke the papers are then sent to the Dunn Laboratory, St. Bartholomew's Hospital, for analysis to check for hydrocarbons which may be carcinogenic.

Standard Deposit Gauge Three Standard Deposit Gauges are maintained by the department for the measurement of dust and grit. During the year, one gauge was removed from the premises in Dale Street and is now sited on the roof of the Health Department Building in Hatton Garden. (See Table 52.)

Co-operation
with the
Central
Electricity
Generating
Board
Owen
Automatic
Filter

In addition to the three sites situated at Aigburth, Oxford Street and Hatton Garden, a further seven instruments are maintained by the Central Electricity Generating Board.

The automatic air filter is sited in Dale Street. This instrument records the intensity of smoke in the atmosphere by comparison of the smoke stain with a standard scale of shades.

Sulphur Gas Pollution The sulphur oxides present in the atmosphere are measured by exposing special porcelain cylinders covered with tapestry cloth and coated with a standard solution of lead peroxide paste. After exposure for one calendar month the candles are submitted to the City Analyst for examination, the results being published as milligrammes of sulphur trioxide per 100 square centimetres.

During the year one new instrument was sited in the roof of the Health Department, Hatton Garden, and twelve further instruments to record the amount of sulphur oxides were sited adjacent to the Speke Industrial Estate. (See Table 53.)

# Inspectors' Visits.

Survey

Some 2,455 visits have been made in connection with the smoke control area survey. Whilst engaged on the survey the inspectors advised owners and occupiers on the conversion of 7,548 appliances to smokeless combustion.

Special Complaints As the results of special complaints received, 81 visits were made by a inspectors to investigate the cause of smoke nuisances and a further 790 visits were made in connection with various matters relating to the work of the section. In order to ensure that installations and adaptations were carried out correctly it was necessary to make some 1,447 re-visits as a follow-up procedure.

At the request of owners or engineers, 196 visits were made by Advisory specialist inspectors to advise on boiler installations and new appliances.

The district inspectors have made routine visits and observations on District their districts to ensure that all smoke nuisances are quickly reported Inspectors and the necessary action taken. Some 463 such observations were made on industrial chimneys and 605 on shipping.

Informal action in respect of exempted buildings such as hospitals, Informal power stations, gas works, etc., is necessary in order to ensure that all Action sources of pollution are dealt with as soon as possible. This work continues to account for a considerable amount of the specialist inspectors' time.

#### Rodent Control.

The drive to eliminate the rodent pest from the city, unrelentingly carried on by the department over many years and stepped up in intensity during recent years, is slowly but surely accomplishing its purpose.

There is every indication, as the result of the action taken, that the rat population in particular has suffered a considerable reduction. Rodent infestation generally continues to decline in severity, and it is significant that no major infestations were reported during the year.

This is a far different picture, by comparison, than that which General presented itself when the comprehensive initial survey was undertaken Improvement in 1943. At that time war damage to buildings and lands, including sewers and drains, especially in the dockside districts and central area, had provided conditions favourable to heavy infestation, namely, abundance of harbourage and food readily accessible to rats. Many serious infestations were discovered and subsequently remedied. The systematic routine surveys of the areas have revealed that many sites which had previously been subject to recurring infestation have remained trouble free since they were disinfested some years ago.

The marked improvement brought about must be attributed to the Block System value of the block system of control applied by the rodent control staff of Control to remedy all infestations found, however slight, to the respective treatments prescribed and applied, and to the subsequent measures taken to prevent a reinfestation.

It should always be remembered that rodent control technique must never be allowed to become static, and as more scientific and technical knowledge is acquired, so each problem is tackled more vigorously. Some problems have yet to be solved, particularly with regard to sewer infestation and the transportation of rodents by road, rail and sea, but progress is being made in these fields of rodent control work.

Although the general improvement in the rodent problem may take years to accomplish, the department is alive to the fact that any slackening of effort could in a very short time undo progress made, due to the rapidity of breeding in rodents.

#### Infestation in Sewers

Whilst there has been a considerable reduction in the rat population of the sewers since the work was centralised in the year 1953, disinfestation of the sewers in some districts is retarded by difficulties of a practical nature. Consequently the problem continues to receive the serious attention of the experts and counter measures are taken to prevent the spread of infestation into sewers successfully treated.

The baits in sewers were again carefully prepared with an additive anti-mould chemical which allows them to be laid for a longer period and still be attractive to rats. In this way the treated bait is available to rats that may only visit the manhole baiting points very infrequently, and the rats in these pockets of resistance are gradually being killed off.

Duties of Local Authorities

Every local authority is required under the Prevention of Damage by Pests Act, 1949, to take steps to secure, so far as practicable, that their and Occupiers district is kept free from rats and mice, and to enforce the duties of owners and occupiers under its provisions.

> Act re-enacted, with modifications, the Rats (Destruction) Act, 1919, and although it greatly strengthened the powers of the authorities and provided the means of achieving the radical improvement in the control of rats and mice, the Act should not be entirely credited with the remarkable reduction of the rat population in the city. Success in a rodent campaign is primarily dependent upon the fullest co-operation of the public, which has been readily obtained in Liverpool and in no small measure has contributed to the general progress made.

Many thousands of requests to the department for assistance have been received from the occupiers both of business premises and dwelling houses since special action was taken from 1943 onwards, without the slightest recourse to formal action. The credit for this worthy achievement must be given to the tactful approach, good advice and practical assistance given over the years by the rodent control staff, which is now enjoying the benefit of a confident public.

One requirement of the Act is that the local authority must be notified by the occupiers when rats or mice are living on or resorting to buildings and lands in substantial numbers. Occupiers of premises readily avail themselves of the service provided, not only for assistance in the destruction of the pests, but also for advice to prevent infestation.

The complaints received have more and more related to dwelling houses.

The possibility of food contamination by rats and mice is always a problems and routine surveys have been carried out at food factories, warehouses, retail food shops and catering establishments as a preventative measure. Immediate steps were taken to remedy any infestations found, however slight.

The continuous attention given to tracing defective drains and sewers together with the carrying out of repairs, in conjunction with systematic treatment of lands, buildings and sewers, have done much to remove the health dangers from rodents and the risk of food contamination by them.

# Rat Destruction Service of the Ministry of Agriculture, Fisheries and Food.

Local authorities were notified during the year that the rat destruction Farms service provided by the Ministry of Agriculture, Fisheries and Food to the farming community is to be discontinued. This means that no further contracts will be undertaken by them, and the service will run down gradually as contracts expire and after the 31st March, 1959, will cease.

Routine inspection is made of the farms in the city as a precautionary measure against the development of rodent infestation and to meet the requirements of the Act in this respect. The staff are always ready to

give advice to the farmers on modern rodent control methods and also to provide, when requested, practical assistance in the destruction of rodents.

## Precautions taken against the spread of Disease.

General Rodent Control Precautions.

Action against Plague Precautions are taken against the spread of plague, a disease which may be brought into the port by rats, and specimens of rats and mice collected are sent to the Public Health Laboratory for examination. It is satisfactory to report that all rodents submitted during the year were found to be free from plague.

Precautions against Weil's Disease Rodents 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 infected by the disease, specimens of rats caught in sewers and on the surface are submitted for examination. Therefore, although poisoning is the chief agent used for rat destruction in sewers in the city, spot trapping was applied in advance of poisoning treatments to obtain specimens for examination as a further precautionary measure against the spread of infection. During the year 24 rats (13 from sewers and 11 from buildings and land) were submitted for examination. Four rats from sewers (or 30.76 per cent.) and one from a dwelling house (or 9 per cent.) were found to be positive carriers of leptospira interohaemorrhagiae.

Immediate action was taken in the districts concerned and the buildings and lands near-by were specially surveyed for rats and mice. The vertical block control system was applied to remedy the infestations found, which means that the destruction of rodents in sewers, buildings and lands by the requisite treatment was carried out at one and the same time.

# Systematic Survey.

The rodent control staff examined 31,741 sites during the year inconnection with the systematic survey and investigation of complaints. A further 71,521 visits were made entailing operational work and re-examination of buildings and lands during or following a treatment. Public health inspectors also made, in conjunction with other matters, 161,805 inspections under the Act.

Complaints relating to rats and mice to the total of 5,088, which is an increase of 283 from the previous years, were received and promptly investigated. Where evidence of rats or mice was found, the circumjacent sites were also visited as a routine measure and appropriate action taken to remedy all infestations by uniform treatment with the minimum of delay.

The survey work continually applied throughout the dockside wards and central area, and in other places where rodents are likely to be found, is of primary importance to the detection of rodent infestation before it is allowed to develop to serious proportions.

### Rodent Infestation.

During the year 31,741 building and lands were examined. 4,835 were Infestationsfound to be infested, the majority very slightly, and details are shown in Buildings and Lands the statistical appendix (Table 45). The main sites affected were warehouses and factories within the dockside wards, as might be expected, but with a continual fall in severity. The central area is maintaining the remarkable decrease in rodent infestation as the result of the action taken year by year.

The city, as an important port, is a centre of road and rail transport, Transportaand rodents, due to their migratory habits, may be brought in by road, tion in Goods rail or sea. There were further cases during the year of the transportation of rats and mice conveyed when goods were delivered to premises. Infestations brought about in this way, although few in number, would account for ship rats being found in buildings on the outskirts of the city and on sites some distance away from the dockside districts. In some cases premises that had been successfully treated were subject by this means to reinfestation, particularly by mice. Where evidence indicated that rats or mice had been conveyed in goods delivered to premises, enquiries were made relating to the consigner so that appropriate action could be taken at the source.

There was some increase in the number of complaints made of rats, complaints many of which related to stray ones being seen in the yards of dwelling of Rats houses and in public passages, chiefly in districts containing the older property. These sporadic outbreaks of minor infestation take up much of the department's time to investigate, both by the rodent control staff and the public health inspectors.

The increase in this type of rat nuisance was considered primarily to be due to the abnormally wet weather during the summer months. The heavy rains caused increased surging of the sewers and drains and flooding of underground habitats of rats, causing them to escape in search of better cover and food, the latter often being supplied by careless persons throwing waste food away into yards and passages.

There was also a relative increase in the number of references to the public health inspectors from the rodent control section concerning the drains on such sites as part of the investigation into the source of infestation. References to the total of 1,364 were sent as compared to 1,101 the previous year; 1,033 of these related to dwelling houses and 331 to business premises. Defective drains were subsequently returned in 501 and 166 cases respectively, and the necessary action was taken to remedy the defects found.

Infestation of Land and Ditches The outer districts of the city were subject generally to very slight rat infestation, mostly by rats living in their natural habitats in banks of brooks, ditches and other embankments and attracted to gardens of near-by dwelling houses in search of food, often supplied unwittingly by persons throwing out bread for birds.

Development of agricultural land for new housing estates may disturb rats and mice from their customary living quarters and cause them to escape on to the sites of houses during construction. A special attraction for rodents exists on sites where poultry are kept, and temporary bolting cover for rats in search of food in gardens is provided quite unintentionally by persons keeping compost heaps.

Although the presence of rats was 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.

The prompt action by occupiers in reporting the presence of rodents enabled the rodent control section to take the necessary steps to remedy the infestations before they developed to serious proportions. A report on the conditions and extent of infestation was made in each case, including the prescribed treatment to effect a speedy remedy, together with such reasonable recommendations as may be considered necessary for preventing a recurrence.

Details of infestations and disinfestations are shown in the statistical appendix. (Table 45.)

#### Rodent Disinfestation.

Disinfestation of Buildings and Lands.

During the year 4,789 buildings and lands were disinfested from rats or mice.

The practice of providing free assistance to the occupiers of dwelling Dwelling houses was continued during the year, with a slight decrease in the Houses number requiring attention for the destruction of both rats and mice.

Owners or occupiers of buildings or lands other than private dwellings Business who require 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 1,782 requests were received during the year. Many occupiers in addition requested the department to examine their premises at regular intervals in order to maintain a constant and expert supervision so that the slightest indication of any rodent activity could be speedily and skilfully dealt with. The full cost of this inspection and operational service was charged to the occupier concerned, and the work is in no way subsidised out of the rates.

#### Methods of Destruction.

Buildings and Lands-Poisoning.

The principal and most effective method employed for rat and mouse destruction is by use of poisons. Quick acting or "acute" poisons and slow acting or "chronic" poisons are used. The acute poisons are zinc phosphide and arsenious oxide for both species of rats and mice, and Antu (alpha naphthyl thiourea) for the common rat.

The use of acute poisons for rats necessitates pre-baiting the site undergoing treatment with unpoisoned bait in token form for several days before poison is applied. In this way rats are conditioned to eat sufficient poison bait when it is applied, and the danger of their partaking a sub-lethal dose that would exist by direct poisoning is removed.

Pre-baiting is also practised against mice, for which one day's pre-baiting usually suffices, but its main use is to guide operators in deciding whether enough baits have been put in the right places before poisons are applied.

Red squill poison, much used in the past, is not now recommended for rodent destruction on account of its unreliability of toxicity. Red squill was of value to remedy minor common rat infestation only on sites where putting down acute poisons would have been too dangerous, but it has been replaced by a more efficacious rodenticide in the form of Warfarin, a slow acting poison at the percentage used.

Warfarin is a blood anti-coagulant, which, when ingested regularly in small doses over a period of days, causes gentle but fatal haemorrhage in rats and mice. The small amount of poison in the bait required to be effective when applied in the form of chronic baiting induces little or no bait shyness by taste, which enables it to be used without the need of conditioning the rodents beforehand to feed from unpoisoned baits.

The major advantages of Warfarin are that it is effective against to both species of rats and mice, and its comparative safety for application in dwelling houses, schools and on other sites where it would be dangerous to use an acute poison.

Nevertheless it is necessary to take every precaution when laying poison bait of any type, especially where it would be accessible to children, animals or birds, and in such circumstances the baits are put into protective containers accessible only to rodents, as a safety measure.

Of the 5,120 infestations and reinfestations remedied during the year, 4,679 were treated by the department. Of these 4,657 were cleared by the use of poisons and the remaining 22 were remedied by trapping only.

It may be interesting to note that of the 4,657 infestations remedied by poisoning, 3,855 were remedied by one treatment, 634 by two treatments, 134 by three treatments and 34 by four or more treatments.

Trapping is generally applied for very slight infestations or as a secondary treatment to deal with a residual number of two or three rats or mice which have survived a poisoning treatment. Break-back traps of the treadle type are used, and, to a much lesser extent, sticky trays where conditions are favourable for this form of treatment.

The remaining 441 infestations were remedied either by the occupiers applying approved treatment prescribed and supervised by the rodent control inspectors, or by proofing such as the repair of defective drains under the supervision of the public health inspectors.

## Calculating the Kill.

It is estimated, using the appropriate formula for calculating the Estimated kill, that at least 13,913 rats in buildings and on lands were destroyed Rats Killed during the year as a result of poisoning treatments. [1,996 dead rats were actually collected after poisoning and a further 114 were caught in traps.

The species of rats collected were 1,238 rattus norvegicus ("brown" or "common" rat) and 872 rattus rattus ("black" or "ship" rat).

A percentage of rodents collected, 365 rats and 11 mice, were sent to the Public Health Laboratory for examination and the remainder burnt.

Although there is no reliable formula available for calculating the Destruction kill in relation to the poisoning of mice, there can be no doubt that the of Mice number of mice destroyed by this method is considerable when taking into account the amount of poison bait consumed, namely, 10,266 ounces. 1,570 dead mice were collected as the result of poisoning and trapping operations.

# Rat Destruction in Sewers.

Rats found in sewers are in no way fundamentally different from the Sewer common or brown rat found in buildings. Sewer rats are of the same Treatment species, rattus norvegicus, and can use the sewers as the means of

traverse from one building to another through defects in drainage systems. There is a definite link between sewer and surface infestation and it is extremely important for the work of rat destruction on the surface and in the sewers to be closely co-ordinated in order to maintain a high standard of rodent control in the city.

In order to prevent 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 tables in the statistical appendix (Table 46). There is no doubt that as the result of the action taken during recent years the breeding and migration of rats through sewers and drains has been greatly reduced.

Modification of Control Methods The problem of dealing with rats that may only very infrequently visit the baiting points in sewer manholes has yet to be completely solved. It must be remembered that for all practical purposes baiting for rats is limited to the number of baitable manholes. The further the distance between manholes the greater is the possibility of rats escaping poisoning treatments or not taking the test bait laid. With a view to overcoming these factors the extended period of baiting as now recommended was adopted and the plain bait was left down seven days before poisoning. The modified technique was again used for the annual test baiting of manholes in sewer divisions previously found to be free from rats.

The extended period of baiting is now made possible by the addition of paranitrophenol at 0.25 per cent to the bait, which acts as a mould inhibitor without any appreciable loss of palatability of the bait as far as rats living under sewer conditions are concerned. Damp baits without such additive become sour and mouldy after two or three days, especially under sewer conditions, and would be quite unacceptable to rats.

A comparison of the total bait takes recorded during the maintenance treatments shows an increase of 765 during the second treatment. This increase may have been due to the abnormal wet weather during the treatment, causing rats to take a wider range of movement from the surging sewers and drains and visit the manhole baiting points in the process.

There are 25,785 sewer manholes in the city and the total bait taken during the two maintenance treatments of 2,976 and 3,741 compared with 9,329 on the initial treatment in the year 1953, show a reduction of 68 per cent. and 60 per cent. respectively.

In order to observe the strictest economy in the work without impairing efficiency, visits are not made to manholes after treatment has been applied for the purpose of recording poison takes to estimate the kill. However, spot checks of the manholes are made, after as well as during, poisoning to ensure that the best possible treatment is being applied.

In the outer districts of the city where sewers had been previously Annual Test 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 to discover whether there had been any change or migration of the rat population into those areas, and details are shown in the statistical appendix. (Table 47.)

Where evidence of rats was found during test baiting, treatments were applied to remedy the localised infestation. Of the 84 divisions wholly or partly test baited, no takes were recorded in 53 divisions containing a total of 8,780 manholes.

#### Preventive Measures.

Preventive measures were taken by the staff when possible. Conditions likely to lead to infestation were at once brought to the notice of the owner occupier of the building or land, and preventive measures and works of proofing were carried out during or immediately following disinfestation as required.

Immediate measures taken included the provision of suitable containers with tight fitting lids for the storage of waste food in cafes and other premises in order to remove a readily accessible food supply for both rats and mice and thereby assist the work of rodent destruction. The more permanent work done included the proofing of food stores; the repair of defective drains; the fixing of metal plates to the bases of doors; providing windows and ventilators in external walls and on coofs with small mesh wire guards; bricking up openings in walls and

around waste pipes, overflows, service pipes, etc., thereby preventing means of ingress for rodents; and the abolition of unnecessary harbourages.

Most occupiers of premises showed a readiness to comply with suggestions and good advice given to them by the rodent control staff, but where they failed to co-operate statutory action was taken by the public health inspectors and six notices were served under the Act, three for business premises and three for dwelling houses.

It is pleasing to note that during the year it was not necessary to institute legal proceedings.

# Pigeons and Starlings.

Nuisance from Wild Pigeons Unrestricted breeding of wild pigeons and starlings has developed to such a large extent over the years that a serious problem now exists in the city. Complaints of nuisance and annoyance from wild pigeons were received during the year in connection with a variety of premises, including public buildings, hospitals, churches, factories, laundries, shops, offices and dwellinghouses.

They cause appreciable damage to public buildings by erosion of stonework through constant fouling with much disfigurement of the fabric. Architectural embellishments become thickly bespattered by bird droppings, and the public statues are suffering in the same way.

Birds also fly into business premises during the day resulting in additional work for the managements and staffs in the protection of food, goods and equipment, as well as causing extra cleansing as the result of their visitations.

They also foul the paving of footwalks, steps and entrances to buildings, and in some cases it is found necessary to cleanse approaches to premises several times daily to remove the danger to persons who might slip, fall and injure themselves.

Not the least affected in one way or another are the occupiers of many dwellinghouses in all districts of the city. The degree of nuisance and annoyance differs in varying circumstances. The noise and filth from one or two pigeons roosting on some houses may cause little or no trouble but on other premises may prove intolerable, especially where there is illness in a house.

Investigation of complaints reveal that householders are much troubled by the daily visitations of flocks of wild pigeons, which often foul clean washing in addition to parts of the premises. Large numbers of pigeons are attracted by an abundance of food which is thrown into the streets daily by inconsiderate neighbours.

In one such case many wild pigeons congregated daily on the roof and gutters of a small terraced dwellinghouse waiting to be fed by a neighbour who had declined to stop the practice. Treatment was applied to meet the situation and more than 100 pigeons were caught in cage traps, much to the relief of the occupants.

In three other cases dealt with on complaint, wild pigeons were entering the roof space of small dwellinghouses in different parts of the dockside, and 240, 109 and 98, respectively, were removed by operators during the hours of darkness and painlessly destroyed. The extreme nuisance such large number of birds were causing the occupants may well be imagined.

Pigeons, although beautiful creatures, become vermin in excess of a reasonable number and a danger to health.

Another very important factor that has been taken into consideration is the concern expressed some time ago by the Liverpool Branch of the National Farmers' Union at the daily visitation to farms by flocks of wild pigeons which they alleged were coming out of Liverpool. They said that very considerable damage was being done to crops by these birds and felt they must continue to press the local authority for their systematic destruction.

It is therefore acknowledged, without any thought of the indiscriminate destruction of wild birds, that the situation can only be relieved by a substantial reduction in their numbers.

The local authority are empowered under the Liverpool Corporation Act, 1955, to take the necessary action for abating or mitigating any nuisance, annoyance or damage caused in the city by house doves, pigeons or starlings believed by the Corporation to have no owner. In this connection the birds may only be seized and then be humanely destroyed in excess of such number as the Corporation may consider reasonable.

The local authority, however, are not authorised to enter upon any premises other than a public highway without the consent of the occupier or person having the control or management of the premises or land.

Complaints of nuisance and annoyance from feral pigeons were received during the year in connection with 164 premises.

Reduction of the Wild Pigeon Population The rodent control section by reason of its specialised knowledge and skill in pest destruction has for some time carried out experimental work with a view to reducing the wild pigeon population. The experience has proved of inestimable value and the knowledge obtained from the operational difficulties met with will no doubt greatly assist any further policy that may be adopted for the destruction of wild pigeons.

The work has many of the problems associated with rodents, but being chiefly elevated in its application has more hazards to overcome while requiring the same skill in the undertaking.

It may be possible, by using techniques similar to rodent control, especially by the application of block control methods, for industrial undertakings and, where necessary, dwellinghouses to be treated in this way to effect a substantial reduction in the wild pigeon population.

Destruction of Wild Pigeons A total of 5,061 wild pigeons were caught and painlessly destroyed during the year. Also many nests and eggs were removed and destroyed during the operational work, which was mainly carried out at night and in the early morning.

The work was undertaken at a variety of premises including public buildings, hospitals, churches, industrial and commercial premises, and dwellinghouses, at the request of the persons concerned. The full cost was charged out for the treatment of all premises except in the case of dwellinghouses, for which a free service was provided similar to that which exists for rodent destruction.

It should be remembered that the experimental work executed by expert operatives of the rodent control staff has been confined to trapping the pigeons alive, removing the birds by hand from roosting and nesting points, and to a lesser degree by the use of nets. Much of the work was done from ladders, both inside and outside of buildings of varying heights, and was generally extremely arduous and hazardous.

The number of birds that may be destroyed by these methods is very limited, and until the Ministry of Agriculture, Fisheries and Food issues licences to local authorities to enable them to adopt more effective methods it appears likely that the wild pigeon population will continue to increase beyond what may be considered a reasonable total. On the other hand, such valuable help is being provided to occupiers who are sorely troubled with the pests, that each complaint, therefore, has to be considered entirely on its merits.

The Protection of Birds Act, 1954, makes provision for the destruction of certain wild birds, including feral pigeons, in the interests of public health. The Act also empowered the Ministry of Agriculture, Fisheries and Food to grant licences to duly authorised persons to use poisoned or stupefying bait of any description so specified for this purpose. Experimental work with narcotics against feral pigeons is being conducted by the Ministry but the question of issuing the licences, even for restricted operations, is still under consideration.

Recommendations were made, where reasonable and practicable, Preventive relating to the proofing of premises to prevent the entry of wild birds. With regard to public buildings and other large premises in the city, building operations to prevent them from perching and nesting in recesses and on ledges is considered generally to be both impracticable and too costly. The reduction of their population to a reasonable number would appear, therefore, to be the only solution to the problem.

Although considerable numbers of starlings fly into the central area Starlings at dusk to perch on large buildings for shelter at night, they are not such a serious nuisance as pigeons. During the day they spend their time and obtain their food on numerous sites in the green belt on the outskirts of the city.

The trapping of starlings would necessarily have to be carried out on many different sites to have any effect in reducing their number. The rapping of these birds, therefore, is considered to be impracticable.

## Supervision of Food Supply.

City Markets

The inspection and supervision of food supplies passing through the city markets, including St. John's Retail Market, the Wholesale Fish Market and the Wholesale Fruit and Vegetable Market at the north end of the city, is carried out by public health inspectors, with additional qualifications as meat and food inspectors.

The work involves the investigation of food complaints together with the routine inspection of fish, fruit and vegetables. A continual inspection of all premises located in the city centre is also maintained.

A rota instituted during 1957 made provision for qualified meat and food inspectors employed on sectors outside the city centre to undertake duties in the markets, and this system has worked well during the past year.

The markets have been supervised every morning between the hours of 8.0 and 10.30 a.m., and periodically throughout the day. All complaints originating from wholesalers and retailers have been investigated immediately, and many consignments have been condemned.

St. John's Retail Market A detailed report concerning the application of the Food Hygiene Regulations, 1955, to St. John's Retail Market was submitted to the Markets Committee. A number of the recommendations are now being carried out and improvements are in progress.

The natural lighting has been greatly aided by the substitution of windows in lieu of the unsuitable roof louvres at the north end of the market. In addition to the exclusion of dust and dirt, incoming cold air has been partially barred, thereby assisting in maintaining a reasonable temperature within the market hall. This work is to continue throughout the building.

A number of stalls have been completely redesigned and constructed on modern lines, while some of the existing stalls have been fitted with canopies and protective food displays.

Poultry Inspection Poultry entering the markets is examined prior to sale, with special detailed examinations of all sub-standard birds imported from Northern Ireland. This resulted in 131 head of poultry being rejected for reasons set out as follows:—

Ascites				13
Arthritis				4
Decomposition			***	26
Emaciation				56
Epithelioma				4
Injury	***		***	13
Lymphadenoma				2
Oedematous Ovid	lucts			13
			_	
Т	OTAL	***		131

As a result of the continuing special attention paid to the examination of sub-standard poultry, there has been a further sharp decline in the incoming supply of this type of bird. It is hoped that as a result of the rejection of inferior quality poultry, the shipment of such birds will eventually cease.

In addition, 2,397 head of high grade poultry were rejected, mainly for reasons of decomposition.

The Wholesale Fish Market supplies an extensive population through-Fish out Merseyside. During the year a total weight of 12,487 tons of fish Inspection was handled, in addition to some 42,710 packages of rabbits, poultry and game.

The inspection of fish, poultry, game and rabbits resulted in the rejection of some 4,875 packages at a weight of 50 tons as unfit for human consumption (See Statistical Table 55).

As in previous years it has been interesting to note that a few isolated fish have been affected with sarcoma, carcinoma, or melanotic sarcoma lesions or growths. During the past year, however, a previously unnoted condition was observed in a hake—the muscular tissues of the fish being peppered throughout with small, black specks. The aid of the Liverpool University Department of Zoology was sought, and it was reported that the specks were capsules containing the spores of a Protozoan parasite belonging to the group termed Cnidosporidia and resembling the stinging cells of the sea anemones and jellyfish.

Although this was the first affected fish noticed in the Wholesale Fish Market, it is understood that the condition was originally observed on the Pacific coast of the United States. Fruit and Vegetable Inspection The inspection of fruit and vegetables at the North Market, Queen Square, and the various wholesale storage warehouses throughout the city, has been maintained during the year. The daily inspection of fruit and vegetables resulted in 19,859 packages at a total weight of 246 tons being rejected as unfit for human consumption.

During the latter part of June and the commencement of July a total of 67 tons of imported potatoes was rejected for reasons of potato blight. The original request for an inspector to give his opinion on several sacks of potatoes gave no hint of the snowballing effect of blight. During this early inspection only a small quantity was visibly affected, and the condition of the main proportion did not justify condemnation. However, as evidence of blight was present, all wholesale firms were advised to make quick sales before the disease could progress.

Within a few days the blight had made spectacular advancement throughout the potato stocks on the wholesale market, and also in retail shops which had been supplied from these consignments. The moist, scaley growth originally speckling a few potatoes in each sack had become wetter and totally encompassing in character, so that now the whole crop held in the city was in a state of decomposition and totally unfit for human consumption.

In January, 3,200 cases of Lebanese apples were detained after chemical analysis indicated that the skin of the apples was contaminated with up to 14 parts arsenic and 40 parts lead per million. A total of 34 local authorities were notified that they had been supplied with apples from this consignment and were advised to take samples before permitting their sale. The fruit held in Liverpool was subsequently dealt with at a cleaning station in the south of England before passing on to the retail market.

A month later, 956 cases of Italian apples were detained following a chemical analysis. In this instance it was reported that the contamination was not excessively heavy and the apples were permitted to be sold after they had been washed in the warehouses.

Observations

A decided improvement in the packaging of fruit and vegetables has been noted in the North Market and in Queen Square. Open string nets are in wide use for the containing of heavy vegetables, such as potatoes and carrots, permitting free air circulation which was not present in the standard type of sack. In addition to this, the adoption of plastic bags for small, machine-weighed-and-washed commodities provides for hygienic and attractive displays, with the total contents readily available for the consumers' inspection.

The daily inspection of canned goods has been maintained by the food canned Goods inspectors stationed at St. John's Retail Market. As in previous years, their duties in this respect have taken them to a variety of premises including food factories, warehouses, and shops within the confines of the city boundary.

The majority of foodstuffs condemned have been disposed of at the Corporation tip at Otterspool, while the smaller quantities brought by firms to the Market for inspection have been removed by the City Engineer's Cleansing Department and subsequently destroyed as being totally unfit for human consumption.

In isolated cases where food was found to be unfit for human consumption, but suitable by means of further processing for the purpose of animal feeding, permission was granted for pig feeders to take possession of the commodity and convert it into swill.

The examination of canned goods resulted in the rejection of 51,068 cans at a total weight of 68 tons. Altogether 12,395 certificates of condemnation were authorised and issued to wholesalers and retailers in respect of the rejected tins.

Some insight into the responsibility attached to food inspection duties may best be demonstrated by the following example where a firm desired judgment on the fitness or otherwise of a consignment of imported canned hams valued at £4,500—this was brought about following several complaints concerning the product.

The inspection entailed the detailed examination of 1,500 cans canned Hams originally crated in wooden boxes. A small quantity of "blown" cans was rejected, but it became apparent during the inspection that abnormal conditions existed in the consignment. Cans which were perfect in appearance gave very slight audible evidence of slackness.

A sample portion of the cans was opened and the surfaces of the hams showed a film of wetness, which proved to be a bacterial breakdown of the gelatine.

When the hams were quartered with a knife only a few exuded an offensive odour, but every one showed obvious signs of decomposition within the area originally containing the femur. After inspection, two-thirds of the consignment were condemned, while the remaining 500 cans, which appeared unaffected, were left in the possession of the owner following an undertaking that the hams would only be sold following removal from the cans for inspection by this department.

Subsequently the firm notified their intention to open 50 cans ready for inspection prior to sale. A return visit was made and the hams subjected to a particular examination of the femur cavities which revealed decomposition. A further 50 cans were taken at random from the remainder of the consignment and similar conditions were found. As a result, the total consignment had to be rejected as being totally unfit for human food.

Canned Lunch Tongues During the summer, information was received from the Central Public Health Laboratory that cans of imported Lunch Tongues bearing a particular code series had been found to be contaminated with Clostridium Welchii and were associated with an outbreak of food poisoning at a school in Yorkshire. The Department was advised that cans of this commodity bearing assorted codes, including the suspect series, had been sent to Liverpool for sale.

The search for the doubtful cans commenced and every effort was made to track them down before they could be sold to the public. Finally, one tin was found and bacteriologically examined; the resulting report confirmed that Clostridium Welchii was present. The enquiries and investigations on the wholesale and retail markets were redoubled in an attempt to find further cans before they were opened and the contents consumed. During this search 14 further cans were found in retail shops and condemned.

As a result of this action there were no notifications of food poisoning resulting from the consumption of contaminated lunch tongue.

The sale of pre-packed frozen foods is now widely evident throughout Frozen Foods the city and suburbs, and it is likely to increase as it becomes recognised that it is possible to purchase fresh frozen commodities outside their normal season. This would appear to apply particularly to the soft and normally quick perishing species of fruit and vegetables.

The advantages of this form of food presentation are obvious in respect of hygiene, convenience, and complete utility to the consumer, providing that the commodities were fresh and wholly sound before being subjected to the final processing. Unless this is observed within the factory the above-mentioned advantages are void and worthless. This sense of responsibility rests not only with the actual manufacturer but also with the retailer, for the packeted foods must be retained within the deep-freezer until the actual times of final sale. Removal from the freezer for display purposes, or for a customer's examination, and subsequent replacement invites trouble, for it is essential that a constant temperature be maintained throughout storage.

During the year, 32 complaints were received from the School Meals School Meals Service. The nature of the complaints included fitness, adulteration, Service-Complaints quality, extraneous matter, and false labelling of foodstuffs delivered to the canteen kitchens of the Education Committee.

Each complaint was investigated by a public health inspector and reports on the findings were submitted to the Director of Education. In every case the premises from where the goods originated were inspected under the Food Hygiene Regulations, 1955, and the suppliers interviewed about the complaints. The inspections revealed that the Regulations were being adhered to in all respects.

During the year, 307 complaints were received from members of the Food public in respect of foodstuffs which had been purchased. The nature Complaints of the complaints included such matters as mould formations, decomposition, damage, vermin contaminated foods, false labelling and extraneous matter in food.

The general public are showing an ever increasing interest in the conditions under which food is manufactured and exposed for sale, and this promises well for both the trade and the consumer. In this connection there was a marked lack of interest in monetary rewards for the

harm done or the inconvenience caused through the complaint. The main reasons quoted for bringing matters to the attention of this Department were that the complaint should be brought to the attention of the firm concerned by a person of official standing, in order that there should be no recurrence in the future.

Each complaint received was carefully investigated and detailed enquiries and inspections were carried out to seek a satisfactory conclusion. The regular practice of tracing the commodities via the retailers to the wholesaler or importer was adhered to, and where these firms were outside the City boundary, letters were sent requesting that interviews be arranged to discuss the complaint. Full co-operation was achieved in this respect and the firms concerned readily agreed to the suggestions made to them concerning safety factors.

Wherever possible personal inspection of the premises and processes were carried out by the inspectors and re-visits made at the request of the particular firms to note the adoption of the suggestions and safeguards brought to their attention.

There was an increase in the number of complaints concerning slivers of glass in canned salmon, crab and tuna fish. As was expected when the complaints were received, investigation proved the "glass" to be Struvites, a condition formed by long storage resulting in the breakdown of proteins into a compound of magnesium ammonium phosphate. This condition is not harmful and the complainants were relieved to learn that they had not swallowed particles of glass, and that there would be no "after-effects."

A wide diversity of foreign bodies in food was encountered throughout the year, ranging from Filaria bicolor in cod, vegetable oil in bread, to various types of insects found in canned meats and fruits.

Goods for Export Regular inspections have been carried out in respect of foodstuffs which are intended for export from this country and require a certificate of soundness. In the main the items concerned were animal carcases or portions thereof, dried fish, and canned goods.

In no cases were the foods for export found to be unsound.

### Meat Inspection.

The year started with a vigorous clean-up and disinfection of the Meat entire slaughtering plant, tools, clothing and lairage accommodation Inspection at Stanley Abattoir and Meat Market. These operations followed the discovery of foot and mouth disease lesions in the heads and tongues of eight cows during the routine inspection of 883 cattle slaughtered on Friday morning, 27th December, 1957. The next day some 2,266 animals were slaughtered and, after inspection, the carcases and offal were moved into the Meat Market, ready for sale on Monday 30th, after which the Meat Market was closed and disinfected, re-opening on January 6th stocked with meat from centres outside a ten mile radius of Liverpool. All this incoming meat was critically inspected before release for sale on Stanley Market. On January 20th full scale slaughter was resumed at the Abattoir.

This year has seen the completion of two years operation of the train-Training ing scheme approved by the Health Committee and City Council in 1956. Scheme During this time, forty-three men have received training and gained experience in the inspection of meat. In September, thirteen of this number attended a special revisionary course at Stanley Abattoir and all were successful in obtaining the certificate of competency in meat and food inspection issued by the Royal Society of Health in November-a record which is unsurpassed by any previous achievement in this field. The difficulty of attracting men to full time work in an abattoir still remains. The nature of the work, the intensive application required, Sunday and bank holiday duty, early morning starting, are among the reasons given for not taking up full-time meat inspection work.

During the year the deputy chief inspector retired after serving for 38 years, also a senior meat inspector after 33 years' service. Both officers were awarded the certificate of meritorious service by the City Council. One meat inspector resigned to take up appointment with another authority.

At the end of the year, the permanent staff consisted of the chief Staff inspector and his deputy, three senior inspectors, one inspector, two public health inspectors qualified in meat inspection, and six assistant inspector trainees.

## Private Slaughterhouse

### Private Slaughtering

There is one private slaughterhouse in the City, at which 31,380 pigs were slaughtered. All carcases and offal were inspected at the time of slaughter. The premises are well maintained and the entire operation of humane pig slaughter is carried out in an efficient, hygenic manner. Slaughtering took place on twelve Sundays during the year, as well as on other weekdays, and the Easter and August Bank holidays.

### Knackers' Yard

### Knackers' Yard

There is one Knackers' yard in the City where 298 animals or carcases comprising 39 horses, 17 ponies, 3 donkeys, 115 cattle and calves, 120 pigs and 4 sheep were dealt with during the year. The premises are maintained in a satisfactory condition.

## Stanley Abattoir

### City Abattoir Slaughtering

The number of animals slaughtered here during the year was 351,415, all of which were inspected at the time of slaughter and are detailed as follows:—

Bulls	Bullocks	Cows	Heifers	Calves	Sheep	Pigs
333	18,923	35,820	945	14,794	215,910	64,690

### Sunday Slaughtering

Slaughtering took place on 29 Sundays and on Easter, Whit and August bank holidays during the year. The number of animals slaughtered on Sundays only, was 44,990 or 12.8 per cent of the total kill.

### Diseased Conditions

### Diseased Meat

The carcases of 96,361 animals, approximately 25 per cent of the total 382,553 slaughtered and inspected, showed diseased conditions and a detailed examination was made in each case. 2,080 carcases were totally rejected as unfit for human consumption, together with part carcases from 4,996 animals.

The condemnation of beef, pork and veal approximated to that of last year, but the condemnation of mutton and lamb carcases was more than double. This reflects the effect of the wet season, lack of good grass

feeding, and the resultant emaciation, distomatosis and the oedematous condition of a very large number of mutton carcases. The total weight of meat and offal found to be diseased and unfit for human consumption was 624 tons, comprising 201 tons of meat and 423 tons of offal.

All this meat and offal was voluntarily surrendered and in no case was it necessary to apply for a magistrate's order for formal condemnation. This reflects the confidence of the wholesale meat traders and farmers 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. (Table 55 statistical appendix).

## Custody of Detained Meat

Carcases which require part rejection, for example forequarters, Detained hindquarters, legs, or chest walls cut off, are dealt with after cooling Meat and setting. They are kept overnight in a specially constructed wired-off enclosure securely locked; and the next day are cut up and the diseased portion weighed, checked and sent for disposal.

All diseased or unfit meat and offal is taken to the Council's Disposal of by-product plant in the Abattoir and is there rendered down to produce Diseased inedible tallow and meat meal.

## Pharmaceutical Products

In addition to the various organs and glands which are normally used Medicinal for the making of medicinal extracts, for example thyroids, adrenals, pancreas, pituitaries-a considerable quantity of liver affected by distomatosis was sent for chemical manufacture. The amount of liver utilised in this way during the year was 643 tons.

## Boneless Fresh Meat

The requirements of manufacturers for lean meat during the year Boneless have maintained the demand for boned-out cow and bull carcases. Meat Sides of beef are sawn into forequarters and hindquarters and the bones trimmed out. The resultant boneless lean meat is subsequently packed in white stockinette bags and sold. It is estimated that approximately one quarter of the 35,418 cows slaughtered were dealt with in this way. In addition, much of the meat brought in from outside areas was similarly utilised.

## Stanley Meat Market

The frozen or chilled meat including offal "pitched" daily on the meat market is subjected to inspection for brine damage, decomposition, mould or other contamination, and all meat carcases slaughtered outside the Abattoir are re-inspected.

### Stanley Meat Market

As a result of this work, the amount found to be diseased or otherwise unfit for human consumption was: beef 22,583 lbs.; mutton 976 lbs.; pork 4,868 lbs.; poultry 313 lbs.; a total of some 12<sup>3</sup>/<sub>4</sub> tons.

Carcases and meat dealt with at the Stanley Meat Market, excluding the 382,553 slaughtered in the abattoir, was as follows:—

guiloos ratta dirw nd-berra bersarban besseath adı Ban qr	Beef (quarters)	Beef (pieces)	Veal	Mutton	Lamb	Pork	Mutton (pieces)
Imported frozen/ chilled	109,440	15,279	137	115,673	685,610	7,855	28,334
Slaughtered outside Stanley Abattoir	94,777	13,473	5,095	6,975	118,476	73,291	12,078

In addition to the above meat, 168,266 packages of boxes of meat, poultry and offal were dealt with.

## Tuberculosis Order, 1938.

### Bovine Reactors Tuberculosis

Sixty cows were sent into Stanley Abattoir for slaughter, and postmortem examinations on behalf of the Ministry of Agriculture, Fisheries and Food were made in each case. Although tubercular lesions were found in various organs, for example, lungs, heads, mesentery, it was not necessary to totally reject any of the carcases.

## Trichina Spiralis.

### Trichina Examination

Routine samples of pork snippets taken from the diaphragm, legs, neck, shoulders, are submitted each week to the Public Health Labora-

tory Service, who have developed a special examination technique in this work. In the 1,963 specimens examined, no trichinella were found.

## Slaughter of Animals Acts, 1933-1954.

The Acts require that no person may proceed to slaughter or stun an Slaughter animal in a slaughterhouse or knackers' yard unless he holds a licence Licences granted by the Local Authority. During the year, 148 licences were issued to slaughtermen, and in addition 238 licences were issued to Mohammedans, mainly seamen, for the slaughter of sheep at Stanley Abattoir subsequently destined for the meat of ships' crews.

## Meat and Food Inspection Classes.

The course of instruction for persons preparing for the examinations food in meat and food inspection or food hygiene were well attended and 41 Inspection students received a sound grounding in the theory and practice of meat inspection, control of food and milk supplies and the law relating thereto. The course commences in September and carries on till May on two evenings a week, one of which is devoted to practical instruction at the Abattoir; during the latter part of the course, the students visit food factories, cold stores, pasteurising plants, in addition to attending at the Abattoir during routine slaughtering operations. As well as local students, some come from the county areas of Lancashire, Cheshire and North Wales.

## Supply of Specimens.

Specimens of blood, intestines, pancreas, uteri, spleens, hearts, cysts, Specimens bovine eyes, and meat have been provided during the year for research work and use in various departments of the Liverpool University and hospital laboratories.

Morbid specimens are also prepared for the examination conducted by the Royal Society of Health and the Veterinary School of Liverpool University.

## The Adulteration of Food and Drugs.

The Medical Officer 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. This entails the constant vigilance of the inspectors who procure samples of foodstuffs and drugs and submit them to the public analyst whose duty it is to test for adulteration or impurities. Appropriate action is taken in cases where samples are found not to be genuine.

During the year 3,562 premises were visited by the sampling officers.

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 3,933 samples of food and drugs were taken or purchased, and of this number 185 or 4.7% were found not to be genuine or were otherwise irregular. This represents an increase on last year's figure which was 3.37%. This may be partly accounted for by the fact that one farmer over a period of three days sent into Liverpool 53 churns of milk, all of which were found to contain added water.

Regular routine samples of milk were taken daily from producers sending milk to Liverpool from Cheshire, Lancashire, Flintshire, Denbighshire and Shropshire.

The 3,933 samples obtained included 698 'formal' and 3,235 'informal'. An informal sample is one purchased without intimation to the vendor that it is be analysed.

Valuable information as to irregularities is obtained in this way and a variety of foodstuffs and drug preparations are checked.

### Legal Proceedings

Prosecutions were instituted in respect of 74 samples of milk found to contain added water. Convictions were obtained in 73 cases and fines totalling £306 with £76 13s. 0d. costs were imposed. In one case, concerning milk containing a small amount of added water, the Stipendiary Magistrate found that the milk was 'as it came from the cow'.

Four summonses were issued against retailers for selling fish cakes which did not contain the required quantity of fish. Fines totalling £10 with £7 costs were imposed.

During the year 351 ice creams, ice lollies and frozen confections were Ice Cream and submitted for chemical analysis or bacteriological examination. Of Water Ices these 253 ice creams were examined bacteriologically and 172 were grade 1; 45 grade 2; 16 grade 3 and 20 grade 4. Samples in grades 1 and 2 (85.7%) can be classed as satisfactory. In those cases where the bacteriological result was found to be unsatisfactory, visits were made to the manufacturing premises and advice given.

There were 35 ice lollies and frozen confections submitted for bacteriological examination and the results, as a whole were found to be satisfactory.

Analysis of 25 ice creams proved only 2 to be slightly below standard by reason of fat deficiency; all other samples complied with the requirements of the Food Standards (Ice Cream) Order, 1953.

Analysis of 38 ice lollies and frozen confections revealed that 6 samples contained small amounts of lead. Five of these samples were taken during an investigation into the methods used by one manufacturer and as a result, several soldered moulds were removed from the production line for braizing and re-tinning. Further samples proved satisfactory.

In addition to the bacteriological examination of milk and ice cream Bacterioduring the year 166 samples of other foods were examined for suitability logical Examination for human consumption, including examination for food poisoning of Foodstuffs 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, trifles, cream filled cakes, shellfish and meat and fish pastes. The results, as a whole, were satisfactory, but in a number of cases bacterial contamination was reported and appropriate action taken.

In addition to the above total 54 samples of foodstuffs were examined bacteriologically as a result of complaints made by the general public and enquiries made incidental to food poisoning.

Bacteriological Examination

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 2,373, comprising 2,036 heat treated milks, 267 tuberculin tested milks and 70 undesignated raw milks.

Five of the 2,036 heat treated milks which were examined failed to satisfy the phosphatase test for efficiency of pasteurisation and 29 failed the methylene blue test (for bacterial quality). 45 tuberculin tested milks failed the methylene blue test but the result of guinea pig inoculation of the 293 milks tested for the presence of tubercle bacilli proved that all samples were negative.

Milk Supply to Hospitals and Aged Persons Hostels

The milk supplied by contractors to hospitals and aged persons hostels is regularly sampled at the time of delivery and 152 samples were tested chemically and bacteriologically. All the samples proved satisfactory and efficiently pasteurised.

Milk Supply to Schools, and School Canteens

There were 229 samples taken at these establishments and 2 were found Day Nurseries to be inefficiently pasteurised. Appropriate action was taken at the pasteurising premises to prevent a recurrence of these results.

## Milk and Dairies Regulations, 1949.

Brucella Abortus

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.

267 samples of tuberculin tested milk were taken and 235 were specially tested for brucella abortus infection. These samples were taken from milk produced in the city and from milk sent from outside areas where: it had been bottled on the farm.

The milk from 7 city herds was found to be infected with brucella abortus and immediate measures were taken to isolate the infected cows by further individual sampling. By this means the milk from suspect cows was isolated at once and with the co-operation of the producer 71 cows were slaughtered, so that in no case was it necessary to send notices : requiring heat treatment of the bulk milk produced at a particular farm. This obviates considerable expense to the producer and at the same time safeguards the health of the milk consumer. There were no cases of tuberculosis found in any of the city herds.

## Fertilisers and Feeding Stuffs Act, 1926.

Liverpool is a centre for the milling of feeding stuffs intended for cattle and poultry. The manufacture of fertilisers is also carried on. During the year 50 samples of feeding stuffs and fertilisers were obtained for analysis.

All samples, with minor exceptions, were found to conform with manufacturers' statutory statements.

## Pharmacy and Poisons Act, 1933.

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 in the current register is 685. It was not necessary to take any legal proceedings.

## Milk Supplies.

public health inspectorial staff are responsible for the The administration of legislation governing the treatment, storage, distribution and sale of milk, and this work involves issuing 540 Registration Certificates and 2,998 licences.

Measures concerned with the securing of a clean milk supply are most Milk important in view of the vital nature of this important food, and Distribution careful supervision is essential at every stage between the factory where it is received, treated, bottled and stored, and the consumer who may be in the home, school or canteen.

Under the present departmental arrangement whereby all inspectors are available for this work, it is possible to keep a close watch on all links in the chain of milk handling, treatment, storage and distribution as each inspector is concerned in the duty of seeing that the requirements of the Milk and Dairies Regulations, 1949, and the Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949, are at all times being observed.

Although all milk is produced under the supervision of the Ministry Registration of Agriculture, Fisheries and Food, the handling, treatment, storage of Dairies and distribution of milk, other than that which is produced and

distributed by a registered dairy farmer, is controlled by the local authority with whom the distributors and their premises must be registered and licensed.

This requires a frequent check on all registered premises and routine visitation during the year revealed that 20 dairies had ceased to operate, 47 dairies required to be transferred from one person to another, and 66 new registrations were required to be effected.

All premises were inspected and made to comply with the requirements of the department before registrations were approved.

### Designated Milks

All milk is distributed under specially designated descriptionss according to its treatment and all distributors in specified areas must hold a licence in respect of each particular designation handled.

These licences are renewable annually and are collected for endorsement and re-issue by the inspectors who examine the premises to ensure that the conditions are satisfactory for the storage and sale of milk.

During the year 4,193 visits were made to premises where milk is handled.

### Registered Dairies

Number of registered dairies				540
Number of registered dairymen				568
Number of dairies which ceased to operate				20
Number of dairies newly registered				66
Number of hawkers newly registered		***		5
Number of hawkers operating at end of 1958				12
Number of distributors registered (who have			in	
Liverpool but who daily bring in supplies to				16
Number of dairies transferred from one person				47
Number of distributors of cream (as distinct	fro	m register	red	
dairymen)				145

## Inspection of Dairies

During the year 180 visits were made to Pasteuring Plants when the installations were in operation and also at times when the plant had been dismantled for cleaning and sterilising, special attention being paid to the temperatures during the water runs on re-assembly of plant before pasteurising was commenced. In each instance temperature recorders and indicating thermometers were checked, and in the 7 instances where inaccuracies were found the instruments were rectified at once. In two further instances the inaccuracy was of such a nature that the instrument affected had to be returned to the maker for overhaul.

During the year 75 visits were made to sterilising establishments and at these visits thermometers and holding times were checked on the sterilising section of the plant. One homogeniser required attention and was rectified at time of visit.

There are 5 high temperature-short time pasteurising plants operating Pasteurisation in the City. These consist of 16 separate units of capacities varying tion of Milk from 850 gallons per hour to 2,500 gallons per hour. Each unit is coupled with mechanical bottle washing plant, automatic filling and capping machinery, together with the necessary conveyor belts to cold storage rooms. During the year 1 H.T.S.T. pasteurising plant ceased to operate and the premises has closed down.

In addition to the above H.T.S.T. Plants, 5 establishments are fitted with Holder or Batch type pasteurisers. There are 10 separate units of capacities of from 150 gallons to 200 gallons each. All these establishments are fitted with mechanical bottle washing plant, automatic fillers and cappers and adequate cold room facilities. One plant has ceased to operate. In one instance an automatic rotary filler has been replaced by a new and larger type filler.

In the 4 main pasteurising establishments, automatic steam sterilising Churn plant is fitted, there being 5 mechanical tunnel-type washers and one Sterilising rotary churn washer. The remaining 6 dairies are fitted with jet washers Equipment and steaming stools. These fitments are maintained in good order and condition and are most effective in their operation.

In the 10 foregoing establishments approximately 365,000 gallons of milk are heat treated daily, the balance above the local requirements being processed for distribution outside the City area.

One establishment is fitted with a machine for the sealing and filling Cartons of cartons which are made within the machine from board lined with sheet polythene. The rate of production of this machine is 4,500 half-pint cartons per hour. This type of pack is used mainly for supplying factories and workplaces to eliminate the wastage and misuse of bottles.

The decrating, re-crating and stacking plant fitted in one dairy is operating very successfully and is shortly to be extended to the remaining units on which crating is carried out by hand.

The heat treatment packing and shipment of sterilised milk in bottles is increasing slightly, weekly shipments being dispatched to West African ports.

### Frozen Milk in Cartons

There is an increasing demand for frozen half-pint and one-pint milk blocks. These are treated in an establishment fitted with deep freeze plant and are used only for export and by the shipping companies for use on voyages. None of this milk is sold in the City and approximately 130 gallons are handled daily.

# Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949, and the

Milk (Special Designation) (Raw Milk) Regulations, 1949.

A person who is registered as a milk distributor in a specified area must also hold a licence in respect of each designation of milk which he handles and any person selling sterilised milk only must hold a licence as a vendor of this particular type of designated milk.

## Licences issued during the year totalled 2,998 as follows:

Dealer Pasteurisers		 ***	10
Dealer sterilisers	***	 	3
Vendors of tuberculin tested milk raw		 	16
Vendors of tuberculin tested milk raw farm bot	tled	 	95
Vendors of tuberculin tested pasteurised milk		 	564
Vendors of pasteurised milk		 	558
Vendors of sterilised milk		 ***	556

In addition to these licences which were issued only to registered distributors, 1,196 licences were issued in respect of the sale of sterilised milk only to vendors who were mainly small shopkeepers. 146 businesses were transferred from one person to another involving the issue of 256 licences.

### Daily Consumption of Milk in Liverpool

				meligo	T BOX IS	bay be	T on	1941.744
Cuberculin tested	milk	(farm be	ottled)	 				 780
Laberculin tested	milk	(bulk)		 				 430
Fuberculin tested	milk	(pasteur	ised)	 				 30,498
Pasteurised milk				 ***	***			 47,955
Sterilised milk				 				 12,207

Of this quantity approximately 734 gallons are homogenised pasteurised. There are some 1,450 gallons of milk produced daily in the City of which about 550 gallons are tuberculin tested (farm bottled).

Approximately 520 gallons of cream are produced daily in the City.

## Liverpool Corporation Act, 1921. Sections 475-483.

This Act empowers the Liverpool Corporation to grant licences to all premises persons keeping dairy cows, store cattle (other than dairy cows) and where Cattle pigs, subject to the premises being suitable.

At the end of 1958 the following table of licences was operative for the keeping of cattle and for pigs:—

Licences to keep cattle			 34
Licences to keep pigs			 55
Number of dairy cows permitted on licences			 851
Average number kept		11. 10	 587
Number of store cattle permitted on licences			 382
Average number kept			 183
Number of pigs permitted on licences			 3,372
Average number kept			 2,502
Number of licences forfeited on ceasing to keep	cattle		 8
Number of cattle involved in these licences			 117
Number of licences forfeited on ceasing to keep	pigs		 13
Number of pigs involved in these licences			 560
Number of new licences granted to keep pigs			 1

Routine visits were made to these premises during the year and all infringements were dealt with verbally or by notice. 250 visits were made to cowsheds and piggeries.

1,945 visits were made, for the purpose of registration, to dairy premises selling ice-cream.

## Food Hygiene.

It is now three years since the Food Hygiene Regulations, 1955, came into force, a period in which some measure of the effectiveness of their application may be assessed.

Implementation of Regulations In this City, an extensive drive was set in motion in 1956, to implement the new regulations. Much work had already been done under the Food and Drugs Act, 1938, especially in respect of improving the structural conditions and equipment of cafes and restaurants.

Previous Efforts Many thousands of pounds were spent by the members of the trade in complying with the department's specifications of work, and the first stage in the great plan for the entire overhaul of the hygiene standards in these establishments was completed. Dingy, old and worn kitchens and food rooms were given a new, bright, efficient look and the effect of this new environment for the food workers was intended to stimulate in them an added pride in their jobs and a desire to improve their own personal cleanliness and standard of work.

Workers' Reactions

This hoped for reaction was not as successful, generally, as might be imagined and, as is already known, considerable effort had to be put into the education of staffs in the need for hygienic practices in food handling.

Need for Constant Supervision Whilst a remarkable and encouraging improvement has resulted from this work by the department, the fact now emerges that unless a constant vigil is kept upon the personnel and owners of the majority of these food premises (including retail shops, canteens and clubs) the natural tendency for them is to become careless, or to succumb to the pressure of peak business periods.

Ever present Dangers Herein lie the ever present dangers which seriously beset the food trade generally and provide the sources of recurring incidents of food poisoning.

Human nature being what it is, the weakness of preferring the line of least resistance soon becomes the dominating factor in the daily routine, particularly if the work is dull, menial, or heavy.

Three years work with the aid of the Food Hygiene Regulations has not removed or even appreciably lessened this great problem.

Except in the larger establishments, little or no time is given to the Lack of training of new workers in this industry. The majority of employers still appear to display an alarming deficiency in the comprehension of the fundamentals of hygiene and the consequences of the failure to practice it.

Staff Training

Far too often the question of economics predominates over all other Economic considerations. Also the problem of employing the right types of workers militates against the advancement of hygiene.

Public reaction to unsatisfactory service is still far short of the Public pressure needed to give added weight to the enforcement of the required standards. There are definite signs of an increase in the volume of public opinion in this matter, but its effectiveness is not sufficient to speed appreciably the advancement desired by the authorities.

Increasing competition among food traders is, however, playing some Effect of part in causing certain shopkeepers to improve their standards of Competition business, but much of this effect is centred upon enhancing the appearance of the shop portion of the premises rather than in improving personal habits and practices and the tidying up of those parts of the establishments which are beyond the gaze of customers.

These are some of the facts which exist after the years of endeavour by inspectors and certain sections of the food trades. The problems of enforcement are in many respects as real and as difficult today as they were in 1955. A hard core of resistance and ignorance still exists and the work of the reformer remains difficult and vitally necessary.

The weaknesses already revealed in the Food Hygiene Regulations, Legal Weaknesses 1955, have not yet been strengthened by amending legislation.

It is appreciated that the complexities of law making are manifold and are not readily understood by the lay mind, but far too often the practical experiences gained in law enforcement appear to be treated with some degree of indifference.

Valuable Facts Valuable and positive facts have been revealed during investigations into the causes of outbreaks of food poisoning, some of which have formed the basis of scientific research.

Food Processing It has also been shown that the greatest risk of bacterial contamination is during the processing of food in factories, canteens and cafes. For this reason special attention is given to these establishments and in particular, those where cooked meats and similar commodities are prepared.

Generally the causes are connected with the human factor and not so much with the lack of, or the unsuitability of the equipment used.

Food Producers' Responsibility

The solution of overcoming the faults of the food workers lies squarely upon the shoulders of the employers and supervisors. They alone can implement the recommendations of inspectors by the training and adequate supervision of their staffs.

Sources of Contamination Personnel must be taught to understand that because the causal organisms of food poisoning are invisible, the only safeguard can be in the observance of visible precautions in every stage of their work.

Tobacco Smoking One of the most serious factors and probably the most difficult to seliminate, is that of tobacco smoking whilst the worker is engaged in the handling of unprotected foods.

Far too little emphasis is given to this danger, and there is still and urgent need for more effective publicity to be given to the risks of food contamination from this serious problem.

Inspections of Food Businesses

During the year 23,817 visits were made to retail food shops, cafes, bakehouses, licensed premises, food factories, street traders, etc., and 1,974 warning letters were sent in respect of these premises.

Attention has been given to cafes, restaurants, etc., in order to ensure the observance of hygienic practices and 884 routine visits have been made to these premises, apart from general observations during the course of other duties and enquiries.

Court Proceedings Included among the many proceedings taken in court were 2 cases concerning infringements of the Food Hygiene Regulations, 1955. Fines totalling £24 were imposed by the Stipendiary Magistrate.

Proceedings were taken against a manufacturer of fish cakes who had contravened the regulations in respect of the following:—

- 1. REGULATION 6(1).

  Equipment used at the food premises was not kept clean.
- 2. Regulation 23(1).

  The floor of the night preparation room was not kept clean.
- 3. REGULATION 23(1).

  The walls and floor of the frying room were not kept clean.

The defendant pleaded guilty and the Stipendiary Magistrate imposed a penalty of £5 on each of the three summonses.

Court proceedings were also taken against a street trader, details of which are dealt with under the section of this report relating to street trading.

There are approximately 320 clubs in the City, including licensed clubs establishments and 373 visits were made to them during the year. These visits were in respect of inspections for routine purposes and in order to advise club secretaries and committees when requested.

Considerable improvement in the general standard of hygiene is Improvements reported, particularly in those clubs which serve certain localities.

It is still a matter of concern, however, that supervision by inspectors Problem of is necessary in a number of cases, because of the tendency to slackness. This is largely due to the fact that the workers in these clubs are voluntary and, therefore, are not usually amenable to supervision or direction.

The difficulties of enforcement are also increased by reason of these Night premises being open at night only, and arrangements for access are not Inspections easy. Therefore the inspections recorded have been made at night.

It has been the endeavour of the department to give adequate attention Restaurants, to catering establishments, especially those within the central area of Cafes, Snack Bars, etc.

On the whole an excellent standard is maintained, but experience indicates that frequent visits to certain establishments are essential in order to maintain this standard of hygiene.

## Co-operation of Caterers

An encouraging number of firms and individual caterers are earnestly trying to comply with the spirit, as well as the text of the regulations and their co-operation is fully appreciated.

Consultations are welcomed by the department, which is more than anxious to help traders in the designing of the lay-out, the suitability of equipment and the welfare arrangements for staffs.

### Food Shops

Attention has been paid to some 7,000 retail food shops in the City and whilst progress is being maintained in many aspects of the Food Hygiene Regulations, there is still the demand for departmental supervision.

The same problems relating to personnel in other branches of the food trade, occur in the retail food shops and unfortunately there is evidence of that "couldn't care less" attitude in some cases.

### Unsuitable Premises

The unsuitability of certain shop premises is also responsible for some lack in the observance of hygienic practices. Regrettably there are too many premises adapted for use as food shops which are quite inadequate in size for that class of trade.

This is an insurmountable problem because of the shortage of the right kind of shops and the high costs associated with larger premises.

### Washing Facilities

The lack of the proper use of hand washing facilities is a matter of concern. Observations reveal that there is still a serious misunderstanding of the fundamental need for the thorough and frequent washing of hands. Far too often the act is a mere perfunctory rinsing of the hands in cool or cold water, without the use of soap.

### Soiling of Hands

Whilst it is appreciated that when many customers are waiting to be served and the variety of goods served to a customer sometimes causes soiling of the hands during the time of serving that customer, it is difficult and perhaps inconvenient for assistants to go away from the counter to wash their hands.

### Contamination of Food

Whatever justification there may be for this situation the fact remains that soiled hands will mean contaminated food and this can only create the risk of another case of food poisoning. This situation also indicates the extreme importance of the hand washing facilities being sited in the shop itself rather than in a less accessible part of the establishment.

Day to day cleaning of the floors and other parts of the shop is not Cleansing of always given the attention desired. This is partly due to understaffing. Premises, etc. It is strongly recommended that shopkeepers should employ cleaners where the number of assistants is kept to a strict minimum.

Employers in the food trades are responding reasonably well to the Infectious requirements of Regulation 11, Food Hygiene Regulations, 1955, Notifications although it is felt that many cases of notifiable illnesses are not brought to the attention of the local authority. During the year 205 notifications were received and appropriately dealt with.

## Fried Fish Shops.

The routine inspection of fried fish shops has received the utmost Inspections attention during the year. These inspections have been in some instances primarily of a supervisory character, as matters affecting the structural conditions of these premises have already been dealt with.

The total number of inspections of this class of premises is 403, apart from the casual or incidental visits which have been made for purposes other than the Food Hygiene Regulations.

It has been found that an increasing number of fried fish shops are Improvements being modernised. This is partly due to the high standard being set by new traders who have improved the appearance of their shops in a practical manner following consultations with this department during the planning stage.

The co-operation of the majority of persons in this trade is Co-operation appreciated. It is felt, however, that in some cases, more consideration Appreciated should be given to the modernisation of the rear portions of premises.

The restricted space at the rear of many shops presents a serious Problems of problem and in some measure retards the progress in improvements Restricted Space that might otherwise be made. This almost insurmountable difficulty can be overcome with more serious endeavour and imaginative planning.

### Ice Cream Retail Trade.

The registration in the City of ice cream manufacturers and vendors Inspections is regulated by the Liverpool Corporation Act, 1936, and there are now 1,536 premises so registered.

New Registrations It is observed that the frequency with which these businesses change hands is remarkably high. There were no less than 275 new registrations during the year, all of which, with the exception of 15, were transfers to new occupiers.

Satisfactory Standard

Special attention is given to the hygiene standard in premises of this class, for it is realised how important it is to remove every possible risk of contamination of food of this kind.

Hand Washing

It has been the purpose of this department to attain a general improvement in hand washing facilities in premises where ice cream is made and sold. Many shops have now been fitted with fixed hand washing basins and water heaters to replace the old portable bowl and "a pan on a gas-ring".

## Street Trading.

Concern of Department

The hygiene standards in stalls, mobile shops and hand-carts is a matter of great concern to the department. The efforts to obtain a permanent and satisfactory improvement are seriously hindered by the very nature of this class of trading, and the means used for conducting it.

This trade is in a class of its own, meeting certain needs of the public in the large housing estates and in the central areas of the City. In some cases it supplies sound food at prices below those charged in shops. Whatever the economic reasons for this may be, they are not the concern of this report, but the economic advantages to the public are negatived if foodstuffs sold in unsatisfactory conditions become prejudicial to the health of the purchasers.

Effect of Food Hygiene Regulations

It is already accepted that the Food Hygiene Regulations are not completely effective in dealing with street trading in food. But if they were entirely satisfactory it would be physically impossible to provide and maintain a standard of hygiene which is essential, or which is attainable in shop premises.

Mobile Shops

There is, however, one form of street trading which can be more easily controlled—mobile shops. Special attention has been given to this class of trading, and much work has been done in the securing of a considerable improvement in the vehicles used.

Traders are encouraged to bring their vans to the department's Inspection of offices where they are examined and, if satisfactory, approved. These Vehicles traders are very co-operative and readily comply with any suggestions made for improvements.

Many vehicles are now fitted with portable or other types of hand washing units with hot water, as a result of these inspections.

There are some 107 barrows and carts and 100 mobile shops operating Inspections in the City and 3,699 special visits and observations have been made during the year. Warning letters were sent in 75 cases, dealing with infringements of the regulations.

The comparatively recent development of selling "hot dogs" from Court box-tricycles in the City centre and outside sports grounds has called Proceedings for some special attention by inspectors, especially at night.

As the result considerable improvement has taken place in the way this foodstuff is stored, prepared and served. Action was also taken to prevent foodhandlers smoking and there has been a marked improvement in this respect.

In one case, however, court proceedings were taken in respect of dirty court equipment; the risk of contamination of food through the manner in Proceedings which the food was stored; the lack of suitable and sufficient means of lighting the stall at night; no supply of wholesome water; no sink for cleaning utensils and no supply of soap, clean towels or nail brush.

The case was defended, but the Stipendiary Magistrate found the summonses proved and imposed fines totalling £9.

## Transport of Food.

A review of the progress in hygiene by the food trades would not be complete without reference to the subject of the transport of food.

The methods by which food is distributed from its source of pro- Unsatisfactory duction, growth or preparation is something which is not being given Transport sufficient detailed attention by some organisations. Some foodstuffs are not receiving the protection from the risk of contamination during transportation, that they receive during processing or in the retailer's shop.

Inspections

For this reason, inspectors examine food vehicles of all types at factories, bakeries and places of delivery. Such matters as the defective or unsuitable fabric of the vans, lack of adequate cleansing, bad arrangement of foodstuffs during transit and the provision, where advisable, of hand washing facilities, are brought to the attention of the owners. This action has resulted in a greatly improved standard in all phases of food transport.

Delivery of Bread and Confectionery There is still, however, a number of vehicles carrying bread and cakes, which are driven with the van loading doors open. This practice is particularly serious and steady progress is being made to overcome this problem.

Protection of Bread and Cakes The problem of protecting food during transit is a difficult one because of the complexity of the circumstances associated with this aspect of food distribution.

The only satisfactory way to minimise effectively the risk of contamination is for suitable foods to be prepacked or wrapped at the source of production. This practice is steadily growing as the economic difficulties are resolved.

Meat Transport Some aspects of the delivery of meat to retailers' premises are still causing concern and although improvements are encouraging, the old methods and ideas die hard and bad habits continue in many instances.

Vehicles

The design and condition of meat delivery vehicles have improved greatly, but there are too many small vans being used which are entirely unsuitable for this work. Small traders very often take serious chances by using obsolete and unsatisfactory means of transport. Some are even using private cars which are also used for other purposes than the carrying of meat or other foods. These vehicles are extremely difficult to keep clean, and very often one sees supplies of vegetables, provisions, meat and fish all inadequately packed or wrapped, jumbled together in a small space at the back of the car or van.

Action by the Department

This is a matter which requires more serious attention. Inspectors deal with the cases they are fortunate enough to observe in time, but there are many cases where traders are not accepting their share of responsibility and are "on the road" before official action can be taken.

### Types 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 Regulations, 1955, and Local Byelaws are as follows:—

### FOOD PREPARATION PREMISES

Bakehouses								189
Industrial canteens .								205
School kitchens .								258
Brewing, beer and mi	ineral	water	bottlin	g	***			44
Spice manufacturers								4
Bacon curing								11
Preserved meat and s	sausag	e man	ufactur	rers				212
Biscuit manufacturer	8							5
Jam manufacturers .								6
Fruit cleaning .								9
Custard and meal po	wders							4
Millers, flour and rice								17
Pickles								3
Sweet confectionery .								13
Coffee and tea packir								20
0 0								8
m i i			***					8
Edible fat manufactu	irers							4
Miscellaneous food pr	roduct	8						32
Ice cream and ice lol								43
	TOTAL	T TO	OD BU	CINEC	cre			
F	EIAI	L FU	OD BU	SINES	SES			
Licensed premises								1,152
OCT !								94
7								1,536
Bread and confection								459
T) / 1								626
Cafes, snack bars, etc								285
0 1 1								53
Delais-				***				205
	ltoror							237
Fishmongers and por								1,347
			***	***		***	***	798
	m.o		***		***	***	***	
Grocery and provisio								876
Sweets, minerals, etc				***				1,278
Fish frying establish	ments					***		417

## DISINFECTION AND DISINFESTATION

This section of the department with its varied duties is connected in a greater or lesser degree with almost all of the services for which the Health Department is responsible, duties which are expanding as the functions at the department continue to grow.

A list of the duties carried out by this section are given herewith, followed by a brief summary containing more detail.

### Functions

- Inspection of premises for verminous condition.
- Disinfestation treatment of verminous premises.
- Disinfestation treatment of verminous furniture, etc. 3.
- Disinfestation and disinfection stations. 4.
- Disinfection of infectious premises.
- City Mortuary.
- 7. Burial Service.
- Storage, distribution and collection of Home Nursing equipment.
- Mobile meals service.
- Food and general store.
- 11. Welfare Foods service.
- Poliomyelitis Immunisation-Transport. 12.
- Miscellaneous services.
- The Liverpool Show.
- 1. Inspection of Premises for Verminous Condition.

Inspections

Inspections of dwelling houses, hospital premises, canteens, cafe for Verminous kitchens, locker rooms and various factory premises originate from a number of sources, and may be divided into the following categories:-

> (a) The majority of inspections of dwelling houses are made on behalf of the Housing Department and they are carried out with the intention of obtaining information regarding the verminous condition of furniture and effects belonging to those families who are 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 a growing number of requests which are received from owners or occupiers who suspect that the 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.
- (c) Hospital Management Committees are increasing their Hospitals requests for inspections and treatment of those hospital premises where cockroach or steam-fly infestation is suspected.
- (d) Inspection of staff canteens is a regular feature of this Canteens branch of the service, as these premises frequently become infested with steam-flies or cockroaches. The cost of any treatment required is debited to the owner of the premises.
- (e) Food manufacturers frequently call upon the services of this section when it is suspected that minor infestations of vermin are occurring in the premises.

The department occasionally receives complaints of insect infestation Improved but on investigation it is sometimes difficult to identify the type of Conditions insect. For the purpose of classification in these cases, the local office of the Ministry of Agriculture has given very useful advice.

Although the number of visits made, and the number of verminous premises treated shows an increase on the previous year, it is not to be assumed that the incidence of vermin infestation is increasing, but rather that members of the general public are becoming more aware of their duties in this direction and are making greater use of the services of the department.

The number of inspections during the year in all these connections was 7,652 of which 2,873 were found to be vermin infested.

2. Disinfestation treatment of Verminous Premises.

As a result of the inspections detailed in the previous paragraphs, Premises disinfestation treatment was carried out in the following cases:— Treated

- (a) 665 dwelling houses treated at the request of the Housing Department.
- (b) 490 dwelling houses treated at the request of owners or occupiers.

(c) 261 treatments of hospitals, staff canteens, factory premises etc.

a total of 1,416 treatments.

### Verminous Furniture etc.

3. Disinfestation treatment of Verminous Furniture etc.

The disinfestation of dwelling houses usually necessitates 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 1,457 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. These are premises in which the occupants have been removed to hospital or are unfit to adequately clean the premises unaided.

## 4. Disinfestation and Disinfection Stations.

There are two stations in continual use, one is at Smithdown Road and the other at Charters Street. They are used primarily for the disinfestation of verminous articles from premises in course of treatment and the disinfection of articles removed from premises and ships in which infectious disease has occurred.

They also derive an income from the precautionary disinfection of various articles intended for export. This work is performed on behalf of various undertakings who are prepared to defray the cost of such treatment.

The amount of work carried out in this connection is: -

5,451 verminous articles disinfested.

17,573 infectious articles disinfected.

21 infectious library books disinfected and returned to circulation.
3,990 articles disinfected as a precautionary chargeable measure.

1,149 tons of miscellaneous goods, the outer wrappers of which are disinfected as a precautionary chargeable measure.

## 5. Disinfection of Infectious Premises.

In the event of infectious disease occurring in any premises, the Infectious necessary disinfection is carried out by staff from this section and Premises and infectious bedding and personal effects are removed to the disinfection stations for treatment.

In this connection, 1,242 infectious premises were disinfected during the year.

Requests are frequently made for treatment of premises in which disease of a non-infectious nature has occurred and in these cases, treatment is carried out, the cost being debited to the person requesting such treatment.

## 6. City Mortuary.

The control of the City Mortuary is the responsibility of the Health Department. It is used for the reception from the City and the river of the bodies of persons who have died in unusual circumstances.

During the year 552 bodies were received, and on the instructions of the Coroner, 495 post-mortem examinations were held.

## 7. Burial Service.

Section 50 of the National Assistance Act 1948, imposes a duty on the Local Authority to arrange for the burial or cremation of persons found dead in the City, where it appears that no suitable arrangements are being made by relatives or friends.

During the year, this service arranged for the burial or cremation of 142 adults and children and 3 stillborn babies.

As an auxiliary to the service, the Health Department has an arrangement with local Hospital Management Committees for the transfer of bodies between hospitals. Under this arrangement 111 bodies were transferred during 1958.

It is the policy of the Department whenever possible to arrange for othe cremation of these bodies. It is, however, very important to sinstitute careful enquiries from friends or relatives regarding the wishes of the deceased before any arrangements are made.

## 8. Home Nursing Equipment.

The provision of equipment suitable for the nursing of persons who are ill at home is a service provided by the department. The number of items in use is growing continually as evidenced by the fact that 2,086 visits were made during the year for the purpose of providing or collecting equipment.

The storage, distribution, collection and maintenance of the varied types of equipment now in use is handled by this section of the department.

### 9. Mobile Meals Service.

Meals on Wheels Two vans are still in use in this service, and 11,573 visits were made to the homes of persons who were in need of the benefits to be derived from the provision of cooked meals.

The meals are provided each Monday, Wednesday and Friday in a limited area within easy reach of Westminster House, from the kitchens of which the meals are obtained.

It is hoped that arrangements can be made to increase this service during the coming year.

### 10. Food and General Store.

This store which is situated at Gascoyne Street Depot, continues to function in a satisfactory manner despite accommodation difficulties. The value and volume of goods handled continues to increase each year. The actual value of the turnover in 1951 was £9,000 whereas the value during 1958, was £22,000. Food, chandlery and general stores are supplied to 148 establishments, the majority of which are those under the control of the Health Department, but included in this number are several establishments belonging to the Children's Department, School Medical Department and one Police establishment.

The complete list of establishments which are supplied from this store is:-

- 25 Maternity and Child Welfare Centres.
- 12 Day Nurseries.
- 61 Domiciliary Midwives.

- 13 Aged Persons Hostels.
- 5 Mental Health Establishments.
- 9 Children's Department Establishments. Police Training College.

## 11. Welfare Foods Service.

The distribution of welfare foods from the Central Store to the various distributing centres is carried out by this section and full details will be found on page 27.

## 12. Poliomyelitis Immunisation—Transport.

The Poliomyelitis Immunisation scheme, the scope of which is now considerably increased, depends on urgent transport of the necessary vaccine. The transport is provided at short notice by this section.

### 13. Miscellaneous Services.

Miscellaneous services include :-

- (a) The collection and removal of furniture and equipment to and from the Aged Persons Hostels.
- (b) Collection, repair and delivery of Day Nursery equipment and furniture.
- (c) Transport of equipment on behalf of the Mental Health Service.
- (d) Various transport duties on behalf of the Children's Department.
- (e) On behalf of the Midwifery Service, gas and air-machines are delivered without delay to the homes of patients.
- (f) Transport required from home to hospital of milk required for the feeding of babies who are patients in hospital.
- (g) 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.
- (h) 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.

- (j) At the latter end of the year a scheme for the transport of Port Health personnel to and from their places of work, was inaugurated by a vehicle from this section.
- (k) A variety of other transport duties necessary for establishments under the control of the Health Department.

## 14. Liverpool Show-1958.

This section played a considerable part in "behind the scenes" efforts to make this part of the show an unqualified success. Most of the stands used in the marquees were constructed and erected by the staff of this section. These stands are available for future shows or exhibitions and it is hoped that, with suitable additions, they will be used at the 1959 show.

## Summary.

STAFF.

With the exception of the Welfare Foods Service, the foregoing variety of duties for which this section is responsible are performed by a total staff of 44 comprising:—

#### ADMINISTRATIVE STAFF

- 1 Chief Inspector
- 4 Inspectors
- 1 Clerk
- 3 Foremen
- 1 Storekeeper

#### OPERATIONAL STAFF

- 2 Mortuary Attendants
- 1 Mechanic
- 2 Joiners
- 2 Boiler Attendants
- 11 Drivers
- 16 Disinfestors, Disinfectors, etc.

### Vehicles and Maintenance.

Sixteen motor vehicles are in continual daily use and during the year have covered 142,211 miles and consumed 9,210 gallons of petrol. The complete maintenance of these vehicles is carried out by the staff at Gascoyne Street Depot.

## CIVIL DEFENCE

During the year, the members of the Ambulance and Casualty Ambulance and Casualty Collecting Section of the Liverpool Civil Defence Corps responded very Collecting well to training. The training syllabus, covering all aspects of Civil Section Defence, including elementary rescue and first aid, extends over a period of 24 weeks. Four training courses were arranged for new entrants and 88 persons attended. Advanced training courses were held and there are now 197 persons holding the Silver Star, of whom 60 qualified for the Scarlet Flash.

Owing to the continued interest, it became necessary to form two Divisions. One at Civil Defence Headquarters and the other in the north of the City. Two persons were promoted to Superintendent and act as Officers in charge of the Divisions. Other ranks of Deputy Superintendents, Assistant Superintendents, Station Officers, Shift Leaders and Deputy Shift Leaders were created and some thirty members of the Section now hold rank. The members meet once each week on "division" nights and undertake practical training, including first-aid, and there are film shows. The regular attendance of the members has been maintained.

The Ambulance and Casualty Collecting Team competed at the North West Civil Defence Regional Tourney at Manchester, but were not successful in gaining a high placing. One member of the staff attended an Ambulance Officers' Course at the Home Office Civil Defence School, Falfield, Gloucestershire.

A large scale exercise was held at Aintree Hospital to test the operation of the Civil Defence Corps and the Hospital Services. All sections of the Corps took part and the lessons learned proved invaluable in training.

A Bedford Civil Defence Ambulance issued by the Ministry of Health on loan to the Liverpool Civil Defence Corps has been used extensively by this and other authorities for training purposes. The Driving School continued training drivers, and eight trainees passed the official driving test. Personnel who have previously passed through the school and qualified rendered valuable assistance in giving driving practice to trainees.

Shelter Welfare

Due to the marked lack of volunteers coming forward for this particular section of the Civil Defence Welfare Services, no courses were arranged during the past year. A number of talks were, however, given on this subject to branch meetings of various organisations in the city.

Welfare of the Homeless, Evacuation and Billeting)

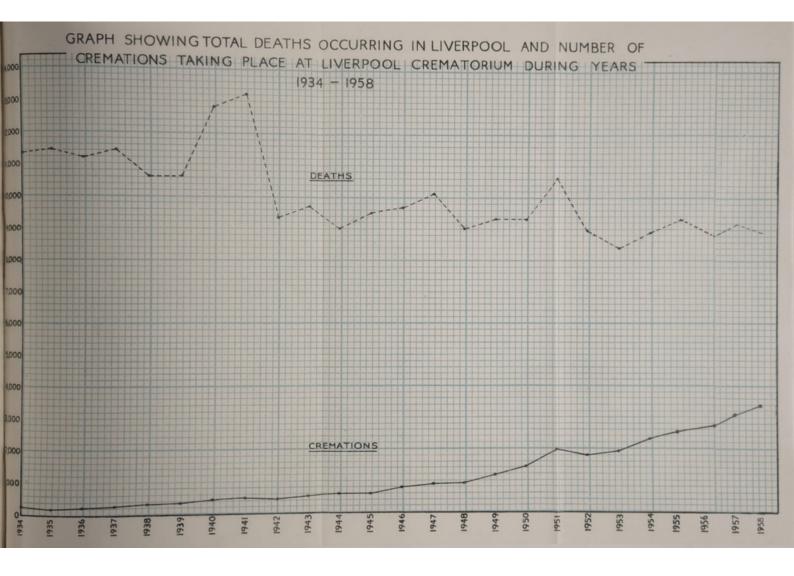
January 1958, saw the completion of a course of lectures to new Section (Care volunteers in the Welfare Section (Care of the Homeless, Evacuation and Billeting).

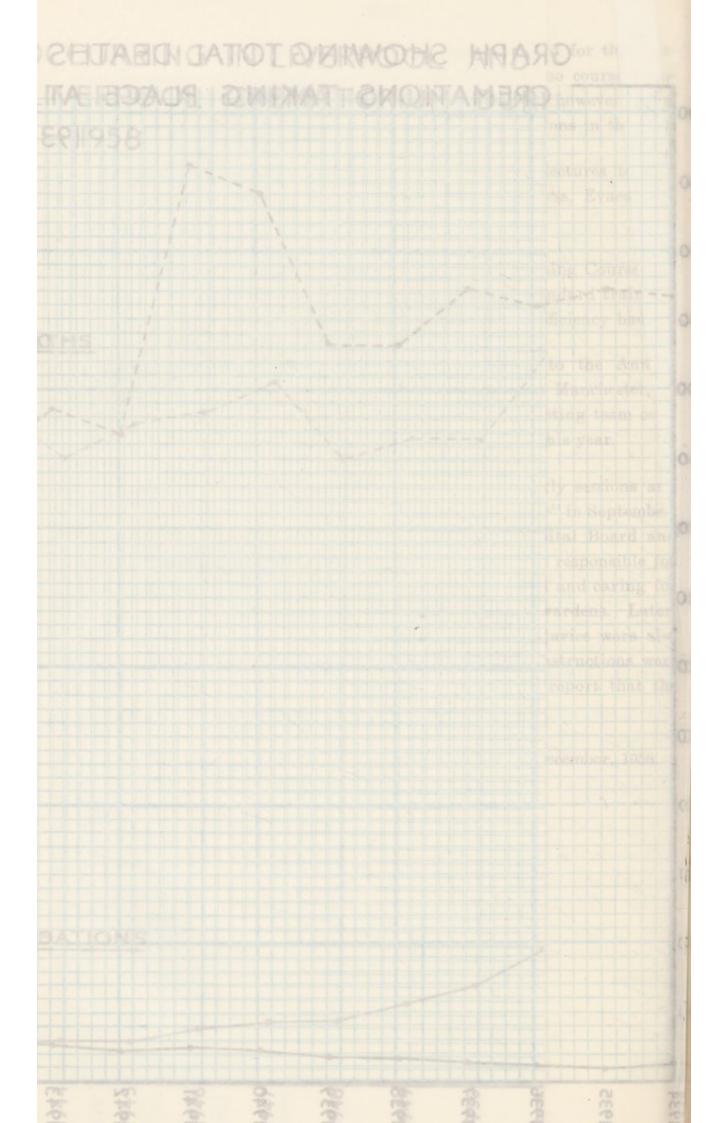
> During March, a combined First Aid and Home Nursing Course was held for volunteers who had already completed their standard training, thus enabling several members to qualify for their proficiency badges.

> Weekly practices and training took place prior to the Annual Regional Civil Defence Competition held at Belle Vue, Manchester, in June. The Care of the Homeless, Evacuation and Billeting team competed, but unfortunately did not gain a leading place this year.

> A group of "regular attenders" met for three weekly sessions and then formed a team which took part in "Exercise Aintree" in September. This was a combined exercise with the Regional Hospital Board and held in the grounds of Aintree Hospital. The team was responsible for opening a Rest Centre with limited equipment provided and caring for the "homeless" people who were directed there by the wardens. Later, walking casualties who had been treated for their injuries were also directed to the Rest Centre which became so full that instructions were issued to open another. It is pleasing to be able to report that the members of the team responded well to their task.

A thirteen-week course for new volunteers ended in December, 1958.





## CREMATION.

The Medical Officer of Health continued to act as Medical Referee to the Liverpool Crematorium. The Deputy Medical Officer of Health and a Senior Medical Officer act as deputy Medical Referees. The statutory documents connected with cremations are scrutinised at the central offices of the Health Department before the Medical Referee gives authority to cremate.

Cremations as a means of disposal are growing steadily amongst all classes of the community. So far as Liverpool is concerned, since 1940, for example, when there were 482 cremations, the number has now increased to 3,348 during 1958, which is an increase of 266 over the number carried out during 1957. This is despite the opening of new crematoria in adjacent areas. The graph facing shows the gradual increase in the number of cremations taking place at the Liverpool Crematorium since the year 1934, together with the number of deaths occurring in Liverpool during the same period.

The usual difficulties were encountered where mistakes and omissions were discovered on the forms completed by doctors and persons making the applications for cremations.

It was noted with interest that the number of cases dealt with through the City Coroners of the various districts had increased considerably, indicating that more sudden deaths have occurred than in previous years.

It is also interesting to note that during January, 1958, official instructions were received from the Home Office to the effect that, in future, a prescribed form had to be used in cases for cremation being brought to Liverpool from Northern Ireland, replacing the Coroner's Form "E", but not serving exactly the same purpose, as the new form is intended solely as an authority to remove the body out of Northern Ireland, giving the cause of death together with circumstances. During the year, quite a number of cremations were received from Northern Ireland and the Isle of Man.

## WATER SUPPLY

The water supply in the area during 1958 was satisfactory both in quality and quantity.

Bacteriological examinations and chemical analyses of the waters were made regularly by the Public Health Laboratory Service and the City Analyst, samples for these examinations being taken both in the City and at Prescot Storage Reservoirs.

During the year, the Water Committee purchased apparatus for use by the City Analyst in testing samples of water for radio-activity.

The supplies from both Rivington and Lake Vyrnwy are filtered through slow sand filters, and chlorinated; they are also limited in order to raise the pH value. Further chlorination is carried out at the Prescot Reservoirs.

There are no parts of the area dependent upon standpipes for a supply.

## **NEW BUILDING**

From December, 1957, the Department had been operating from the Opening new offices in Hatton Garden and on 21st February, 1958, the official Ceremony opening ceremony took place. Alderman Alex. Griffin, J.P., the Chairman of the Health Committee, invited the Lord Mayor (Alderman Frank H. Cain, LL.D.) to declare the building open and unveil a commemorative plaque. The Lord Mayor then formally declared the building open and unveiled the plaque.

A vote of thanks to the Lord Mayor was proposed by Alderman John Braddock, Chairman of the Finance and General Purposes Committee, and seconded by Alderman M. J. Reppion, Deputy-Chairman of the Health Committee. Then followed an inspection of the building and of the office accommodation. The Lord Mayor and Lady Mayoress, the Members of the Health Committee and guests then proceeded to the Exchange Hotel for lunch.

The new building has been allocated to sections so that those with the Layout highest number of callers, or where the callers were likely to be handicapped by age or infirmity, were situated on the ground and first floors. The allocation of global space to provide for visiting staffs has meant that medical emergencies such as mass inoculation or-vaccination sessions merely mean a temporary transformation of an area, and this can take place with a minimum of inconvenience. It was also possible to make provision because of this for facilities to instal a mass radiography plant for a period, and also for additional temporary staff in connection with the mass radiography campaign, which will be reported in detail in next year's annual report.

The new building in Hatton Garden has been erected to the design Architectural and under the supervision of Ronald Bradbury, Ph.D., F.R.I.B.A., A.M.T.P.I., the Liverpool City Architect and Director of Housing, and consists of a basement, ground floor and four storeys. There is also a flat roof which can be used as a promenade or solarium by the staff in good weather, and is also used as a site for various atmospheric pollution recording devices as the building is in the centre of the city.

Tenders for the work, based on Bills of Quantities prepared by Messrs. Langdon & Every, Quantity Surveyors, of 4 Church Street, Liverpool 1, were submitted to Committee in November, 1954, when that of the Peak Construction Co. Ltd., of 95 Broad Lane, Liverpool, 11, amounting to £127,795, was recommended for acceptance. In March, 1955, work started on the site and proceeded continuously until December, 1957, when the building was finally occupied by the Health Department. The inscribed stone plaque, set in the South Entrance Hall to mark the opening ceremony, was executed by H. Tyson Smith, the Liverpool Sculptor, of 36, Bluecoat Chambers, College Lane, Liverpool, 1.

The new building in Hatton Garden allows the Department to function once again as a co-ordinated unit.

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cording devices as the building is in the centre of the city.

## GENERAL REVIEW OF LOCAL HEALTH SERVICES UNDER NATIONAL HEALTH SERVICE ACTS.

The Council will remember that in Circular 29/52, 19th August, 1952, they were asked to arrange for the Medical Officer of Health to prepare a special survey of the first 5 years' work of the local health authorities services under the National Health Service, for inclusion in his Annual Report. This was published in the Annual Report for 1952, pages 178 to 215, respectively. The Minister does not now consider it necessary for a special survey on the same scale to be made covering the first ten years' service, but has asked for a shorter general review to be included in this report.

For convenience, the same fourteen headings are used in this brief general summary and reference will be made on occasions to the earlier report of 1952.

The administration of the Health Department of Liverpool has not 1. Adradically changed during the past five years. There has been an increase ministration of both medical and professional lay staff to meet the increased work, and in particular there has been the appointment of a full-time Assistant Medical Officer to undertake the prevention and care of tuberculosis.

## Maternity and Child Welfare.

## (a) at hospitals:

The arrangements referred to in the 1952 report have generally con- with other tinued satisfactorily. There has, however, been a marked increase in National the number of health visitors attending paediatric clinics at not only Health Service Mill Road Maternity Hospital but at all paediatric hospitals within the city. These arrangements have functioned satisfactorily and have helped considerably in ensuring that the after-care work of paediatric patients continued smoothly.

2. Co-ordination and cooperation

## (b) by general medical practitioners:

Co-operation between the local health authorities and general medical oractitioners in regard to maternity and child welfare services have mproved considerably. Due to the increased ante-natal care at present being carried on by general practitioners and hospitals a number of ante-natal clinics within the city have been shut, but in an increasing number of instances, midwives have regularly attended special sessions arranged by general practitioners in their surgeries. Thus over the last five years there has grown up a closer co-ordination between the general practitioners and the local health authority in regard to the maternity services.

## 3. Joint Use of Maternity and Child Welfare.

Two consultant obstetricians are employed by the local authority, one took three ante-natal clinics each week and the other took one ante-natal clinic per week. The lecturer in public health at the University took two infant welfare clinics each week. It is proposed early in 1959 to make a joint appointment between the University and the local authority and appoint a paediatrician who will undertake four infant welfare sessions weekly at one of the clinics, the remainder of his salary being made up by the Department of Child Health.

## Health Visitors attending outpatient departments.

Since 1952, there has been a great increase in the number of health visitors attending routine paediatric outpatient departments at children's hospitals within Liverpool. In addition, a full-time health visitor is employed on after-care duties in relation to diabetic patients and attends the diabetic clinic at the Northern Hospital regularly.

Recently two health visitors started to carry out similar care and after-care work in relation to epilepsy and attend Alder Hey Hospital, at which many of the epileptic cases in children are treated, and the Royal Southern Hospital, where a special clinic is held for epileptic patients. In this way, the care and after-care services for epilepsy have been strengthened in the past few years.

#### Tuberculosis.

With the appointment of a full-time Assistant Medical Officer to organise care and after-care services for tuberculosis within the city, there also followed a great strengthening of the existing staff and there are now eighteen nurses, including three male nurses, undertaking the duties of tuberculosis visitors. Maternity and Child Welfare.

4. Voluntary

The various voluntary organisations referred to in detail in the 1952 Organisations report have continued to assist materially in maternity and child welfare. In addition, there has been built up an even closer liaison between some of these services and the welfare service section of the department.

#### Ambulance Service.

The Ambulance Service was taken over completely in 1952 by the Corporation, so terminating the arrangements which had operated for four years with the Merseyside Hospitals Council.

Expectant and nursing mothers.

At present there are twenty-three weekly ante-natal clinics held in Expectant and twenty district centres, and in each of these post-natal examinations are Mothers and made. It will be seen from the previous report that this represents a Children marked reduction on the thirty-seven ante-natal clinics held in 1953. Age As referred to already, a scheme has been adopted whereby assistance is given at clinics in general practitioners' own premises for ante-natal patients. Specimens of blood have been collected, as in the past, from all ante-natal clinics and sent to the Blood Transfusion Centre for examination.

Mothercraft training has continued to be developed as far as possible.

In 1953 a physiotherapist was appointed by the city to carry out relaxation exercises in ante-natal patients. This has continued throughout the period most satisfactorily.

## Child Welfare.

There are 55 weekly child welfare clinics held in 24 centres. These continue to be well attended and have not in any way suffered the decline which has been apparent in ante-natal clinics.

Health education on all matters has been continuously stressed and developed in the past five years with the use of many different forms of visual aids to assist in this essential work.

## Care of premature babies.

There has been a significant and most important change made in the city in the care of premature babies. In 1955 and 1956 two specially

5. Care of under School trained midwives were employed to look after the larger premature babies born and/or nursed at home. In 1957 a third nurse was appointed. This new service had a remarkable effect on the outcome of premature babies and following the years in which they were employed, the infant mortality rate fell from 36 to 28.

Supply of dried milk and other foods.

In 1954 the Ministry of Food relinquished their duties in relation to the selling of dried milk locally and this was taken over by the Health Department. Special services have been developed to encourage wide distribution including the use of a mobile van.

Dental Care.

There has been little change in the arrangements for dental care within the city.

6. Domiciliary Midwives

There are 82 midwives practising in the city at present. Of these, 60 are in the municipal service, 14 working in the Liverpool Maternity Hospital, one in independent practice and seven as maternity nurses.

Difficulties are increasingly being met in the recruitment of midwives. At present, three of the midwifery staff are continuing to work on long after retirement age and it is likely that these difficulties will increase in the future.

7. Health Visiting There are 78 health visitors employed in the city and, in addition, four trained nurses approved for such duties enumerated in the larger report of 1952. Health visitors have been used increasingly on infectious disease follow-up work, particularly in relation to poliomyelitis and smallpox. They have also been used specially in the recent Mass X-ray Campaign. Liverpool has continued to act as a very active training centre for health visitors and twenty students are accepted each year. This number will, in 1959, be increased to twenty-five in an attempt to build up the service and recruit more health visitors. Residential accommodation is not provided by the local health authority but students have no difficulty in obtaining it. Students have been moved from one of the maternity and child welfare centres to the School of Hygiene as the facilities there are better for a larger class. Health visitors are allowed to attend refresher courses arranged for health visitors and school nurses.

In 1958, health visitors were sent to attend special courses in the training of radiation hazards for the first time, and the Superintendent Health Visitor attended a full-time two weeks' course run by the Liverpool College of Technology. It is hoped that other senior members of the health visitor staff will be sent on similar courses in the future so as to build up a nucleus of trained personnel to carry out this work.

The home nursing service has continued to be carried out by the 8. Home Liverpool Queen Victoria District Nursing Association acting as agents for the local health authority. This Association has continued to work from one central home but has shut all its subsidiary homes with the exception of one, and opened special centres. Agreement was reached in 1957 for the Queen Victoria District Nursing service to cease in the future to carry out home nursing duties within the city and the City Council to take over these duties. This take-over will now take place on 31st December, 1959. The District Nursing Association has given to the Corporation its Walton Home which will in future be used as a training centre for district nurses and the Corporation has indicated that it wishes to continue membership of the Queen Victoria District Nursing Association so that its nurses can continue to be Queen's nurses.

It is hoped, following the take-over of the home nursing duties that there will be considerable innovations in and extensions made to the district nursing field in Liverpool.

#### Vaccination.

The number of primary vaccinations in Liverpool is best seen by the 9. Vaccination table given below, when it will be realised that in the early part of the and Immunisation last five years a significant fall in the number of children vaccinated was noticed. Following this, special steps were taken to try and persuade more mothers to get their children vaccinated either by their own doctors or at home, and this did lead to a slow but steady improvement.

1954			 6,989	
1955			 7,677	
1956			 7,414	
1957	***		 8,250	
1958		***	 11,112	

The figures in 1958 were given a remarkable boost following the smallpox outbreak which occurred on Merseyside in May and June. However, if the number of adults vaccinated is taken into consideration the number of young infants vaccinated was 8,832, which is still relatively low in proportion. It is disappointing that even with the occasional outbreak of smallpox in the port, the numbers of parents who agree to have their children vaccinated is not high.

## Diphtheria immunisations.

Diphtheria immunisations have continued satisfactorily. It is most interesting to note that in 1958 there was a remarkable increase in the number of primary vaccinations carried out and it is felt that this is more likely to be due to the wider use of combined vaccine which probably is responsible for the increase by 3,738 inoculations, making the total diphtheria immunisations for 1958, 14,938 compared with 11,200 in 1957.

## Whooping Cough immunisation.

The last five years has seen a remarkable change in whooping cough immunisation. This was first introduced in 1953 and has steadily grown in popularity until in 1958, 12,832 infants were immunised for the first time.

Even more significant is the fall in the number of cases of whooping cough which has been observed and although these are given in detail in this report, they are repeated here so that the probable effect of immunisation can be clearly seen:—

Levin Car Irvan	1954	 	1,933	cases	
	1955	 	2,490	cases	
	1956	 	2,559	cases	
	1957	 	1,726	cases	
	1958	 	474	cases	

## Poliomyelitis immunisation.

Poliomyelitis immunisation was introduced first in 1956 and has steadily developed in 1957 and 1958. 53,659 young persons were completely vaccinated against this disease in 1958 and, in addition, 25,600 booster doses were given. It is now estimated that roughly 39 per cent of the age group which could have been immunised have been protected.

The rate is considerably higher in the under 15 year age group than in the 15/25 year group and steps are at present being taken to try and encourage this age group to come forward more readily for immunisation.

The following table indicates the number of patients conveyed each 10. Ambulance Service year from 1948-1958.

1948	 	 53,963	
1949	 	 86,700	
1950	 	 98,064	
1951	 	 114,241	
1952	 	 129,495	
1953	 	 188,568	
1954	 	 199,244	
1955	 	 211,183	
1956	 	 213,718	
1957	 	 213,031	
1958	 	 217,979	

It will be seen that there has been a steady increase. One of the outstanding developments has been the most satisfactory arrangements which have been made with various local authorities in North Wales whereby ambulances coming to the city now report directly to the Liverpool Control Headquarters for instructions. This arrangement, which was finally made during the petrol shortage following the Suez crisis has worked very smoothly and has meant that on very few occasions does an ambulance come from Wales and return home empty. Arrangements are made between the neighbouring Welsh authorities so that if need be an ambulance from one county will make a special journey outside its route so that it can take back a patient to his home from a Liverpool hospital. These arrangements have materially reduced the number of outside journeys made by Liverpool ambulances during the last three years. In this way it has been made possible for the increased demand on the service to be met without a great increase in the number of vehicles.

#### Tuberculosis.

The tuberculosis prevention care and after-care services have been 11. Tubercuconsiderably increased in scope since 1954. The staff has been greatly losis Prevenincreased and strengthened with the appointment of a full-time Assistant After-care Medical Officer to supervise this work, and, with the extension of the number of tuberculosis visitors to eighteen from ten, this has meant

tion Care and

that the case load of each tuberculosis visitor is now roughly 460 patients. In addition, to assist the tuberculosis visitors in carrying out their work, a modern statistical system has been introduced whereby every tuberculous patient is selected regularly for routine home visiting. Patients who are in the acute and active stage of this disease (a stage which roughly lasts from one to two years after notification) are visited at home every two months by the tuberculosis visitors, and patients who are quiescent but still on the register, once in six months. This latter arrangement ensures that any female patient, who is quiescent and becomes pregnant is recognised early so that suitable arrangements can be made to help her in her pregnancy.

The Corporation's tuberculosis visitors continue to work in the four chest clinics and there is considerably improved co-ordination between their work following the introduction of the full-time Assistant Medical Officer to carry out this work. The Health Committee has not continued the Tuberculosis Prevention and After-care Sub-Committee, but this work has been taken over by the Handicapped Persons Sub-Committee. There has also been a considerable increase in the number of tuberculosis patients sent to Colonies.

During the last three years increasing use has been made of the powers under section 172 of the Public Health Act, 1936, to secure admission to hospital of unco-operative infectious patients. The section was first invoked in 1957 when a Magistrate's Order was granted in one case, and in 1958 four such cases were admitted to hospital under these orders. There has been a great reduction in the number of refusals to accept hospital admission following the occasional use of these powers.

During 1958, with the appointment for the first time of a domiciliary occupational therapist, it has been possible to extend the after-care work of tuberculosis and to include domiciliary occupational therapy in some cases. Two more occupational therapists have just been appointed by the city, so the staff in 1959 will be at least three and it should then be possible to develop a much wider service in this sphere. There have already been one or two outstanding examples of the way in which such a service can be of value, particularly with chronic patients who have been confined to their homes for a long period of time.

Illness generally—Occupational Therapy.

The establishment for the first time of an occupational therapist in 1958 was a great step forward in the care and after-care work for illness of severely handicapped people. At first, this officer had to confine most of her duties to the severely crippled and physically handicapped people at home, but with the appointment of two further occupational therapists in 1959 it is hoped that this will be able to be extended throughout all types of illness.

Other arrangements mentioned in the 1952 report have continued. V.D. Welfare.

The after-care work in relation to venereal disease has continued along the same lines as outlined in the 1952 report, although with the welcome fall in the number of cases of venereal diseases it has been possible to reduce the staff to one male and one female welfare visitor. Contact tracing has continued at the same high level.

The home help service has increased in size remarkably during the Helps last five years.

The staff now consists of:-

1 Organiser.

1 Assistant Organiser.

2 Assistant Female Visitors.

2 Clerks.

198 Home Helps, of which 20 are full-time.

The emphasis of the home help service has changed considerably. When it was first introduced in 1948 the majority of cases were because of either acute illness or home confinements. Now by far, the largest proportion of cases are for old people and chronic sickness. This change can best be illustrated by seeing the following table of numbers in both these classes in the period 1948-1958, inclusive:—

	Emergency	Old People
1948	 639	255
1949	 944	447
1950	 1,114	482
1951	 1,079	710
1952	 1,152	883
1953	 980	1,248
1954	 739	1,131
1955	 645	1,428
1956	 758	1,401
1957	 980	1,146
1958	 900	1,704

#### 13. Health Education

Health education has considerably expanded in the department. Public lectures and other teaching is carried out and has been extended considerably, and every student nurse in the city receives six lectures on "Social Aspects of Disease" from members of the department.

Since 1954 each year at the three-day annual Liverpool Show held in July, a large-scale health education exhibit is staged and this has covered all aspects of the work of the department, including maternity and child welfare, tuberculosis, care and after-care, immunisation and vaccination, cancer education, atmospheric pollution, housing and health, welfare services for the handicapped and crippled, services for the aged and mental health services. This health education exhibit covers approximately 5,000 sq. ft. of demonstration space.

#### 14. Mental Health

The Mental Health Service has increased in size and developed markedly during recent years. The staff now employed are as follows:—

Medical	1 Senior Assistant Medical Officer.
Administrative and Clerical	1 Senior Assistant (Admin.). 1 Senior Authorised Officer. 1 Assistant (Admin.). 8 Clerks and Typists.
Visiting Staff	12 Duly Authorised Officers. 6 Female Visitors. 1 Removals Officer.
Training Centres (formerly Occupa- tion Centres)	3 Supervisors. 1 Supervisor of Industrial Class. 3 Senior Asistant Supervisors. 23 Assistant Supervisors or Trainee Supervisors—interchangeable 9 Domestic Staff.

Compared with the staff in 1952 this represents an increase of twenty. The work of this section has continued along the lines which were indicated in the report of 1952.

The most serious problem which has faced the local health authority in the mental health field has been the difficulties caused by the inability of the hospital authorities to provide enough institutional care, particularly for low-grade mental defectives. This problem, which has been voiced on many occasions and has been the subject of more than one deputation to the Ministry of Health from the local health authority, has shown signs in the last couple of years of improvement, and

the number of Liverpool defectives at present on the waiting list in the highest urgency is thirty-nine. The way in which the waiting list has slowly fallen since 1952 is shown by the following table:—

1952	 	73
1953	 	90
1954	 	93
1955	 	81
1956	 	68
1957	 ***	56
1958	 	39

### Training.

It has been realised for some time that the training facilities in the training centres in Liverpool are barely adequate to cope with the numbers, and plans are in hand to convert at least six cottages and hall of the former children's home at Fazakerley for this purpose. It is hoped that when these conversions are completed, further accommodation for 300 more defectives will be made available.

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Venereal diseases—case illustrations  Venereal diseases—contact tracing  Venereal diseases—incidence in age group  Venereal diseases—patient defaulters  Vital statistics  Vital statistics of number of larger auth  Voluntary organisations  Water ices  Water supply  Welfare foods  Welfare service—persons maintained in local authorities and veneral diseases—contact tracing	aps  norities  n establishmoluntary orgation xx	ments prov		83, 87, 233 86, 87 85 84 86 ix, 1 table 59 227 195 222 27 xxvii, 109 other table 30
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Venereal diseases—contact tracing Venereal diseases—incidence in age grow Venereal diseases—patient defaulters Vital statistics Vital statistics of number of larger auth Voluntary organisations  Water ices  Water supply  Welfare foods  Welfare service—persons maintained in local authorities and veneral service—temporary accommodate Welfare visitors—work of  Westminster House	re ups norities n establishmoluntary orgation xx ation	ments provganisations.		83, 87, 233 86, 87 85 84 86 ix, 1 table 59 227 195 222 27 xxvii, 109 other table 30 es 28 and 29 111, table 31 113, table 32 109 xxviii, 109

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## STATISTICAL APPENDIX.

TABLE 1
BIRTH STATISTICS

	1	BIRTH	STATISTICS			
1 11	LI	VE BIRTI	HS	S'	TILLBIRT	THS
samulation of	Males	Females	Total	Males	Females	Total
Legitimate Illegitimate	7,639 425	7,224 374	14,863 799	200 23	179 11	379 34
ar am	8,064	7,598	15,662	223	190	413
					77	
Year	В	irths	Birth Rate	Illegit Birt		% of Births
1938	1	6,175	18.7	7	71	4.8
1942	1	3,729	20.5		371	6.3
1943		4,432	21.8		030	7.1
1944		5,412	23·1 21·7		274 582	8·3 10·7
1945 1946		4,784 8,528	25.2		351	7.3
1947		9,904	26.4		51	5.8
1948		7,695	22.3	1,0		5.7
1949		6,551	20.7	9	943	5.7
1950		6,110	20.1		068	6.0
1951		5,593	19.9		359	5.5
1952		5,839	20·0 20·3		376 373	5·5 5·4
1953 1954		6,022 5,742	20.5		347	5.4
1955		5,268	19.6		185	5.1
1956		5,944	20.6		801	5.0
1957	1	6,044	20.9	20.9 854		5.3
1958	1	5,662	20.5	7	799	5.1
				1		
						Stillbirths
Year	Reg	ristered	Registered	Tot	tal	per 1,000
		Births	Stillbirths	Bir	ths	Live and
	110000					Stillbirths
1935	17	7,347	749	18,0	96	41.4
1936		7,403	708	18,1	11	39.1
1937		3,728	010			
1938			618	17,3		35.6
1939 1940		3,175	639	16,8	314	38.0
1941	15	3,175 5,614	639 631	16,8 16,2	814 245	38·0 38·9
	15	5,175 5,614 5,016	639 631 519	16,8 16,2 15,5	314 245 535	38·0 38·9 33·4
1942	18 18 18	3,175 5,614 5,016 3,291	639 631	16,8 16,2	314 245 535 799	38·0 38·9
1942 1943	18 18 13 13 14	5,175 5,614 5,016 3,291 3,729 4,432	639 631 519 508 552 485	16,8 16,2 15,5 13,7 14,2 14,9	314 245 535 799 281	38·0 38·9 33·4 36·8 38·6 32·5
1942 1943 1944	15 15 13 14 14	5,175 5,614 5,016 3,291 3,729 4,432 5,412	639 631 519 508 552 485 492	16,8 16,2 15,8 13,7 14,2 14,9 15,9	314 245 535 799 281 917	38·0 38·9 33·4 36·8 38·6 32·5 30·9
1942 1943 1944 1945	15 15 13 14 14 16	5,175 5,614 5,016 3,291 3,729 4,432 5,412 4,784	639 631 519 508 552 485 492 431	16,8 16,2 15,8 13,7 14,2 14,9 15,8	314 245 535 799 281 917 904 215	38·0 38·9 33·4 36·8 38·6 32·5 30·9 28·3
1942 1943 1944 1945 1946	18 18 13 14 14 16	5,175 5,614 5,016 3,291 3,729 4,432 5,412 4,784 3,528	639 631 519 508 552 485 492 431 539	16,8 16,2 15,5 13,7 14,2 14,9 15,9 15,9	314 245 535 799 281 917 904 215	38·0 38·9 33·4 36·8 38·6 32·5 30·9 28·3 28·3
1942 1943 1944 1945 1946 1947	18 18 13 14 18 14 18	5,175 5,614 5,016 3,291 3,729 4,432 5,412 4,784 3,528 9,904	639 631 519 508 552 485 492 431 539 514	16,8 16,2 15,5 13,7 14,2 14,9 15,9 15,9 20,4	314 245 535 799 281 917 904 215 967 418	38·0 38·9 33·4 36·8 38·6 32·5 30·9 28·3 28·3 25·2
1942 1943 1944 1945 1946 1947 1948	18 18 18 19 18 14 18 19	5,175 5,614 5,016 3,291 3,729 4,432 5,412 4,784 8,528 9,904 7,695	639 631 519 508 552 485 492 431 539 514 479	16,8 16,2 15,5 13,7 14,2 14,8 15,8 15,2 19,0 20,4	314 245 535 799 281 917 904 215 967 418	38·0 38·9 33·4 36·8 38·6 32·5 30·9 28·3 28·3 25·2 26·3
1942 1943 1944 1945 1946 1947 1948 1949	18 18 18 18 14 18 19 19	5,175 5,614 5,016 3,291 3,729 4,432 5,412 4,784 3,528 9,904 7,695 3,551	639 631 519 508 552 485 492 431 539 514 479 358	16,8 16,2 15,5 13,7 14,2 14,9 15,9 15,9 20,4	314 245 535 799 281 917 904 215 967 418 174	38·0 38·9 33·4 36·8 38·6 32·5 30·9 28·3 28·3 25·2
1942 1943 1944 1945 1946 1947 1948	18 18 18 14 18 19 19 10 10	5,175 5,614 5,016 3,291 3,729 4,432 5,412 4,784 8,528 9,904 7,695	639 631 519 508 552 485 492 431 539 514 479 358 375 396	16,8 16,2 15,5 13,7 14,2 14,9 15,9 15,2 19,6 20,4 18,1 16,9 16,4	314 245 535 799 281 917 904 215 967 418 174 909 485	38·0 38·9 33·4 36·8 38·6 32·5 30·9 28·3 28·3 25·2 26·3 21·2 22·7 24·8
1942 1943 1944 1945 1946 1947 1948 1949 1950 1951	18 18 18 14 18 18 19 10 10 10	5,175 5,614 5,016 3,291 3,729 4,432 5,412 4,784 3,528 9,904 7,695 3,551 3,110 5,593 5,839	639 631 519 508 552 485 492 431 539 514 479 358 375 396 400	16,8 16,2 15,5 13,7 14,2 14,9 15,9 20,4 18,1 16,9 16,4 15,9 16,4	314 245 535 799 281 917 904 215 967 418 174 909 485 989 239	38·0 38·9 33·4 36·8 38·6 32·5 30·9 28·3 25·2 26·3 21·2 22·7 24·8 24·6
1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953	16 15 13 14 16 16 16 16 16 16 16	5,175 5,614 5,016 3,291 3,729 4,432 5,412 4,784 3,528 9,904 7,695 3,551 3,110 5,593 5,839 3,022	639 631 519 508 552 485 492 431 539 514 479 358 375 396 400 394	16,8 16,2 15,5 13,7 14,2 14,9 15,9 15,2 19,6 20,4 18,1 16,5 16,4 15,9 16,5	314 245 535 799 281 917 904 215 967 418 174 909 485 989 239 416	38·0 38·9 33·4 36·8 38·6 32·5 30·9 28·3 25·2 26·3 21·2 22·7 24·8 24·6 24·0
1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954	18 18 18 19 14 18 19 19 10 10 11 11 11 11 11 11 11 11 11 11 11	5,175 5,614 5,016 3,291 3,729 4,432 5,412 4,784 3,528 9,904 7,695 3,551 3,511 5,593 5,839 3,022 5,742	639 631 519 508 552 485 492 431 539 514 479 358 375 396 400 394 400	16,8 16,2 15,5 13,7 14,2 14,9 15,9 20,4 18,1 16,9 16,4 15,5 16,4 16,5 16,4 16,5	314 245 535 799 281 917 904 215 967 418 174 909 485 989 239 416	38·0 38·9 33·4 36·8 38·6 32·5 30·9 28·3 25·2 26·3 21·2 22·7 24·8 24·6 24·0 24·8
1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955	18 18 18 14 18 19 19 10 10 11 18 18 18 18 18 18 18 18 18 18 18 18	5,175 5,614 5,016 3,291 3,729 4,432 5,412 4,784 3,528 9,904 7,695 3,551 3,511 5,593 5,839 3,022 5,742 5,268	639 631 519 508 552 485 492 431 539 514 479 358 375 396 400 394 400 408	16,8 16,2 15,5 13,7 14,2 14,9 15,9 15,2 19,6 20,4 18,1 16,9 16,4 16,4 16,1 16,4	314 245 535 799 281 917 904 215 967 418 174 909 485 989 239 416 142 376	38·0 38·9 33·4 36·8 38·6 32·5 30·9 28·3 25·2 26·3 21·2 22·7 24·8 24·6 24·0 24·8 26·0
1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954	18 18 18 18 18 18 19 10 10 10 11 11 11 11 11 11 11 11 11 11	5,175 5,614 5,016 3,291 3,729 4,432 5,412 4,784 3,528 9,904 7,695 3,551 3,511 5,593 5,839 3,022 5,742	639 631 519 508 552 485 492 431 539 514 479 358 375 396 400 394 400	16,8 16,2 15,5 13,7 14,2 14,9 15,9 20,4 18,1 16,9 16,4 15,5 16,4 16,5 16,4 16,5	314 245 535 799 281 917 904 215 967 418 174 909 485 989 239 416 142 576 338	38·0 38·9 33·4 36·8 38·6 32·5 30·9 28·3 28·3 25·2 26·3 21·2 22·7 24·8 24·6 24·0 24·8

TABLE 2.

# Analysis of causes of Infant Mortality in successive quinquennia 1896-1955, and the years 1956, 1957, and 1958.

(A.)-Recorded Deaths.

	1	2	3	4	5	6	7	8	
			AL THE				alieté T	Malforma-	
		Total	General			Respira-		tions	
Years.	Total	Deaths	Diseases	Tubercular		tory	Diseases	Premature	Ex
	Births.	Under	(excluding	Diseases.	Diseases	Diseases	(including	Birth,	(
		1 Year	Tubercu-				Diarrhœa.)	Maras-	
	811	of Age.	losis).	E88,0	E 88	0.7	18,004	mus &c.	
1896/1900	111,700	21,160	1,508	698	2,476	3,575	6,376	5,698	
1901/1905	118,801	20,353	1,546	644	2,516	3,484	5,187	5,732	
1906/1910	118,313	17,739	1,613	465	2,052	3,146	3,902	5,520	н
1911/1915	111,872	15,458	1,309	345	1,432	2,916	3,635	4,953	н
1916/1920	99,451	11,510	1,116	202	1,083	2,821	1,872	4,107	13
1921/1925	104,217	10,497	1,066	200	573	2,776	1,786	3,764	
1926/1930	95,701	9,002	978	109	401	2,553	1,670	2,981	н
1931/1935	88,644	7,904	902	82	368	2,050	1,184	3,125	- 33
1936/1940	80,936	6,226	573	74	519	1,457	698	2,691	п
1941/1945	71,648	5,512	341	71	403	1,704	548	2,193	П
1946/1950	88,788	5,034	311	47	213	1,109	963	2,226	п
1951/1955	78,464	2,626	83	10	28	480	132	1,792	п
1956	15,944	413	8	-	6	75	9	300	п
1957	16,044	423	6		8	80	15	302	н
1958	15,662	434	3	_	5	76	20	321	
		(	B.)—Death	Rates per 1,	000 Birth	s.			
1896/1900	*33-4	189	12.7	6.2	22.1	32.0	57-1	51.0	
1901/1905	33.4	172	13.0	5.5	21.2	29.3	43.7	48.1	п
1906/1910	32.2	149	13-6	3.9	17-4	26.6	33.0	46.7	
1911/1915	29-3	137	11.6	3.1	12.8	26.1	32.5	43.1	
1916/1920	24.9	116	11.1	2.0	10.9	28.4	18.8	42.0	
1921/1925	25.1	100	10.2	1.9	5.5	26.6	17.1	36.1	19
1926/1930	22.1	94	10.2	1.1	4.2	26.7	17.4	31.1	
1931/1935	20.5	89	10.1	0.9	4.2	23.1	13.4	35.3	
1936/1940	19-4	77	7.0	0.9	6.4	17-9	8.8	32.9	18
1941/1945	21-3	78	4.8	1.0	5:6	24.1	7.7	30.7	
1946/1950	22.9	56	3.4	0.5	2.3	12.3	10.5	25.1	
1951/1955	20.1	33	1.0	0.1	0.3	6.1	1.7	22.8	130
1956	20.6	26	0.5	- 010	0.4	4.7	0.6	18-8	
	20.9	26	0.4	005	0.5	5.0	0.9	18.8	
1957	WO 0								

<sup>\*</sup>In column 1 the rates indicate the number of births per 1,000 of the population.

## (C.)—Death Rates expressed as a percentage of the rates recorded in 1896-1900.

1896/1900	100.0	100.0	100-0	100.0	100.0	100-0	100-0	100-0
1901/1905	100-0	91.0	102.3	89.3	95.9	91.5	76.5	94-0
1906/1910	93.0	78-6	107-1	62.9	78-6	83-1	57.8	91-0
1911/1915	87-0	72.5	91-9	50.0	57.9	81.5	56.9	84-0
1916/1920	76.0	61.4	87-4	32.2	49.3	88.7	32.7	82.0
1921/1925	75.1	54.9	80.3	30-6	24.9	84.7	29.9	70-8
1926/1930	66.2	49.7	80.3	17.7	18-9	83.5	30.4	60-9
1931/1935	61.4	47.2	79.5	14.8	18-9	72-2	23.4	69-2
1936/1940	58-1	40.7	55-1	14.5	29.0	55.9	15.4	64.5
1941/1945	63.8	41.3	37-8	16-1	25.3	75.3	13.5	62.0
1946/1950	68.7	29.4	26.9	8.0	10-6	38-5	18-3	48-8
1951/1955	60.1	17.6	8-2	1.9	1.5	19.0	2.9	44.7
1956	61.7	13.8	3.9	-	1.8	14-7	1.1	36-9
1957	62.6	13.8	3.1	-	2.3	15.6	1.6	36.9
1958	61.4	14.8	1.6	-	1.4	15.3	2.3	40.2

TABLE¥3

# ANALYSIS OF CAUSES OF MORTALITY.

1957, and 1958.

... ..... uccaue mount to 1 1950, and during the years 1951, 1952, 1953, 1954, 1955, 1956

		77	14	ra.	ш,	(5)	IN	,	)r	,	JA.	•	~	-		
Total Deaths from all causes.	147,005	146,195	145,522	150,962	137,223	117,756	115,632	98,347	10,648	8,994	8,422	8,946	9,289	8,842	9,093	8,930
(e) Cancer.	2,015	2,820	4,223	6,480	7,603	9,852	12,619	13,265	1,559	1,591	1,553	1,582	1,601	1,590	1,603	1,643
Total Deaths from (a), (b).(c) & (d)	91,584	86,311	84,539	81,179	74,125	58,126	40,069	29,723	3,209	1,917	1,766	1,836	2,103	1,873	1,964	1,968
(d) Digestive diseases (including Diarrhœa).	14,747	13,186	18,491	18,163	12,282	8,184	5,987	4,328	310	292	271	275	245	215	236	258
Respiratory diseases (including Influenza).	29,763	32,507	35,819	32,995	36,480	29,447	18,196	15,728	2,339	1,229	1,142	1,251	1,589	1,458	1,558	1,554
(b) Tubercular diseases.	19,869	17,870	16,714	16,054	14,946	12,664	9,413	6,987	449	305	284	244	204	144	128	116
(a) Infective diseases (less Diarrhœa and Influenza).	27,205	19,748	13,515	13,967	10,417	7,831	6,473	2,645	111	91	69	99	65	26	42	40
Years.	1871-1880	1881-1890	0061-1881	0161-1910	1911-1920	1921-1930	1931-1940	1941-1950	1951	1952	1953	1954	1955	1956	1957	1958

	100-0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100-0	100-0	100.0	100.0	100.0	100.0	100-0	100.0
ortality).	1.4	2.0	2.9	4.3	5.5	8.4	10.9	13-7	14.6	17.7	18.4	17.7	17-2	18.0	17.6	18.4
percentage of total deaths from all causes (Proportionate Mortality).	62.9	59-4	57.4	53.0	55-0	49.4	34.7	30.1	30-1	21.3	21.0	20.5	22.6	21.2	21.6	22.0
rom all causes (I	10-0	9-4	12.7	12.0	8.9	6.9	5.5	4.4	5.6	3.5	3.5	3.1	5.6	2.4	2.6	2.9
of total deaths fr	20.5	23.2	24.6	21.8	27.3	25.0	15.7	15-9	22.0	13.7	13.6	14.0	17.1	16.5	17.1	17.4
as a percentage	13.5	12.7	10.8	9-01	6-01	10.7	8.1	7.1	4.2	3.4	3.4	2.7	67.53	1.6	1.4	1.3
Deaths expressed as a p	19.2	14.1	9.3	8.6	7.9	9.9	5.6	2.6	1.0	1.0	8.0	0.7	2.0	9.0	0.5	0.4
П	088	068	006	016	920	930	940	026								
	1871-1880	1881-1890	1891-1900	1901-1910	1911-1920	1921-1930	1931-1940	1941-1950	1951					. *	1957	1958

TABLE 4
DEATHS FROM CANCER
1958

Organ	s Affected			Number of deaths
Buc. cavity and pha	rynx			33
Oesophagus, stomacl	n, intestines	and red	etum	570
Larynx, trachea, bro	nchus and h	ungs		399
Cervix and uterus				78
Breast				122
All other sites				364
Leukaemia and alcul	kaemia			35
Lymphosarcoma				42
	Total	2.		1,643

TABLE 5.
MATERNAL MORTALITY.

4	Year.		Bri	THS REGISTE	RED.	MATERNA	L MORTALITY.
		m	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
933			16,929	680	17,609	60	3.41
934	***	***	17,593	685	18,278	51	2.79
935			17,347	749	- 18,096	59	3.26
936			17,403	708	18,111	64	3.52
937			16,728	618	17,346	40	2.31
938			16,175	639	16,814	33	1.96
939			15,614	631	16,245	29	1.86
940			15,016	519	15,535	31	2.01
941			13,291	508	13,799	32	2.42
942			13,729	552	14,281	34	2.38
943			14,432	485	14,917	34	2.27
944			15,412	492	15,904	31	1.95
945			14,784	431	15,215	23	1.51
946			18,528	539	19,067	19	0.99
947			19,904	514	20,418	17	0.83
948			17,695	479	18,174	14	0.77
949			16,551	358	16,909	9	0.53
950			16,110	375	16,485	7	0.42
951			15,593	396	15,989	10	0.62
952			15,839	400	16,289	7	0.43
953			16,022	394	16,416	5	0.30
954			15,742	400	16,142	8	0.49
955			15,268	408	15,676	9	0.57
956			15,944	394	16,338	7	0.43
957			16,044	409	16,453	7	0.42
958			15,662	413	16,075	4	0.25

TABLE 6
ANTE NATAL CLINICS

STREET MORNELITY.		1957	1958	
Total number of centres at which ante-natal clinics w	vere hele	d	22	21
Number of clinic sessions held per week (medical)	100		29	24
Number of new cases attending ante-natal clinics Sessions)	(Doctor	rs'	2,397	2,250
Total attendances at ante-natal clinics			14,079	11,629
Cotal attendances at post-natal clinics			463	335
Number of new cases attending midwives' ante-natal	elinies		263	586
Number of attendances at midwives' clinics			1,021	2,486

TABLE 7
CHILD WELFARE CLINICS

				9	1957	1958
Total number of centre	s at which child welfare	elinies	were he	eld	24	24
Number of clinic session	ns per week				52	53
Number of new cases:	Under 1 year of age				8,460	8,200
	Aged 1-5 years				252	437
Total attendances:	Under 1 year of age				80,784	80,379
	Aged 1-2 years				7,698	7,657
	Aged 2-5 years				9,805	8,725
	Total under 5 years				98,287	96,761

TABLE 8
ANALGESIA

The state of	00	Year	Doctor present at delivery	Doctor not present at delivery	Total
Liverpool Maternity District Hor	nes		Par John G		
Gas/Air		1956	27	877	904
Section 1 States 2 Tel man 2 de l'auto		1957	28	869	897
		1958	34	990	1,024
Pethidine		1956	23	641	664
		1957	17	605	622
	11	1958	19	708	727
Municipal Midwives					room
Gas/Air		1956	307	2,969	3,276
		1957	276	3,118	3,394
	48	1958	314	3,140	3,454
Pethidine		1956	248	2,310	2,558
		1957	239	2,577	2,816
	-	1958	277	2,584	2,861

TABLE 9

MIDWIVES ENGAGED IN BOTH DOMICILIARY AND INSTITUTIONAL
PRACTICE AT THE END OF THE YEAR

CARLELL 11	Domiciliary Midwives	Midwives in Institutions	Total
Midwives employed by the Authority	60	w oh	60
Midwives employed by Hospital Management Committees of Boards of Governors under the National Health Service Act:— Under arrangements with the Local Health Authority in pursuance of Section 23 of the National Health Service Act, 1946	14	189	203
lidwives in private practice (including midwives employed in nursing homes)	8	14	22
Totals	82	203	285

TABLE 10
ANALYSIS OF CONFINEMENTS

		Domicilia	ry Cases.			
Proposit nf. Total	Doctor no	t booked.	Doctor	booked.		
100 TTS  100 TTS  100 TSS  100	Doctor present at time of delivery.	Doctor not present at time of delivery.	Doctor present at time of delivery (either the doctor booked or another).	Doctor not present at time of delivery.	Totals.	Cases in Institu- tions.
Midwives employed by Hospital Manage- ment Committees or Boards of Governors under the National Health Service Act	4	229	38	931	1,202	12,393
Midwives in private practice (including midwives employed in nursing homes)	7 - ACS	1	7	anii Las	8	450
Midwives employed by the Local Authority Year 1956 Year 1957 Year 1958	26 18 14	672 590 459	341 307 353	2,910 3,173 3,343	3,949 4,088 4,169	

TABLE 11

INCIDENCE OF SEPSIS IN BABIES OF MOTHERS WITH BREAST INFECTION
AND WITH NO BREAST INFECTION IN 7,272 CASES

			Mothers with st Infection		Mothers with no Breast Infection (6,834)			
ene	861	Babies with Sepsis	Babies with no Sepsis	% Babies with Sepsis	Babies with Sepsis	Babies with no Sepsis	% Babie with Sepsis	
Hospital		26	85	23.4%	408	3,808	9.7%	
Home		15	54	21.7%	228	2,242	9.2%	
Nursing Home		0	2	_	6	142	4.1%	

The remaining 256 cases did not have an abscess but complained of redness are swelling of the breast. 139 were hospital, 115 were domiciliary and 2 were nursing hor deliveries, and the incidence of sepsis in the babies was 31%, 21.7% and 50%, respectively

TABLE 12

INCIDENCE OF BREAST FEEDING IN HOSPITAL AND HOME DELIVERIES
AT SIX WEEKS IN 7,272 CASES

( Ima	Hospital Delivery	%	Home Delivery	%	Nursing Home Delivery	%	
Breast Fed	1,124	25.1%	655	24.7%	46	30.3%	
Partly Breast Fed	361	8.1%	232	8.7%	16	10.5%	
Wholly Artificially Fed	2,981	66.8%	1,767	66-6%	90	59.2%	
Totals	4,466	100%	2,654	100%	152	100%	

TABLE 13

HOME NURSING—ANALYSIS OF DISEASES—
BABIES 0-1 MONTH

						Cases	Visits
						niting	er, ladive
Spina Bifida				***	 	5	58
Bronehitis	***				 	5	27
Constipation					 	The same of	Intelligence
Pemphigus					 	1	14
Septic Fingers			***		 	3	17
Septic Spots					 	26	224
Discharging Eyes					 	11	118
Mastitis					 	3	24
Pneumonia					 	1	14
Septic Umbilicus					 	5	43
Protruding Umbilieus					 	-	-
Ophthalmia Neonatoru	ım				 	9	75
Haemorrhagic Disease					 	1 2 3	4
Abscess of Buttock					 	2	27
Stomatitis					 	3	26
Otitis Media					 	1	6
Circumcision					 	1	9 2
Gastro Enteritis					 	1	
Burns					 	1	28
					-		
		Totals			 	78	716

TABLE 14

HOME NURSING—ANALYSIS OF DISEASES
BABIES 1 MONTH—1 YEAR

							OPE	Cases	Visits
									STORY DOWN
Pneumonia								20	86
Bronchitis								163	929
Undiagnosed	Respira							1	3
Pyrexia (und									_
Scalds								4	28
Burns								2	25
Constipation								8	18
Whooping Co							1123	2	10
Circumcision								15	113
Measles (Geri								1	17
Septic Spots								5	40
								1	
Septic Buttoo									6
Abscesses								10	63
achrymal Al				***		***		I III CIA	_
dastro Enter					***	***		_	
Removal of 1				***		***			-
onjunctivitis								5	29
stomatitis			***	***		***		12	71
Boils						***		5	45
dervical Aden	itis							_	
Otorrhoea									
Otitis Media	***							55	332
pina Bifida								4	24
Eczema								_	navie-
eptic Umbili								1	11
mpetigo								2	37
fastitis							100	_	_
ellulitis								2	19
Lirschsprungs	Dicess							ī	6
and the same of th								i	16
Rectal Stenos								3	14
hroat Infect								- 1	
rowth of Lu	ng				***				8
Rash	Y7.							2	10
Diarrhoea and	and the same of	ing						2	6
eaction to I	s.C.G.	***					***	1	5
Ieningocele								1	10
leningitis								1	11
		-	Totals					331	1,992

TABLE 15
HOME NURSING—CLINIC ATTENDANCES, CENTRAL HOME

						-	Cases	Visits
Diabetic							16	3,076
Anaemia							89	1,268
An. of pregnancy							4	63
Cardiac							13	206
Sinusitis							11	57
Tonsillitis							8	30
Bronchitis							12	106
Respiratory Condition							1	7
Bronchiectasis							1	
Asthma						***		
Boils					***		32	158
Breast Abscess							4	158
Carbuncles				***			14	44
Septic (hands, fingers,	ete '					***	11	47
Non-All Charles	000.		***	***				
Dermatitis and Psoris	neie		***	***		***	1	10
Cellulitis (leg and face							1	13
N4						***	3	19
Otitis Media		***	***	***		***	3	7
Pre-dental Infections		Dondal	A 1 -	***		***	29	105
		Dental	Abs.			***	2	18
Jynaecological			***			***	2	11
Ante-natal Measles Co	ontac	t	***				B -	-
Lymphangitis		***		***			-	_
Neuritis							3	25
Arthritis	***	***					-	_
l'uberculosis					***		10	426
Prophylactic							1	3
Ulcer Leg		***					2	2
General Debility							4	32
enile Confusion							1	11
Kidney							1	3
elvic Infection							6	19
lands of Neck							1	11
		Totals				-	284	5,782

TABLE 16

NUMBER OF CASES OF CERTAIN INFECTIOUS DISEASES REPORTED DURING 1958

870,8 81 Particolor 68 Res 180 68	January	February	March	April	May	June	July	August	September	October	November	December	TOTALS
Scarlet Fever	72	109	68	49	70	83	85	49	45	69	92	88	879
Measles and German Measles	137	409	690	654	635	892	1182	624	253	322	482	930	7,210
Diphtheria	_	_	-	_	_	_	_	_	_	_	_	_	
Cerebro-spinal Fever	3	5	_	6	2	4	_	2	2	1	1	3	29
Poliomyelitis Paralytic Non-paralytic	1	=	=	=	_	1	1	_	3	4	3 1	1	14 2
Pneumonia and In- fluenzal Pneumonia	63	36	52	27	21	22	16	11	15	31	39	73	406
Dysentery	83	142	244	123	73	89	45	22	26	34	23	27	931
Whooping Cough	14	13	19	8	17	34	44	61	79	63	68	54	474
Food Poisoning	2	8	10	4	22	15	10	16	20	11	9	4	131

### TABLE 17

### ANNUAL RETURN OF FOOD POSIONING NOTIFICATIONS COUNTY BOROUGH OF LIVERPOOL, 1958

COL	JNTY BORO	UGH OF L	IVERPOOL	, 1958			
Adolla. Children		1st Quarte	2nd Quarter	3rd Quarter	4th Quarter	Total	
Food Poisoning Notificati As returned to Registr Cases Otherwise Ascertain Fatal Cases	rar General	ed) 20	41 7	46 15 —	24 28 —	131 50 —	
	Symptomless	s Excreters		53	(em)	madul.	
100	PARTICU	JLARS OF O	UTBREAKS		minus i		
3 00 00 81	No. of O	utbreaks	No.	of Cases	nou	graphers.	
See les ma	Family Outbreaks	Other Outbreaks	Notified	Otherw	rise c	otal No. of Cases	
Agent identified Agent not identified	1	1	1	28 —		29	
		SINGLE CAS	ES		-120, 110	MILE P	
		No.	of Cases				
		Notified	Otherwis Ascertain	se of	al No. Cases		
Agent indenti Agent not ide		THE STATE OF THE S	22	1	52		
		AGENTS					
Staph, pyogenes		43 S Type	almonella o	rganisms	10	9	
Sal. typhimurium		93 S	al. heidelber			1	
0.1 /1			al. hvittingf al. newingto			1	
Sal. wangata		1 8	al. anatum al. panama			2	
- Savi Groundy			av. paraema	***			

### TABLE 18

### AGE PERIODS OF DEATHS FROM TUBERCULOSIS DURING 1958

Age Periods.	RESPI	RATORY	MENINGES	AND C.N.S.	OTHER FORMS		
Age rerious.	Males.	Females.	Males.	Females.	Males.	Females.	
0— 1	_	_	THE REAL PROPERTY.	_	_	_	
1-4	-	-		1	O TEN	-	
5- 9	-	-	_	-	_	-	
10-14	1	100	_	-	_	1	
15—19	_	_	-	_	_	_	
20-24	1	1	-		_	-	
25-34	8	6	-	- 1	_	_	
35-44	15	8		V	-	_	
45-54	10	6	_	_	1	_	
55-64	20	5	1	-	1	1	
65—over	17	11	-	-	1	-	
TOTALS	72	37	1	1	3	2	

TABLE 19
TUBERCULOSIS CASES ON REGISTERS OF CHEST CLINICS

	R	ESPIRA	ATORY	No	N-RE	SPIRATORY	00	Т	OTAL	
Diagnosis	Ad	ults.	Children		ılts.	Children	Ad	ults.	Children.	GRA
	M.	F.	Cinidion	M.	F.	Cimaren	M. F.		omaron.	Тот
A.—New Cases examined during the year (excluding contacts): (Definitely Tuberculous)	443	265	106	31	33	23	474	298	129	90
B.—Contacts examined during the year:  (a) Definitely tuberculous  (b) Diagnosis not completed  (c) Non-tuberculous	13 406	25 1 791	46 5 2,225		1		13 406	26 1 791	46 5 2,225	8 3,42
C.—Cases written off the Dispensary Register as Recovered	278	336	96	35	54	25	313	390	121	82
D.—Number of Cases on Dispensary Register on Dec. 31st 1958:—  (a) Definitely tuberculous  (b) Diagnosis not completed		3,441	718 4	240	261	156 —	4,061 13	3,702 14	874 4	8,63
Number of attendances of patie Dispensaries during the year 1	ents a 958		30,488						lical treat- ber, 1958	1,3
Number of visits paid by the Tomes Medical Officer to the homes during 1958		856	PDT.	2031	44 P1,					
Total number of cases vaccin B.C.G. during 1958:— Children Others		8* \	3,082	Total number of visits paid to the homes of patients by Tuberculosis Visitors during 1958						

<sup>\*</sup> Includes 1,228 newly born babies in Maternity Wards in Sefton General Hospital and Walton Hospital

TABLE 20
ANALYSIS OF NON-NOTIFIED TUBERCULOSIS CASES 1958

ī			Reasons	for non-not	ification.		
Disease.	No. of Deaths.	No. of cases not notified before death.	Diagnosis made at a post- mortem examina- tion. (Includes Coroner's Cases.)	Diagnosis delayed owing to clinical difficulties.	Doctor thought case had been notified by another Practi- tioner.	Notifica- tion forgotten.	Patient died before notification could be effected
Respiratory	109	5	1	1	-	-	3
Non-Respiratory	7	1	_	-	-	-	1

TABLE 21
DEATHS FROM RESPIRATORY TUBERCULOSIS

	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
		tion to the same of the same o		01 - 27	30	A STATE OF THE STA

TABLE 22
DEATHS FROM NON-RESPIRATORY TUBERCULOSIS

	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

TABLE 23
NUMBER OF NEW CASES OF TUBERCULOSIS FOR 1958

Age Periods		Under 5 yrs.	5-14 yrs.	15-24 yrs.	25-44 yrs.	45-64 yrs.	65 yrs. & over	Total	Total Respiratory
Respiratory—	-	91-0			50-1		190,1		- 1
Males		21	26	71	134	164	53	469	705
Females		26	35	101	99	46	19	326	} 795
Mi				-	R.I.R.	Z.		eds.	Total
Meninges and C.N.S. Males		3	1	1	1	S-ROA	_ =	6	Non-respiratory
Females		4	2	1	-	-	10120a m	7	Years
	_		3836	-	le el ser				- } 79
Other Forms		11:0	108		0.00		252		No.
Males		7	5	7	10	6	1	36	1
Females		3	3	7	10	6	1	30	

DISCHARGES	to Community	4       -4204-      0	‡31
	Total	11 1 1 1 1 6 6 7 2 3 3 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	78
801 85 81	Other R.H.B. Accommodation		22
1 0H 0H	Informal	∞     ∞     1   4     -	*24
ADMISSIONS	Sec. 9	111111111 -1-111111 1 11	1
ADM	Sec. 8 (1) (b)		8
. Estima	Sec. 7	111111111 -1111111	1
	Sec. 6		12
	Sec. 3	877	•10
7 7 7 12 12 12 12 12 12 12 12 12 12 12 12 12	iquali m	LIVERPOOL REGIONAL HOSPITAL BOARD HOSPITALS— Greaves Hall Ashton House St. Catherine's The Manor Thingwall Hall Olive Mount Whitecross Crow Wood St. Joseph's Children's Hospital MANCHESTER REGIONAL HOSPITAL BOARD HOSPITALS— Mary Dendy Brockhall Calderstones Cranage Hall Lisieux Hall Swinton Royal Albert Atherleigh OTHER REGIONS— Royal Albert Atherleigh OTHER REGIONS— Rempton Moss Side  Rampton Moss Side	TOTAL

\* In addition 2 Sec. 3 admissions and 12 informal admissions from other Regional Hospital Board acommodation. ‡ In addition 1 patient transferred to Mental Hospital.

### TABLE 25 MENTAL DEFICIENCY

LIVERPOOL PATIENTS IN REGIONAL HOSPITAL BOARD ACCOMMODATION AT 31ST DECEMBER, 1958

A	1 01	DI DECE	MDEIV, I	000		
		Ma	les	Fem	ales	Total
2 In he hanne	CT OI	Under 16	Over 16	Under 16	Over 16	Total
LIVERPOOL REGIONAL HOSPIT BOARD HOSPITALS— Newchurch Greaves Hall Ashton House The Manor	 	13 	61 - 5	8 8	101 7 28 16 2	109 89 28 16 7
St. Catherine's Thingwall Hall *Sefton *Whiston Whitecross Olive Mount Ormskirk Crow Wood		- - 8 10 2 3	1 1 - 5 4 -		2 1 1 -	3 3 1 29 15 2 6
St. Joseph's †Other Hospitals (non M. accommodation)		1	34	7	2	7 37
TOTAL ,		39	111	42	160	352
MANCHESTER REGIONAL HOSPIT BOARD HOSPITALS— Calderstones		1	283		179	463
Brockhall Cranage Hall		14 2 - 3 3	189 15 23 24	- 1 7	178 3 9 3	389 20 32 31
Lisieux Hall Gillibrand Hall Chorley Ulverston Clitheroe			1 1	Ī	15 21 9	44 15 22 9 1
Atherleigh	-	23	581	1 17	417	1,038
OTHER REGIONAL HOSPITAL BOAR HOSPITALS—	-	1 \$		1111	fa .	
TOTAL		1	7	_	13	21
STATE INSTITUTIONS—  Moss Side  Rampton		T. T.	4 5		3 9	7 14
TOTAL			9	-	12	21
GRAND TOTAL		63	708	59	602	1,432

Figures do not include 26 patients on licence, 4 patients escaped but still under order, and 3 patients in Mental Hospitals.

<sup>\*</sup> Places of Safety. † Comprising:—Westminster House, 33; Park Hospital, 1; Newsham Hospital, 2. Royal Liverpool Children's Hospital Leasowe, 1.

#### TABLE 26

### WAITING LIST FOR INSTITUTIONAL CARE

Waiting list a	t 31.12.	.58		 	86 comprising
Urgency 3 (hi	ghest)			 	39
Urgency 2				 	21
Urgency 1	***			 	15
Urgency 0			***	 	11

These figures can be classified as follows:—
(a) In age and sex groups.

Urgency	Und	ler 6	6—16		16 and over		Total
Orgency	male	female	male	female	male	female	Totai
3	1	1	9	2 2	13	13	39
1	2	1	4	-	5 5	6 3	21 15
0			1	2	6	. 2	11
	4	2	21	6	29	24	86

### (b) Time on waiting list.

Urgency	Over 3 yrs.	2—3 yrs.	1—2 yrs.	6 mths— 1 yr.	Under 6 mths.	Total
3 2 1 0	15 6 2 7	3 1 1	6 5 1 3	4 7 1	11 2 10 1	39 21 15 11
	30	5	15	12	24	86

### (c) Classification of defectives.

Urgency	High grade	Medium Grade	Ambulant low Grade	Cot & Chair	Total
3	6	17	12	4	39
1		12 7	6	2	21 15
0	3	7	1	- 13	11
	11	43	26	6	86

Note :- Waiting list figures do not include the following :-

In places of safety ... ... ... 4
In Regional Hospital Board accommodation other than certified M.D. hospitals ... ... 78

### TABLE 27

### MENTAL ILLNESS

### PATIENTS REFERRED IN 1958 AND ACTION TAKEN

Total cases referred		1,351							
Referred by :-									
General Practitioners		647	0	ther	Corpora	tion s	sections	and	
Hospitals		243		depar	rtments				10
Police					risons				8
Psychiatrists		125			re- or at		re	***	24
Relatives					ttee mei	mber			3
Shipping firms		29	0	ther s	ources				57 1
How dealt with :—									****
Admitted to hospital (	Section 2	0 Lunacy	Act)						*865
Admitted to hospital (							***		11
Admitted to hospital (									16
Admitted to hospital (				ient A	ct)		•••		33
Admitted to hospital (			Act)						88
Admitted to other hos			***				***		44
Referred to J.P. (Secti									†444
Referred to Psychiatri			***						300 64
Referred to Welfare So			***	•••	***				933
Referred for pre- or af				***					73
Referred back to patie									2:
									1488
No further action				•••	•••				1400
									1,351

<sup>\*</sup> Of whom 383 were subsequently subject to Summary Reception Order (Sections 16 Lunacy Act).

# TABLE 28 RESIDENTIAL ACCOMMODATION

The total accommodation available for use on 31st December, 1958, was as follows :-

Esta	blishm	ent.	ulbo	No. of Beds.	Date of Opening.
Westminster House	e		 	774	5. 7.1948*
Aigburth House			 	52	16. 7.1953
Alteross House			 	57	11. 4.1957
Beechley			 	43	9.11.1950
Brookfield			 	19	21. 1.1952
Brookside House			 	18	5. 3.1957
Croxteth Lodge			 	31	17.12.1956
Holt House			 	58	24. 9.1953
Lismore			 	36	10.12.1951
Moreno House			 	34	14. 1.1949
New Grafton Hous			 	95	5. 7.1948*
New Parkfield Hot			 	27	18.12.1950
Park House	400			20	30.12.1949
Ullet Grange			 	27	13.11.1957
				1,291	

<sup>\*</sup> In occupation by the Local Authority prior to 5th July, 1948.

<sup>†</sup> Of whom 19 were subsequently subject to Summary Reception Order (Section 16 Lunacy Act).

TABLE 29

PARTICULARS OF PERSONS ADMITTED TO RESIDENTIAL ACCOMMODATION AND DESCRIPTION OF THE PREMISES FROM WHICH THEY WERE ADMITTED

	1	1A	2	3	4	- 5	
1958	Vacated Private House	Vacated Corpora- tion House	Flat	Living with Relatives	One Room	Mise. Lodgings Res. Accom. etc.	Total
January	 11	1	3	7	9	16	47
February	 15	1	-	11	5	17	49
March	 8	_	_	19	6	7	40
April	 7	-	_	7	13	11	38
May	 5	1	1	11	11	10	39
June	 3	- 4	1	18	7	5	34
July	 2	61	_	14	5	12	33
August	 8	1, 4, 5	_	10	9	8	35
September	1	-	1	7	9	4	22
October	 2	_	3	7	8	7	27
November	 2	1	2	7	2	9	23
December	 4	1	-11	4	3	5	17
TOTAL	 68	5	11	122	87	111	404

TABLE 30

# AGED PERSONS MAINTAINED IN ESTABLISHMENTS PROVIDED BY OTHER LOCAL AUTHORITIES AND BY VOLUNTARY ORGANISATIONS. STATEMENT OF ADMISSIONS, DISCHARGES AND DEATHS

	Remaining	Ad-	Dis-	Died	Remaining
Authority or Organisation	31.12.57	mitted	charged		31.12.58
CHA ROYTAGUILIAGODA JAITAGO	SER OT GR	THEGA	HORRES	90 85	AJUDITHA
British Legion Home, Ripon	2	_	2200	-	2
British Legion Home, Bwlch	ī	_	_		1
Charles Best House, Parkgate	1	3	2	-	2
Christadelphian Homes, Southport	1	1	1	-	1
Church Army Home, Bootle	4	1		_	5
Convent of the Good Shepherd,	7		-0		100
Liverpool	5	_	1	-	4
Embankment Fellowship	1	1	1	_	1
Maryland, Formby	0	_	_	-	3
Methodist Home, Liverpool	10	_	1	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				ar To	- Vancount
People's Hostels Association)	6	4	2		8
25/27 Sefton Drive, Liverpool (Old				R 1	desid
People's Hostels Association)	11	9	8	2	10
Salvation Army Home, Bootle	5	2	_		6
Salvation Army Home, Liverpool	15	5	3	2	15
Salvation Army Home, Penketh	2	1	2	-	1
"Stapely" Home for Aged Jews,	100	la la la	13		
Liverpool	23	15	12	2	26
"Sundale", Linnet Lane, Liverpool	3	1	3	-	1
Turner Memorial Home, Liverpool	14	13	7	1	19
W.V.S. "St. Michael's Mount",					
Liverpool		7	11	-	5
W.V.S. "Warriston", Liverpool	9	3	4	-	8
Sundene Lodge, Waterloo	1	-	-	-	1
Home and Hospital for Jewish	3		ber   958	-	Or Long
Incurables		-	-	-	1
Redhill Bethesda Home	1		The	-	1
"Woodlands", Edinburgh		1	-		1
Bootle Corporation				-	2
Bristol Corporation	1	-		-	1
Caernarvon County Council	-	1		-	1
Clackmannan County Council	1	7.5		-	1
Cumberland County Council	1			-	1
Flintshire County Council	1		-	1	1
Glamorgan County Council	1	1		1	1
Portsmouth Corporation		1	1	_	1
Lancashire County Council		1	1		1
St. Helens Corporation	7	1		15.756	1
Staffordshire County Council	. 1			_	1
Totals	. 139	72	59	8	144
				-	

TABLE 31
TEMPORARY ACCOMMODATION PROVIDED AT LOWER BRECK ROAD UNDER SECTION 21(1)(b) OF THE NATIONAL ASSISTANCE ACT

Remaining 31.12.57	Admitted	Discharged	Remaining 31.12.58
68	834	821	81

### TABLE 32 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 p	personal	applica	tions fo	or advi	ce and	help		958
Number of persons)	visits pa		-		ts to h	andica	pped	2,247
Number of persons)			-		ts to h			8,601
Number of j	persons a	dmitte	d to:-					404
(b) hospita	al							17
Number of property	visits in of perso	connections adm	itted t	th the o hosp	protec	c., and	f the	
effects of	deceased	person	s with	no kno	wn rel	atives		1,170
Requests for the year					teleph	one, di	uring	2,819
3								~,010

## TABLE 33 REGISTERED BLIND PERSONS

The following table shows the number of registered blind persons in Liverpool.

	A	ge	KOL I	Males	Females	Total
0				-	_	and and and an and
1				-	_	_
2				1	1	2
3				1	-	2 1 7
4				6	1	7
	10			8	16	24
11-	15			12	6	18
16-	20			5	7	12
21 -	29			29	25	54
30-	39			47	30	77
	49			65	70	135
	59			113	85	198
	64			65	79	144
	69			83	88	171
	79			134	272	406
	84			52	126	178
	89			26	72	98
				10	17	27
_	100		-	-	-	-
	Тота	LS		657	895	1,552

# TABLE 34 REGISTERED BLIND PERSONS (NEW CASES)

The following table shows by age-groups the number of newly-blinded added to the register during 1958:—

0 1 2 3 4	:::			
1 2 3 4				
1 2 3 4				
4			-	_
4		 -	-	-
4	***	 -	-	-
		 HOUSE OF STREET	200.00	-
- Art. 19		 _	-	_
5—]		 1	-	1
11—1		 1	-	1
16-2		 Marin and a	_	Numbered party
21-2		 _	-	_
30-3		 1	1	2
40-4		 1	1	2
50—		 6	5	11
60-6		 1	6 5	7
65—6		 8	5	13
70—		 16	23	39
80—8		 6	15	21
85—8	39	 6	8	14
90+		 Lyund at h	1	line in 1
-	Totals	47	65	112

### TABLE 35

### PARTIALLY-SIGHTED PERSONS

The following table shows the number of registered partially-sighted persons in Liverpool:—

Age Groups	Males	Females	Total	
100				
0— 1	_	-	7	
2—4	45	25	70	
5—15	45	18	33	
16—20	15 16	10	26	
21—49	10	18	34	
50—64	23	105	128	
65 and over	23	a c	120	
TOTALS	115	176	291	

TABLE 36

### PARTIALLY-SIGHTED PERSONS (NEW CASES)

The following table shows by age groups the number of new cases of partially-sighted persons added to the register during 1958:—

Age Group			Males Females			Total
Intliber	order )	pelping.			golden	Anthority or Organi
0-1			-		-	-
2-4			_		_	_
5—15			4	1.77	2	6
16-20			1	101	-	le l
21-49			2		-	2
50 - 64			2		2	4
65 +			5	bid	22	27
						y y
Тота	LS		14		26	40

TABLE 37

### FOLLOW-UP OF REGISTERED BLIND AND PARTIALLY-SIGHTED PERSONS

(i)	Number of cases registered during the year in respect of	Cause of Disability						
	which Section F of Form B.D.8 recommends:—	Cataract	Glaucoma	Retrolental Fibroplasia	Other			
	(a) No treatment	26	10	h= Lody	41			
711	(b) Treatment (medical, surgical or optical)	20	11		38			
(ii)	Number of cases at (i) (b) above which on follow-up action have received treatment	11	10	_	29			

TABLE 38

### HANDICAPPED PERSONS MAINTAINED IN ESTABLISHMENTS PROVIDED BY OTHER LOCAL AUTHORITIES AND VOLUNTARY ORGANISATIONS

### STATEMENT OF ADMISSIONS, DISCHARGES AND DEATHS

Authority or Organisation	Remaining 31.12.57	Ad- mitted	Dis- charged	Died	Remaining 31.12.58
Catholic Blind Institute, Liverpool	19	6	3	1	21
Herefordshire County Association for			16	-01	,
the Blind Jewish Blind Home, Surrey	1 3				1 3
Manchester and Salford Blind Aid	0				
Society	1	_	_	1	_
Royal National Institute for the Blind,					
Hoylake	1	_		-	1
Royal School for the Blind,	0				0
Leatherhead	2 12	2	5	_	2 9
David Lewis Epileptic Colony Langho Epileptic Colony	19	1	5		15
Maghull Homes for Epileptics	42	22	7	4	53
St. Elizabeth's Home for Epileptics,			T.		
Much Hadham	2	_	_	_	2
Ashley House, Bognor Regis		1	_	-	1 1
Ampthill Cheshire Home	1	-			1
"Honresfeld" Cheshire Home British Council for Welfare of Spastics	1 1	1	1		1
Cotebrook Home for Cripples	î	-	_	_	î
Hostels for Crippled and Invalid	1000				
Women Workers, London	1 -	-	-	-	1
Ernest Ayliffe Home for the Deaf	2 -	-	-	-	2
National Institute for the Deaf,	1			D. Not	1
Barrowford National Institute for the Deaf, Bath	1	BO L O			1
National Institute for the Deaf,	and a land		- Elijentirmi	THE THE	-
Working Boys Hostel, London	_	2	1	-	1
				The Colon	
88 - H	02	Gani		DITTO DE	(0)
Totals	110	36	23	6	117

### HOUSING POINTS SCHEME—SUMMARY OF STATISTICS FOR THE YEAR OF 1958

	Nos. Dealt With	Awarded Points	Awarded No Points
****	200		
****	200		-con-line
	230	11	219
	394	294	100
	126	116	10
	53	52	1
1977	10000000		7
	1000000		
	15	15	_
0.850			
10000			4
TOTAL SE			1
			1
	11660		1
	2000		1
	45	17	28
-	7.00		MANUAL PROPERTY.
			9
		13	5
	15	9	6
	10	10	
	8	8	-
	2	2	_
		dela	
Tag	3	3	
	10	18	1
***	10	10	
	91	91	
		-	
***	34	34	_
7000	0.7	0.4	-
			7
***			22
			_
	5	5	-
	347	50	297
	45	32	13
	51	48	3
		196	828
	2,969	1,406	1.563
	1,348		
	18		
	4007.00		
***	000		
	5 991		
	0,231		
		2  RS 15 13 31 91 128 10 9 45 19 18 15 10 8 15 10 8 2 3 19 21 7 34 91 57 20 5 347 45 51 1024 2,969 1,348 18 896	2 2 2 15 15 15 13 13 31 31 91 87 128 127 10 9 9 8 45 17 19 10 18 13 15 9 10 10 8 8 8 2 2 3 3 19 18 21 21 7 7 34 34 91 84 91 84 57 35 20 20 5 5 347 50 20 20 5 5 347 50 45 32 51 48 1024 196 2,969 1,406 1,348 18 896

# TABLE 40 PARTICULARS OF SHOPS INSPECTIONS

Total Number of Shops-17,000 (approx.)

Inspections			Notice	s	
Retail food shops	1	9,448		Issued	Remedied
Retail non-food shops Cafes, restaurants, etc.	***	2,112 882	Shops Act, 1950.	502	374
Fried fish shops		403	Food Hygiene Regulations, 1955	1,537	927
Clubs		373	Food Byelaws	48	34
Hairdressers		324	Public Health Act, 1936	110	34
Pet Stores		274	Pet Animals Act	9	9
Wholesale shops Wholesale warehouses	1	2,627 412	Prevention of Damage by Pests Act, 1949 Liverpool Corporation	4	4
Street traders Places of entertainment		699 207	Act, 1956 (Hairdressers)	6	4
Half-holiday Closing.  Visits to shops after 1 p.n.	n. 2	6,854	Merchandise Marks Act	69	69
Evening Closing. Visits to shops	4	0,947			Manager II
Sunday Closing. Visits to shops on Sunday	7	4,310		albert !	Hortes

# TABLE 41 FACTORIES ACTS, 1937 AND 1948 Part I of the Act

 Inspections for purpose of provisions as to health (including inspections made by the Public Health Inspectors).

		Laboration	M/c.	Number	and do	Number	of	M/e
	Premises (1)	10	Line No. (2)	on Register (3)	Inspections (4)	Written Notices (5)	Occupiers prosecuted (6)	Line No.
 1, 2, 3,	ies in which 4, and 6 are by local aut	to be en-	1	1,332	559	10	1 0 -	1
in which	ies not inclu h Section 7 is al authority		2	3,780	3,191	97	_	2
tion 7 i	premises in v s enforced by ity (exclud s premises)	the local ing out-	3	63	140	2	_	3
	To	TAL		5,175	3,890	109	-	

TABLE 42
FACTORIES ACTS

2. Cases in which Defects were found.

	M/e.			r of Cases i efects were		Number of Cases in which	M/c.
Particulars. (1)	Line No.	Found.	Remedied.	To H.M.	By H.M. Inspector. (6)	Prosecu- tions were	Line No. (8)
Want of cleanliness (S.1)	4	10	8	7	8	_	4
Overcrowding (S.2) Unreasonable tem-	5	_			_		5
perature (S.3) nadequate ventilation	6	-	-	_	01=	-	6
(S.4) meffective drainage	7	-	-	1	-	-	7
of floors (S.6) lanitary Conveniences	8	-	B-00	O Tura	ST TO Y	HANTIOE	8
(8.7)— (a) Insufficient (b) Unsuitable or	9	6	6	_	5	-	9
defective (c) Not separate for	10	119	99	Sol-Lan	25	-	10
sexes	11	1	1	-	1	-	11
the Act (not in- cluding offences re-				-			
lating to outwork)	12	42	30	21	_		12
TOTAL	60	178	144	29	39		60

# TABLE 43 FACTORIES ACTS Part VIII of the Act OUTWORK

(SECTIONS 110 AND 111)

		Section	n 110		Section	1111		
Nature of Work.	M/c. Line No.	No. of out- workers in August list required by Section 110(1)(c).	No. of cases of default in sending lists to the Council.	No. of prosecutions for failure to supply lists.	No. of instances of work in unwholesome premises.	Notices served.	Prosecu- tions.	M/e Line No.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9))
Wearing apparel— making, etc	13	210	4	1, 2,	01	_	nail— lo	13
Total	70	-210	- I	_		_	Carried State	70)

# TABLE 44 SUMMARY OF PROSECUTIONS (Cases Heard)—YEAR 1958

Act	Section	No. of Informa- tions or Com- plaints	Penalties	Costs	Orders
JACTO	URI ACT		£ s. d.	£ s. d.	Age Age
Public Health Act, 1936	75	15	11 10 0	-	700
Public Health Act, 1936	94	85	158 0 0	-	44
Public Health Act, 1936	95	2	5 0 0	_	-
Public Health Act, 1936	154	5	4 15 0	-	_
Public Health Act, 1936	290 (6)	73	133 0 0	-	_
Shops Act, 1950	Evening Closing	6	5 5 0	-	
Shops Act, 1950	Half- holiday Closing	1	10 0	-	- 1
Food and Drugs Act, 1955 (Selling to the prejudice of the purchaser)	2	72	264 0 0	76 13 0	-
Food and Drugs Act, 1955, and The Food Hygiene Regulations,	4	8	3100		
1955	-	9	24 0 0	_	-
TOTALS		268	£606 0 0	£76 13 0	44

SUMMARY OF RODENT INFESTATIONS AND DISINFESTATIONS OF BUILDINGS AND LANDS DURING THE YEAR 1958

Total B	remedied	513	374	338	3,001	894	(099)	5,120
Total	ired t	523	367	340	3,029	206	(739)	5,166
gory	Minor	523	367	340	3,029	206	(739)	5,166
Category	Major			1 811		ľ	<u> </u>	
6 6	Mice	35	30	16	40	67	(54)	188
tations ne Year	Rats and Mice	63	9	60	60	60	(5)	17
Reinfestations during the Year	Rats	6	15	99	30	17	(29)	126
	Premises	40	388	50	71	75	(77)	274
	Mice	317	144	96	1,560	465	(415)	2,582
Infestations	Rats and Mice	00	32	15	51	26	(24)	132
Infest	Rats	152	140	155	1,345	329	(212)	2,121
	Premises	477	316	266	2,956	820	(651)	4,835
Description of Premises		Shops sqodS	Factories	Warehouses	Dwelling-houses	Other buildings and lands	Food premises (included in above)	TOTAL

Note: -Infestations remedied include 427 outstanding from 1957.

TABLE 46

RAT DESTRUCTION IN SEWERS

MAINTENANCE TREATMENTS

		Initial -	M	AINTENANCE	TREATMEN	TS
Sewer manholes	treated	Treatment 1953	1957 (1)	1957 (2)	1958 (1)	1958 (2)
Pre-baited		 16,378	12,252	11,158	13,246	12,483
Pre-bait taken		 9,329	3,953	3,367	2,976	3,741
Poison baited		 11,141	6,132	5,199	5,143	6,074

TABLE 47
RAT DESTRUCTION IN SEWERS

### ANNUAL TEST BAITING

Test Baiting Divisions	Year 1953	Year 1954	Year 1955	Year 1956	Year 1957	Year 1958
Total number of manholes	6,337	8,753	13,731	13,873	13,571	12,810
Number of manholes tested	797	902	1,428	1,382	1,440	1,451
Number of manholes showing takes	68	75	114	33	101	98 }

### TABLE 48

### SMOKE CONTROL AREAS

### ORDERS MADE AND SUBMITTED TO MINISTER DURING 1958

Area	Date Order Made and Submitted	In- dustrial Premises	Com- mercial Premises	Dwellings	Other Premises (Local Authority and Crown)
(No. 4) Smoke Control Area bounded by Mt. Pleasant, Hope St., Hardman St., Leece St., Renshaw St., Ranelagh Place.	1st Oct.	34	169	87	18
(No. 5) Smoke Control Area bounded by Renshaw St., St. Lukes Place, Berry St., Seel St., Hanover St., Waterloo Place, Ranelagh St., and Ranelagh Place.	1st Oct.	60	294	21	2
(No. 6) Smoke Control Area bounded by Lime St., London Road, Monument Place, Moor Place and Copperas Hill.	5th Nov.	17	172	132	1
(No. 7) Smoke Control Area bounded by Hatton Gdn., Gt. Crosshall St., Byrom St., Cartwright Place, Dawson Place, Hunter St., Christian St., Islington, Wm. Brown St., and Dale St.	5th Nov.	23	100	31	13
TOTALS		134	735	271	34

### TABLE 49

### SMOKE CONTROL AREAS

### PRELIMINARY DETAILS SUBMITTED TO MINISTER OF HOUSING

### AND LOCAL GOVERNMENT DURING 1958

Area	Date Prelim Details Submitted	In- dustrial Premises	Com- mercial Premises	Dwellings	Other Premises (Local Authority and Crown)
(No. 8) Smoke Control Area bounded by Stafford St., Islington, Moss Street and London Road.	3rd Dec.	21	108	166	1
TOTALS	nul Commo	21	108	166	1

TABLE 50
SMOKE CONTROL AREAS CONFIRMED DURING 1958

Area	Date Confirmed	In- dustrial Premises	Com- mercial Premises	Dwellings	Other Premises (Local Authority and Crown)
(No. 2) Smoke Control Area bounded by James St., Lord St., Whitechapel, Manchester St., Dale St., Lime St., Ranelagh St., Hanover St., Canning Place, Strand St.	12th May	113	684	39	Total Total State
(No. 3) Smoke Control Area bounded by London Road, Stafford St., Islington, Wm. Brown St.	20th Oct.	27	180	61	2
TOTALS	-	140	864	100	9

### TABLE 51 SMOKE ABATEMENT

Detailed Progress in Smoke (	Control Are	as		
Number of premises visited				4,528
Number of premises requiring conversion				1,437
Number of premises converted				843
Number of conversions in progress				101
Number of premises in confirmed areas				533
Adaptations in Dwellings in Confirmed Areas Smoke	Control A	reas (No.	1) and ()	
Number of dwellings requiring conversion				60
Number of dwellings converted				57
Number of applications received for grant aid				28
Total cost of works of adaptation			£701 15	
Total amount awarded as grant			0100 3	ls. 6d.
Total amount recoverable as Exchequer Grant				9s. 5d.
General Improvements Outside Sm	oke Control			
New oil fired vessels to replace old coal fired vessels				6
Change from solid fuel to oil (industrial boilers)				11
Smoke density indicators fitted				17
Change from hand firing to mechanical stokers				4
Number of chimneys rejead				6
Change from coal to coles (industrial bailers)				3
Gas ignition provided (industrial and sectional boiler	s)			17
Change from solid fuel to electric boiler				1
Improved mechanical stokers fitted				7
Aids to fireman_mirrors fitted				8
Aids to fireman damper controls extended				4
Particulars of Inspec		10000		
Number of special visits				01
Number of advisory visite				81
Number of incidental calls				196
Number of re-visits				790
Number of special complaints received during year				1,447
Number of chimneys observed following complaint				34 61
Total minutes of excess smoke				136
Number of routine observations				463
Total minutes of evess smoke				602
Number of ships observed following complaint				52
Total minutes of excess smoke				29
Number of routine observations of shins				504
Total minutes of evenes emole				331
Clean Air Act, Section 3-Approva		rnage		001
Number of notices of intention to install new furnace	or new ru			40
Number of applications for approval of new furnaces				49
Number of applications appeared				28 28
				40
Clean Air Act, Section 10—Heights Number of plans examined re-chimney height	or new ch	imneys		
Number approved				55
Number rejected				39
Number approved after chimney height increased				16
Number withdrawn				11
				5
CONTRAVENTIONS Public Health Act 1926 (Prior		NEO)		
Public Health Act, 1936 (Prior Number of Section 102 Notices	to June, 19	(808)		-
Number of Section 102 Notices				35
Number of warning letters				18
				17
Number of Section 20 Nation (S. Clean Air Act, 195	6			
Number of Section 30 Notices (Smoke Emissions) .				27
				27
Liverpool Corporation Ac	t, 1921			
Excessive Smoke Emission (Section 472)				36
Number of warning letters				36

## TABLE 52 ATMOSPHERIC POLLUTION MEASUREMENT

STANDARD DEPOSIT GAUGE

The results are quoted in tons per square mile per month and the monthly averages are as follows:—

Loca	tion	of Inst	rumen	t		drama drama io enn	Letter	Tons per Square Mile
Oxford Street		0 1000			10			22.78
Aigburth Vale								10.69
Clarence Dock								51.21
Love Lane								44.86
St. Domingo Road								29.26
Fairclough Lane								23.45
Dunbabin Road								15.62
Rocky Lane, Childwall								12.48
Mill Lane, West Derby				***				16.82
Dale Street (4 months)								32.27
Hatton Garden (8 months)								26-24

### TABLE 53

### ESTIMATION OF SULPHUR TRIOXIDE POLLUTION

LEAD PEROXIDE METHOD

The daily average for the year is quoted in milligrams per 100 square centimetres.

Three EST by States 18th	Locatio	on of	Instru	ment	etze d	Daniel Daniel	P TE E		M.G. SO <sub>3</sub> /day
Hatton Garden									3.48
Clarence Dock									3.75
St. Domingo Road									3.72
77 1 1 T									4.03
To A. Lin Dand									2.82
Mill Lane, West Derb	y							***	2.98
Edge Lane (Outside)									2.61
Edge Lane (Inside)									0.75
Mersey Tunnel Air In	let								5.09
Mersey Tunnel Mid R.									2.89
Mersey Tunnel Dock J		1		,					3.20

### TABLE 54

### QUANTITY OF FOOD CONDEMNED FOR DISEASE OR FOUND UNFIT FOR HUMAN CONSUMPTION

	400						Tons.	Cwts.	Qrs.	Lbs.	
Beef, Veal, 1	Mutton.	Pork					201	12	2	10	
Offal							422	19	3	10	
Fish (Wet)							34	7	1	2	
Fish (Dry)							5	13	0	8	
Shellfish							4	19	0	23	
Poultry							4	6	2	23	
				***		100	100	4	2	9	3
Game	Harra	***					A Milan	13	0	16	
Rabbits and			***	***	***		77	0	0	6	1
Fruit					***			400	1	12	
Vegetables						***	165	14	1		P
Nuts							3	7	3	25	B
Dried Fruits				***			1	4	3	18	P
Canned Goo	ds						68	12	-	13	J
Sundries (Sa	usages,	Cereal	s, Jell	ies, etc	.)		18	7	3	18	10
Tot	al quan	tity of	food	conden	nned		1,009	3	2	25	1

TABLE 55

CARCASES AND OFFAL INSPECTED AND CONDEMNED IN WHOLE OR IN PART

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs	Horses
Number killed 382,553	20,603	35,418	14,794	215,910	95,828	_
Number inspected 382,553	20.603	35,418	14,794	215,910	95,828	-
All Diseases except Tuberculosis and Cysticerci.				THE STATE OF		
Whole carcases condemned	6	144	149	1,357	148	_
Carcases of which some part or organ was condemned	4,260	13,472	1,022	60,357	6,264	
Percentage of the number inspected affected with disease other than tuberculosis and cysticerci	20.7%	38.4%	7.9%	28.0%	6.7%	STATE OF THE PERSON NAMED IN COLUMN 1
Tuberculosis only.						E E
Whole carcases condemned	36	203	9	_	28	-
Carcases of which some part or organ was condemned	1,140	5,485	F -	-	2,264	-
Percentage of the number inspected affected with tuber- culosis	5.7%	16-6%	0-06%		2.4%	-
Cysticercosis.	10 4 6	100				
Carcases of which some part or organ was condemned	8	9		_	1	_
Carcases submitted to treat- ment by refrigeration	8	9	_	_	_	_
Generalised and totally con- demned	-	-	_	-	-	_

TABLE 56

# METEOROLOGICAL SUMMARY, 1958,

Recorded at Liverpool Observatory and Tidal Institute, Bidston.

	Bar	Mean Barometric		Temperature	rature	UPO-A	Rainfall	ıfall	No. of days	Sum	Sunshine
Month	2	in.	M	Mean	Mean Max.	Mean Min.			rain	NI G	
	1958	Normal	1958	Normal	1958	1958	1958	Normal	1958	1958	Normal
						1 1 0	2 0	000	8	0 07	5
January .	29.81	29.92	39.5	39.00 40.0	45.2	30.0	4.00	22.23	17	65.6	67.0
February F	29.91	58.85	30.00	49.3	43.9	34.2	1.34	1-75	14	108.1	112.0
		29.63	45.1	46.7	51.0	40.1	0-49	1.67	7	158.5	162.0
	29.88	29-97	51.0	52.1	56.9	45.8	2.30	2.04	17	178-7	201.6
		59.99	56-2	57.3	6.19	51.1	4.69	2.06	20	141.4	205.5
	29 89	29-95	59.0	60-2	64.5	54.9	3.35	2.71	20	160-9	182.7
		29-92	59.5	8-62	65.2	55.0	4.47	3.16	20	128.0	167.3
September	29.91	29.96	. 59-1	56.3	63.9	54.4	4.93	2:75	16	107.8	130-6
October	30.08	29.90	51.5	50.0	55.6	47.8	2.93	3.17	20	88.4	0.96
November	30.17	29.89	45.8	44.3	48.8	42.3	1.71	2.67	12	46.2	59.1
December	29-61	29-86	41.3	41.0	44.6	38.0	3.63	2.66	19	29.3	41.1
Year	29.90	29-93	49-0	49.2	53.8	9-74	36-28	28.72	202	1259-7	1476.3
The same of the sa											

The normal is the long period average for that time of year.

### TABLE 57.

### MISCELLANEOUS STATISTICS.

Area of City						***	***	 27,819 acres
No. of inhabited (Number at 3					 able)			 205,227
No. of structura	lly separ	ate dw	ellings o	ccupie	d (1951	Census	s)	 195,981
Rateable Value	:							
1st April, 198	58							 £9,192,650
31st December	er, 1958	•••		•••				 £9,276,346
Sum represente	d by a l	Penny	Rate:					
Actual 1957/	58							 £36,404
Estimate 195	8/59	***					***	 £36,367

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																													-						SIS- NEW			s.																				TA	BL	E N	0. 5	18.										
			Di	agnos	la				8	orm	of I	Dises	Me				1	100				. 84	laire	Clas				He	usin	g Co	iditio	on a					Cont	act I	Listor	77		7		B.C.	G.		8	x										Age	Ge	нари											П	
Abercranby	2 Illness	to Contact	w Mass Radiography	Reutine Exam.	Child Welfare Exam.	to Exam.	Other	S Pulmonary Tub.	T.B. Meningitis	There and Like W. B.	Corried T.R.	Adentia	Abdominal T.B.	Other	English		Contains	Irish	Welsh	Other	Group 1	Grosp 2	Owner 4	0	* dead	e daoin	Satis. Sep. House	Unsat. Sep. House	Rooms only	Institution	Other	Sep. Bedroom	Sep. Bed	Parents T.B.	Shlings T.B.	Spotsee T.B.	Other T.B.	Contact in	Centact in Family	(Outside Heusehold)	Contract at Work	Centact at School	Other Contact	B.C.O. Pertiondy	B.C.G. Befused	Notified after Death	Made	Penale	7	-	24	9	7	0.0	10-14	18-19	20:24	25-29	20.00	1	00-00	46-41	45-40	90.00	99:30	60-64	65-69	20.74	20,70			TOTAL
Aigburth	-		2		***		1	30			3	1	Pre	2	25	5	-	4	1	2		1	1	1	6	16	17	2	16		1	16	17	3	1	2	5	1									17		***			1	1	2	1	3	2			5	4	2	2	2	4	1	1	13	1-		1	
Allerton		***					1	9		1 .					1		1		1		3		3 12	1	1	3	8	=					10	4		14.0	1	3		- 1		-		2			5				***			1	1		1	1		1		*		1		***	1	1	100		111	
Jafeld	- 14	1	2	2	111		-	17		1 .				1	15						100			2	3	4		1	***	***		1	9	1	100	100	111	1	111				00	-	***	711		10						20.00		3	1	1			1		1	4			1	-	100	-		
Arundel	14	1	4		200			16	1				- 100		11								1			4		2	4	1			11		-		2		-			**					11							1		1	6	1					-			-	-	ALC:		1		
Breckfield	. 13	1	3		200	1	2	17							11			1		1				-			11				5	100	12		-	-	-		-									8		1				1	1	2	5	1	H		2	1				1	-	17				20
Browlgreen	7	1	3	1				8			-	2		2	1											2		2	1			4	1000	1	1		111	1	100							101		6			1		1			2	2	1			1	2	1				1	1	1	1		
Gentral	. 30	1	2					25	3	1	3	1	1	2	2	1		1		8					-		13		7		10	9	20	1	1	100	3		1				114	***		41		6			1	1		3	2		6	2		1			3	4	2	1	2	1		ı	1	13
Childwall		100		2				12	2 1						1					1	1	1	1	8 .	4	2	11		1		100	2	3		1	1	1	10	1								7	5							1			1		2	1	2		3	1	1		1	1	J		12
Church			1	***				10							1	9 .				-1				4	1	1	9				1	3	6	1		1											8	2								2	1			1 .		2	2	1				1-		1 .		10
Clabracet	-		1		***			12			-14	***				2 .								8	1	3	11					3	4	2	1		2											6			1			1		2	1	1		2 .			1	2				1	13	1		12
County			3						8	2 .		100	***	-		0 .	-						2 1		2			5	1			9	10	1	1		2										17					1		1	1	1	1	2			1 .		3		3	4		45	100			20
Croxteth			1					-				100	***			8 .			100						1					514	-		3		-		100	-	-	-	-   -	-			***	***		2	***	-				200		1	1					3		***		2		æ	10	4		8
Dingle	-	-	8		***		2	30				101	***		3					1		-					21	6	4	Ares.	200	1		2	1		2		-			-		111		1	14		***	1					1	4	1.0	1	-	1	3	5	2			2		45		A.		31
Dovecet			1		-	710			1 3		1		110		B			3	-	-1	111		-	-	2	-	-	1	***	-		3	10		2	-	-	1	-				100	***	***	140	14			***				1	216	5	4	1		-	3			4	2			H	45	æ		34
Fairfield			1		A		700	21			***	-	111		3			1	***		1	-					9						16		1000	-	6		-	1	-					***	17	6		-	-	***		-		2		1		-			2	2		5		H	2 1	æ		23
Yanakerley	100		1		1	1,711		46	-	1		1			1 1			9	1								12			-			11		100	2	6					- 1	-				11	9	1	-	1			-	2	-	4					2	1	1	1	-	1	H		1 .		
Gillaness						-	1	21			1				3					100					7				2				8															16		1	2	1		2	2	3	-	-	-				1	1	2	1		All I		1		
Grasby			12			1	1						-		2					6							n				3		8			1	1											17				1		1	1	2	4	3		1	5	3	2	1	1	3	1			1		
Kensington			6		-			11			-				2						-		1 1		2		18		1			7		1			1	10	1	1 .		-				-	17	6					1	1	-	2	3	3		2	2	2	2	1	2		1			AT		23
Low Hill	. 12	2	1	***	-	1	111	11	3	1	1			1	1	5				1		1	. 1	0	1	5	10	4	2			7	8	5	3		1					-	-	1	1	***	9	7					1	1	1	3	1	3			1	1	1		1	1			ar.	AT.	1	16
Melrose	. 11	1	2		100		1	11	1 -		2	246	1	1	1	1							-	6	4	5	9	5		1		4	6	2	1		1		1-				-	1		-	5	10						1		1	2	3		1	4				1			ALT.	ar.	Æ	1	15
Netherfield	. 9	4	1					11	2 -		2				1	4								6	3	5	1	12	1			1	1	3	2		1 2	1	2	2 .					1		7	7		111	1		1	.1	1	4		1		1 .		3		1								14
041 Swam	24	3		1				26	6 4					2	2	6		1		1			. 1	1	5	12	26		2			6	11	4	2	2	5										12							1	1	3	3	1		4	1	1	1	1	3		7			A		28
Pieton	21	2	6					27		1	1				2	1							1 1	1	5	12	14	12	3			3	10	1	3	2	2										16				1			3			3	1			1		6	3	3	1	4	1				29
Pierie	. 20	1	2	2				20	0					3	2	4		1							6	-	-		3	-	100		14									-		100	***	***	17							1	1	3		E			1	***	1	***	2	5	1	1	1			25
Princes Park	16	1	1	1				17		1	111				1					2					2			7	3	1	1		4			1								-		-	10			1			1			2		1 2	1		2	3	2			1	13	1		1		20
St. Domingo			1					18			1				2				1								7	10	3	***			7							2 -						200	10			1	2	1		1	2	2					2		1	1	***	***	-	10	1	S.		22
St. James			10			-		36		1 .			1		2		1	2		15					6		-		8	644			21			-			-	0 2	-	-	111		000	100		10	-	-	410	1		3	1	1.	0		1	4	-	4		3	5	2	æ	4	4	1		38
50. Mary's			3		277	1		10			-				1			-				100		6		3	9	9	3	275			7	-	1	-	-		1 ***					***				7 8			100	-			1	1	1	-		-	-	-	-	1	-	100	F	1	-	H		11
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Smithdown			3		200	***		21			1	-		-		2	1	-	-	H					-	6		0	-	110	1		4			-	2				1			1				11	1		111	2		3	2				H	1	2		1	1	-	1	F		1	H		23
Speke			4		94			21			1			1	2						1				3	9	-	8		-				-	4	2				1 .				***				9				1		2			3		-	2			3	3	3	140	15	1		1		23
Sandhills			2	-	101	***		19				1	211		1		1		1	1	1	1					13	2	5	***			14			-			1			1	1			***		9	1		2	1	514			3	2					3	2	2	1	1	Till State	T.	1 .	1		21
Vauxhall	24	-	-	1	100	-		20		1	1				2										3			5	3	100	-		5			1	1		1							111	16	9	1	110	1		1	4	-	1	1	1	:	2	1	3	2	144	1	3		1	4			25
Warbreck			7	-				21		1 /4		100			1			1	1	.2	1		. 1	1	1	5	12	3	2	2	3	8	12	5	1	2	3	1	1		-	-1		100			15	1	144	-	1		1000		-	100	3	10		2		2	1	1	3	1	1	2 1	1			22
Westminster			1		-	100	1	20	-	-	1	1	-	1	12					1			1	0	7	3	13	3	5	1	1	3	9	1	1	1	1		-								15	8				1	1	1		1	3	1	2	1	3	1	1	1	1	2		2	1	1		23
Woolton	15	1	9	999	-		1	21			-	1	-		25				1				2 1			3		2	-	494	100		13				1										11	11			1		1	3	1	4				1	2	2	2	1	1	2	1					22
TOTALS .	593	89	124	31	1	7	15	752	1	3 2	11	12	3	53	22	ST.	5	20	8	47	8	3	39	5 12	18 25	16 5	32 3	36	117	8	61	235	364	93	65	24	100	6	1	7.		1	1	8	2	1	501										100		1 1	56	57	53	50	57	57	32	3	0 2	2 7	12	2	854
	-	-							100				1																																					4										29	36	33	38	43	45	44	2	35 1	7	9	2	501
																																																F	3	7	6	11	6	23	17	42	6	1 4	4	25	21	20	12	14	12	8	6	5	5	2	5	353

TABLE 59.

TABLE 59.

TABLE 59.

TABLE 59.

TABLE SHOWING POPULATION, BIRTH-RATES, DEATH-RATES, INFANT AND MATERNAL MORTALITY RATES, ETC., OF A NUMBER OF THE LARGER AUTHORITIES FOR 1958.

Name of Authority		Birmingham	Bradford	Bristol	Cardiff	Kingston- upon-Hull	Leeds	Leicester	Liverpool	Manchester	Newcastle- upon-Tyne	Nottingham
Registrar General's estimated population for 1958		1,095,000	287,800	438,000	253,300	301,100	511,600	277,700	762,400	676,900	272,400	313,000
Comparability factor—  (a) Births		0.95 1.10	1.00	1.00	0.94 1.12	0.96 1.24	0.98 1.13	1.01	0.93 1.22	0.96 1.17	0.97 1.13	0.96 1.14
Crude birth rate per 1,000 population		17.6	17.75	15.93	18.07	19.1	16.4	15.99	20.54	18.22	18.61	17.82
Birth rate as adjusted by factor		16.73	17.75	15.93	16.99	18.3	16.1	16.15	19.10	17.49	18.05	17.11
Crude death rate per 1,000 population		11.0	13.88	11.93	10.96	11.0	11.6	12.00	11.71	12.70	12.51	10.93
Death rate as adjusted by factor		12.13	13.46	11.09	12.27	13.7	13.1	12.36	14.29	14.86	14.14	12,46
Infant mortality rate per 1,000 live births		25.05	30.27	20.64	25.34	24.2	26.0	25.45	27.71	25.62	24,86	22.05
Neonatal mortality rate per 1,000 live births		16.23	18.64	14.47	18.35	17.06	18.1	18.47	18.19	19.21	16.77	15.40
Stillbirth rate per 1,000 total births		21.96	23.68	17.18	20.96	23.6	23.5	21.38	25.69	25.44	21.81	22,95
Perinatal mortality rate per 1,000 total births	***	37.84	37.70	29.01	45.77	36.37	38.7	35.93	41.43	42.11	34.54	34,53
Maternal mortality rate per 1,000 total births		0.41	0.39	0.28	0.64	1.04	0.82	0.22	0.25	0.63	0.386	1.05
Tuberculosis rates per 1,000 population (a) Primary notifications— Respiratory		0.84 0.10	0.80 0.11	0.62 0.08	1.05	0.61 0.05	0.63 0.04	0.60 0.061	1.043 0.103	0.78 0.10	1.09	1.026 0.077
(b) Deaths—Respiratory		0.00	0.097 0.024	0.08 0.02	0.095 0.012	0:11 0.02	0.11 0.004	0.072 0.018	0.143 0.009	0.10 0.02	0.11 0.007	0.156 0.016
Death Rates per 1,000 population from—		1										
Cancer (all forms including Leukaemia and Aleukaemia)		2.10	2.32	2.08	1.97	2.16	2.08	2.23	2.15	2.19	2.44	1,955
Cancer of Lungs and Bronchus		0.48	0.52	0.47	0.34	0.48	0.53	0.44	0.52	0.53	0.62	0.460
Meningococcal infections		0.01	0.00	-	0.012	0.003	0.004	0.011	0.004	0.003	0.011	0.006
Whooping Cough	***	-	0.00	-	-	-	0.002	-	-	0.001	-	-
Influenza	***	0.04	0.017	0.05	0.024	0.07	0.02	0.025	0.017	0.07	0.77	0.102
Measles		-	0.00	-	0.004	0.003	_	-	0.003	0.004	-	0,006
Acute Poliomyelitis and Encephalitis	***	0.01	0.00	-	0.004	0.003	0.006	0.0036	0.003	0.006	-	0.003
Diarrhoea (under 2 years)		0.01	0.020	0.004	0.004	0.003	0.004	0.0072	0.02	0.01	0.0037	0.003
Diarrhoea (under 2 years) (per 1,000 live births)		0.41	1,203	0.29	0,22	0.17	0.24	0.450	1.08	0.49	0.197	0,179

		A the Mean Planting Street - 15.15

TABLE 60.

NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS) DURING THE YEAR 1958.

					Nu	IBER OF	CASES	Notifi	ED.					
Disease.	At						At Ages	-Year	18					TOTAL
3	all Ages.	Under 1	1—	2—	3—	4—	5—	10—	15—	20—	35—	45—	65—	DEATH
Scarlet Fever	879	6	25	60	85	119	538	38	6	2	_	_	_	_
Diphtheria	_	-	-	-	_	_	_	_	_	_	_	_	_	_
Enteric Fever (including Paratyphoid)	18	3	-	2	1	1	3	1	1	1	1	2	2	_
Puerperal Pyrexia	717	-	-	-	_	_	-	1	99	529	85	3	_	_
Pneumonia	406	45	42	23	16	7	56.	9	13	42	27	63	63	79
Cerebro-spinal Fever	29	14	7	2	2	1	2	_	_	1	_	_	-	3
Poliomyelitis (Paralytic)	14	-	2	2	3	3	1	1	1	1	-	_	-	2
Poliomyelitis (Non-paralytic)	2	-	-	-	_	-	-	2	_	_	_	_	-	-
Dysentery	931	94	117	131	82	76	222	68	27	53	23	27	11	_
Ophthalmia Neonatorum	89	89	_	_	_	-	-	_	_	_	-	_	-	-
Erysipelas	33	-	1	-	-	-	-	-	_	8	- 2	18	4	1
Malaria	3	-	-	-	-	-	-	-	_	1	_	2	-	-
Measles	7189	448	981	1185	1132	1011	2380	31	7	14	-	-	-	2
Whooping Cough	474	55	56	82	73	76	121	7	2	2	_	-	-	-
Food Poisoning	131	21	12	10	7	4	19	18	5	5	11	10	9	-
Totals	10915	775	1243	1497	1401	1298	3342	176	161	659	149	125	89	87

Total Street

	House Seem (mileding Pate	

### CITY OF LIVERPOOL.

### TABLE 61.

### Infant Mortality during the year 1958. Net deaths from stated causes at various ages under One Year.

															under C												
CAUSE OF	DEAT	н			Under I 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 Respirato	y Syste	em	***		-	-	-	-	-	-	-	-	_	_	-	-	_	_	-	_	-	_	-	-	_	_	_
" Meninges,	ete.	***	***	***	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
" Intestines	etc.	***	***	***	-	-	-	-	-	-	_	-	-	-	-	_	-	-		-	-	_	_	-	-	-	-
" Other Org	pans .	***		***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Syphilis	***	***		***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Typhoid Fover	***	***		***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dysentery	***	***	***	***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphtheria	***	***	***	***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Whooping Cough	***	***	***	***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal Infections	***	***	***	***	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	2
Acute Poliomyelitis	***		***	***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mosales	***	200	***	***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scarlet Fever	***		***	***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chiekenpox	***	***	***	***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paychosis	***	***	***		-	-	-	-	-	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Meningitis (non-tubercular	****	***	***		-	-	750	-	-	-	-	-	-	-	-	-	1	-	2	-	-	-	-		-		3
Influenza	***	***	***	***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
Pneumonia	-	***	***	***	-	-	-	-	-	-	-	-	-	-	-	10	13	9	5	6	1	1	6	_	-	2	53
Bronchitis	***	***	***	***	1	-	-	-	-	-	-	-	-	-	-	4	5	6	1	1	-	-	2	1	-	-	20
Enteritis	***	***	***	***	-	-	-	-	-	-	-	-		-	-	1	3	3	-	1	-	-	3	4	2	1	14 84
Malformations	***	***	***		22	2	5	3	1	3	-	7	2	1	46	9	6	5	2	7	1	2					55
Injury at Birth	***	***	***	***		7	8	10	1	1	2	1	-	1	54	1	-	-	-			-	_		_	_	19
Infections of Newborn	***	***	***	***	1	-	4	-	1	2	1	2	2	6	19	-	-	1	1	-	-	_	_	_	_	_	163
Other Diseases of Early In	fanoy	***	***	***		24	16	12	1	4	3	5	1	1	160	1	5	3			2	1	1	_	1	1	21
Other Causes	***	***	775	•••	1	1	1	-	-	-	-	2	-	1	6	1	0	0	-		-				1		21
	700	otals			140	34	34	25	4	10	6	17	5	10	285	27	33	27	11	15	5	4	12	5	5	5	434
	1	Otals	***	***	140	94	0.4	20				1															
						1						1									-						
												1	_	1					Laditin	-		406	-	1		1	1

Net Births in the year

| Legitimate ... 14,863 | Illegitimate ... 799

Net Deaths in the year of

Legitimate Infants 406

Illegitimate Infants 28

- 0 and work to ambient

#### CITY OF LIVERPOOL.

DEATHS REGISTERED DURING THE YEAR 1968

	_			_	-		_	10000	-	-	-	-			-	-	_	_	_	_		_	_	_		
CAUSE OF DEATH	81	EX											AGE-	BELO	w											Totale.
	Malon.	Females	1	3	3			10	15	20	25	30	35	40	45	30	46	60	65	20	76	80	85	90	Over 90	
ALL CAUSES	4518	4412	434	18	19	13	10	24	20	29	34	41	77	133	150	293	636	641	874	1090	1257	1427	1130	555	173	8000
Case I.— Inductions and Parasitic Diseases II.— Neopleases III.— Alregic, Metabolic Diseases, etc. IV.— Diseases of the Blood. IV.— Diseases of the Blood. IV.— Diseases of Carolatory System IVII.— Diseases of Diseases System IVII.— Diseases of Diseases IVII.— Diseases of Diseases IVII.— Diseases of Diseases IVII.— Diseases of Salas IVII.— Diseases of Early Inflarer IVII.— Diseases IVII.— Diseases of Early Inflarer IVII.— Diseases IVII.— D	91 871 23 12 533 1489 841 144 77 60 145 21	63 780 60 29 10 760 1423 713 114 52 4 13 24 53 52 38 175	3  5 2 76 20  1 84 237 6	2 	5 1	-1111 (   m   1)	1   1   1   1   1   1   1   1   1   1	1 5 1 2  1 	24       1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		811   8   1   1   1   1   1   1   1   1	8 12 21 1 1 22 6 2 4 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	15 34 4 2 10 29 7 4 6 2	10 48 6 	100 08 5 1 25 83 36 10 2 1	13 153 3 2 43 161 55 26 11 1 1 28	24 178 8 2 1 67 209 93 20 11  1 1 25	12 252 15 6 1 98 274 154 20 11 3 5 1	14 242 13 4 152 373 209 20 14 2 7 1	12 239 7 4 2 220 431 240 40 17 2 6 1	13 211 13 7 3 290 321 251 42 17 1 4	1 100 8 5 4 221 458 21 15 2 3 17 28	3 36 4 2 3 99 222 221 111 8 	8 32 79 28 4 	156 1651 93 41 15 1293 29914 1554 258 139 4 28 31 297 31 297 30 30 30 30 30 30 30 30 30 30 30 30 30
Class L.—Tuberculosis of Hospiratory System	72	37	1				ï		1		2	7	7	14	9	7	9	19	6		10			1		100 2 1
Tuberculosis of Other Organs	8	9	1111						1						ï	111	2	2	2	2	2	3	ï	2	11	17
Dywestery Diphtheria. Whooping Cough	=	=																							III	
Meningacoccal Enfections Acute Polisenyelitis Menales Other Infections Diseases	1 5	1 11	1	1		1	111	ī				1			1111	3	1	11 19	2	10.00		1			88	2 2 16
Class 2.—Malignant Neoplasm of Bue. Cavity	23 277 339 3  202 20	10 293 60 119 78 204 15	HIIIII	1111111	1111111111		111111		111111111111111111111111111111111111111	1111111111		1 3 2	3 3 2 1	1 1 9 6 3 9 6	1 9 7 5 3 20 2	2 18 29 18 7 22 1	3 38 50 17 8 33 4	3 47 58 15 8 47	4 90 78 12 8 53 2	2 90 74 30 11 51 2	5 93 53 17 11 58 1	4 104 25 11 12 52 3	8 00 9 8 2 29 2	1 17 4 3 10 1	14 11 3	33 870 399 127 78 606 35
Jenga Neoptania	7	1	-					1		111					1	1.	1	-	2		10		1		-	1
Class X.—Thyrotoxicoxic Diabetes mellitus Other Allergic diseases, etc	15 18	32 25	111		1		-	1		1	1	1	2	3	1 8	17.0	1 2	8	4 9	12	2	7 6	1	3	=	47 43
Class 4.—Anternite	9	25 4	1.1				ï	1					1	2		~	1	2	5	4	4	6	5	2	1	34 7
Class 5.—Psychoses and Psychonogratic Disorders	5	10	-				1											1	1		2	3	4	3		15
Class: 6.—Vaccular Lexicon of Central Nervous Syst. Meningible Epilopsy Ottos Media and Masterifitis. Other Discuss of Nervous System.	504 4 5 1 10	718 4 5 4 29	-3 -1 1	1111	= = = = = = = = = = = = = = = = = = = =	7		1	1	-	1 12 1	1 11	4 2 1	7	5	17 1 3 1 3	40 2 1	62  1  4	92	146	213	285	217	1	32	1222 8 10 5 48
Chass 2.—Elementic Fevr. Chronic Blasmatic Heart Disease Arterioscleroid, etc. Heart Disease Other Diseases of Heart. Hypertensive Disease Other Diseases of Circulatory System.	2 40 1169 82 116 80	9 115 918 120 158 105	- - - 1	1111111			111111			1 1	4	1	2777432	13 12 1	10 19 2 1	19 30 1 9 4	2 25 100 9 11 5	2 14 150 16 18 9	18 213 12 18 13	2 15 281 22 30 23	1 5 319 32 45 28	9 380 41 38 33	7 329 36 51 35	3 152 23 23 21	65 2 4 8	11 155 2067 202 274 185
Chas 6.—Influence Broad-topourgranda Proceducia, Broad-tite Picarley Other Respiratory Diseases	5 300 41 443 52	8 422 25 229 29	47 6 20 3	1 1 1 1 1	4		14111	1111111		- - -	1	111111	1 2 1	1 4 12	3 :: 10 :: 2	1 11 16  7	2 12 3 34  4	2 20 3 59	1 39 9 95 	2 77 11 111 8	1 101 9 118 11	147 6 83 15	2 144 10 74 	91 92 37 1	20 1 7 —	13 722 66 672 81
Class 9,—Ulor of Stomach.	20	20	111					7	=	-			2	1	2	3	6		7	n	15	16	10	3	1	87
Appendicitie. Intestinal (Outrustion and Hernia. Gustro-Enteritis Circhosis of Livree. Chol-lithiam. Other Diseases of Dignetive System	17 21 18 4 17	21 22 4 15 20	14	13   1	11111		111111		HILLI	11111.	1			all with		4 12	8 7	3 3 3	2 2 1 2	2 - 1 2 2	5 2 6 3	6 5 1 3 7	1 4 2 4	3 2 1	1	38 43 22 39 37
Class 10.—Acute and Chemic Nephritis. Other Diseases of Kalseys. Hyperplatis of Prostate. Other Diseases of Genito Urinary System	32 13 23 9	24 25 -3	1 1 1							1	1	3	3	3 2 11	1		1 1	1 100	3 5 1 2	2 2	6 5 2 4	3 6 0 2	3 4 8	3 -	111	26 28 23 12
Class 11.—Sepsis of Prognancy	=	1 3	1.1										2	1												1
Class 12.—Diseases of Skin.	5	13	***				+++				1		1		1.	1	31	10	3	1	2	1	2	1	1	18
Class 13.—Diseases of Bones. Other Diseases of Organs of Movement.	4 3	20 4	ï				***		ï								1	1	4 1	6	5	4	2	1 1		24 7
Class 14.—Composital Malformations	- 60	24	84	5		1	2		3		4	2		4	2		1		1	1	1					118
Class 18.—Birth Injuries	41 30 34	14 30 65	55 20 162																							- 55 20 102
Class 16.—Smilty and III-Defreed Diseases	21	38													1					2	1	11	17	15	12	59
Class 17.—Road Accidents. Other Violent Causes Spinish	48 96 40	26 100 40	6	1	1	4 3	2	3 8	5	4	4 2 3	3 3	7 2 2	1 7 8	2 9 4	11 7	13 13	5 14	400	3 17 7	3 26 6	11 26 4	24	1 17 	1 7	74 200 80
TOTAL MALES	4518	***	255	12	n	7		13	9	16	16	23	36	20	79	176	327	415	533	613	611	627	445	167	63	4518
TOTAL FEMALES	-	4412	179				2	11	11	13	18	18	41	63	71	119	171	226	341	467	646	800	685	388	122	6612

CITY OF LIVERPOOL

STARGED STERRED DURING THE YEAR 1865

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			annual conferences to contain the latest to the
			with the state of
			and the state of t
			Managara Sangkara of Ottors Organs