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REPORT

ON THE HEALTH OF THE

CITY OF LIVERPOOL


FOR THE YEAR

1954

BY

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

Medical Officer of Health.



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Chief Disinfecting Inspector ... R. C. SYMES.

Chief Smoke Abatement Inspector P. H. SAUNDERS (died 31.1.55)

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Assistant T. H. MADDEN.

MY LORD MAYOR, LADIES AND GENTLEMEN,

I have the honour to submit my Annual Report on the health of the City of Liverpool for the year 1954, this being the 107th year reported on by the Medical Officer of Health of Liverpool. This year, a summary of the 1951 Census relating to Liverpool has been included (p. 7) as I feel these figures will be a helpful source of accurate information for members of the Council, corporation departments and others concerned in the provision of services for health and well-being in the City.

During the year, Mr. George Binns, O.B.E., who had been Chief Sanitary Inspector for the City since 1934, retired. The great work Mr. Binns carried out during his years of office in environmental health and hygiene and in the improvement of the general hygiene of the City has been the subject of comments in previous reports. The major part he played in the billeting and other aspects of Air Raid Precautions during the war years has also become part of the wartime story of Liverpool.

It is with regret that I record the death of Mr. P. H. Saunders, Chief Smoke Abatement Inspector, who died on 31st January, 1955. This is a great loss to the Department, especially at the time when his efforts were starting to bear fruit.

Vital Statistics.

During the year there was a slight reduction in the birth rate to 20.0 per 1,000 of the population, little change in the still-birth rate, and an increase in the general death rate from 10.7 to 11.4. However, when the detailed causes of death are examined, some encouraging results can be reported.

The deaths from all forms of tuberculosis were 244, compared with 283 in 1953, and continued the satisfactory reduction in the mortality from this disease noted during the last six years.

Perhaps the most satisfactory results were the decreases noted in the infant mortality rate and the death rate of children aged 1 year and under 5 years. The infant mortality rate, after remaining stationary at 35 for three years, fell to 31 per 1,000 live births. Even more dramatic,

was the reduction in the number of deaths which occurred in children aged 1 year and under 5 years to 58 in 1954 from 90 in 1953. If the present figure is compared with the number of deaths in children aged 1 year and under 5 years, for the past five years, the improvement is remarkable:—

							No. of deaths Children 1—5 years
1950	...	...	...	...	...	...	121
1951	...	...	...	...	...	...	136
1952	...	...	...	...	...	...	97
1953	...	...	...	...	...	...	90
1954	...	...	...	...	...	...	58

These figures are a measure of the improvements in the health of children under 5 years since 1950 and represent the co-ordinated achievements of all those connected with the public health, medical, paediatric and child welfare services. When viewed against the background of this busy industrial City still containing many unsatisfactory houses, it is something about which those services may justifiably feel proud.

For an unknown reason, the lung cancer death-rate fell during the year from 432 deaths to 383. It is possible that this is only a temporary respite from the increases noted in the past ten years.

Maternity and Child Welfare

Infant Mortality

It is gratifying to be able to report a substantial reduction in the Infant Mortality Rate from 35 for the three previous years to 31 for 1954. This reduction, which is equivalent to the saving of 84 lives of children under one year of age, has been achieved by the efforts of medical and social workers in the preventive and curative fields, together with the substantial contribution from the steadily improving housing conditions in the City. The special emphasis of the health visitors and midwives on the care of young children and premature babies has undoubtedly helped to achieve this reduction.

As part of the increased drive to improve the care of the premature baby, arrangements have been made during the year for the mothers of all premature babies delivered in hospital to be seen by the health visitors before discharge. This has enabled a more efficient follow-up of the advice given in hospital, and a better reception for the health visitor on her first visit to the home.

Arrangements have been extended during the year for health visitors to attend paediatric out-patients clinics in the Hospitals, as it has been found that this is one of the most effective ways of obtaining better co-ordination with the hospitals and their staffs.

Co-ordination
with
Paediatric
Departments

Increased numbers of visits by health visitors have been paid to elderly people at home, and also in connection with the control of poliomyelitis. Further extensive work has once again been undertaken by health visitors in the cancer investigations fostered by the North Wales, West Cheshire, and South-west Lancashire Cancer Research Committee. In these investigations Liverpool is playing the major part.

During the year, in conjunction with the Medical Research Council, the Whooping Cough Trial has continued, and the target of 5,000 children to be immunised was reached by December. This number of children was obtained much quicker than was expected, due to the interest of the public and the co-operation of the general practitioners.

A change has been made in the smallpox vaccination arrangements. Special vaccination clinics have been given up and vaccination is now carried out as a normal procedure at all child welfare clinics at every session. It is hoped that the new arrangements will be more convenient to mothers and lead to an increase in infant vaccination.

Co-operation
with General
Practitioners

During the year, a start was made to increase the co-operation between general practitioners and health visitors. It was felt that little could be achieved until the general practitioners and health visitors were able to get to know each other better so that a direct approach could be made from one to the other. To encourage this, meetings at which tea was provided, were held at the various clinics. The general practitioners attended in considerable numbers and had the opportunity of meeting the health visitors working in their district. This initial gesture has led to an increasing degree of co-operation, and the general practitioners are using the services of the health visitors more than a year ago.

New Child
Welfare
Clinics

The opening of two Clinics temporarily located in houses in the Speke and Croxteth areas in the year has extended the effective child welfare cover in two rapidly developing housing projects. The City Council has approved the building of a permanent clinic in each of these areas.

Welfare
Foods

In June, the Welfare Foods Scheme was transferred from the Ministry of Food to the Local Authority, and arrangements were completed for the distribution of these foods from 21 infant welfare centres, and six other distributing points. No falling off in the demand for Welfare Foods has occurred as a result of this change.

**Home
Nursing
Equipment**

There was a marked increase in the use made of home nursing equipment during the year.

**Day
Nurseries**

The 14 Day Nurseries accommodating 788 young children have continued to provide a most helpful service for those acute social cases where the mother must go out to work. The plans for the new nursery in Shaw Street have been completed; this building is urgently needed to take the place of the two unsatisfactory nurseries in Salisbury Street and Mill Road.

**Midwifery
Service**

During the year, 72·6 per cent of the births took place in hospital and 27·4 per cent at home. Of those mothers confined at home, 77·7 per cent were delivered by municipal midwives. In addition, much work has been undertaken by the midwives looking after women who were delivered in hospital but discharged home shortly afterwards, and visits were paid to 1,393 women discharged from hospital before the 9th day of the puerperium. One of the most encouraging features of the maternity work during the year has been the growing amount of active co-operation with both the hospitals and the general practitioners.

**Supplies of
Breast Milk**

Nursing mothers have been encouraged to donate any excess of breast milk which was collected by health visitors and taken to the Royal Liverpool Children's Hospital, where it has been sterilised and stored. The hospital uses this human milk for feeding certain sick infants. In return for the help given in collecting these supplies, the hospital authorities have agreed to make available breast milk to mothers at home caring for premature babies where such supplies are required.

Maternal deaths in the City have been classified for the first time in this report according to the social class of the Registrar-General. Maternal mortality rose to 0·49, but it must be remembered that these figures are always liable to fluctuation due to the very small numbers of deaths.

The Queen's District Nursing Association has continued to act on an agency basis for the City. There has been a marked increase in the visits paid to elderly persons needing a late evening visit to make them comfortable and settle them for the night. Eight additional nurses have been employed and 166,588 visits paid during the year to patients over 65 years of age, compared with 107,680 in 1953. This service has proved of great assistance, particularly in helping the very frail or partially bed-ridden old persons at home, and has often enabled them to remain at home, and postponed their need to enter a chronic hospital. There is little doubt that in this way the advantages achieved have been most marked, and have relieved pressure on hospital beds, particularly in the winter-time.

**District
Nursing**

1,870 households were helped by the provision of a home help throughout the year. Many of these cases included elderly frail persons living at home where the provision of a home help for one or two sessions a week has continued to be a most valuable contribution and enabled these old persons to remain living within their own homes.

**Home Help
Service**

Increasing difficulties were encountered with providing home helps for mothers confined at home, due to the scale of charges, and at the end of the year these were completely investigated with a view to making them more practicable. (Since writing this report a completely new scale of charges for home helps has been accepted by the City Council.)

There were no serious epidemics of infectious diseases in the City during the year. The general level of infection remained very much the same as in previous years, but there was a welcome decrease noted in the number of cases of Sonne dysentery.

**Infectious
Diseases**

The incidence of poliomyelitis remained low, being similar to that experienced in the City in the previous year.

Poliomyelitis

There was an increase in the cases of enteric fever, but a number of these came from outside the City.

Enteric Fever

During the year there was a small reduction in the numbers of primary diphtheria immunisations carried out. This reduction has continued steadily during the past five years, and is something which cannot be regarded as at all satisfactory.

Immunisation

Vaccination The level of vaccination also fell very slightly during the year, and although it is still considerably above the national average, in a large seaport such as Liverpool it is still too low, and every effort should be made to increase the level of these vaccinations.

Whooping Cough The Whooping Cough Trial conducted in conjunction with the Medical Research Council progressed very satisfactorily throughout the year, and a total of 5,082 children have now been immunised under this scheme.

Tuberculosis It is satisfactory to report that there was a continued reduction in the number of new cases of respiratory tuberculosis traced during the year, and as this is the second year that there has been a steady fall in the number of new cases reported, it would seem that the marked reduction in the death rate of tuberculosis, which was noted after the introduction of the new methods of treatment, has now been followed by the start of a fall in the incidence of this disease.

The level of tuberculosis within the City, however, still causes concern, particularly as Liverpool continues to compare unfavourably with the majority of the large cities in the country in this respect.

After-Care Visits by Tuberculosis Visitors During the year certain positive steps have been taken to ensure that this problem is tackled more energetically. It has been decided to increase the number of tuberculosis visitors employed and, at the same time, to re-organise the statistical records kept in connection with their work. It has been decided that after-care visits should be paid regularly to all persons on the tuberculosis register, the more acute cases being visited at least once every two months, and the quiescent cases at least once every six months. When this scheme is fully implemented, there is no doubt that the additional visiting will have the effect of discovering more and more unsuspected cases, and in this way it is hoped that the incidence of disease will be further reduced.

B.C.G. Vaccination B.C.G. vaccination started during the year among school leavers, and it is most satisfactory to report that 81 per cent of the parents agreed to have their children vaccinated if necessary. It was also felt that some careful after-care scheme should be introduced to follow up these vaccinated children, and also unvaccinated children, particularly as a group of unvaccinated children may contain a number who are very

liable to develop the disease. It is interesting to note that an accurate measure of the infection present within the City was obtained during the B.C.G. vaccination scheme, as in the 5,293 examined, 34 per cent of children aged 13 years were found to be Mantoux positive. This indicates that 34 per cent of school children aged 13 years had already come into close contact with tuberculosis infection, and in this respect it is interesting to compare the figures given on page 45 of the report with other large areas of this country when it will be seen that the comparable figure for London was 16 per cent.

In the Mental Health Section of this report, some important and pertinent questions are considered in detail, including the preventive mental health services, and the duties of duly authorised officers.

Measures for the prevention of mental ill-health, although clearly the duties of Local Health Authorities under the National Health Service Act, 1946, have hardly yet been defined. But a start has been made in this difficult field, and any successes are encouraging and helpful. It is hoped that gradually extended preventive mental services will be developed, including more preventive mental health services in child welfare clinics, and closer co-operation with the general and industrial medical practitioners.

More after-care work has been undertaken, working in close contact with the hospital and general practitioners. The few individual cases quoted illustrate very briefly some of the help given; the usefulness of having an employment officer on the mental health staff has been obvious during the year, and has contributed to the successful working arrangements with the Ministry of Labour officials.

The work of the duly authorised officers has been described in detail and shows that this important social worker within the City has covered a very wide field of duties in connection with mental illness and mental deficiency. His responsible and often unenviable task in relation to urgent removal to hospitals of mentally ill patients is difficult, and incomplete understanding of his duties in cases dealt with under Section 20 of the Lunacy Act has sometimes made his task most complicated. It might well be thought that this officer who has removed the person to hospital when mentally ill, would be unlikely to be looked

upon by the family or patient subsequently as someone who would be able to help them with after-care. And yet in only very few cases is any resentment shown, and the majority readily look again to the duly authorised officer for help and assistance.

Occupation Centre attendances continued to rise, reached 305 at the end of the year, with a waiting list of 30. The usefulness of this service is very great, and the newly-planned centre in Brookfield Drive is already urgently required.

Waiting List for mental deficiency institutions

Last year, attention was drawn to the increasing problems created by the shortage of mental deficiency institution vacancies, particularly for the worst low-grade cases. It is depressing to report the situation at the end of the year was as acute as ever.

The numbers of highest urgency cases awaiting admission to mental deficiency institutions have risen in the following way during the last five years:—

1950	...	...	...	29
1951	...	...	...	61
1952	...	...	...	73
1953	...	...	...	90
1954	...	...	...	93

The attention of all reading this report is particularly called to the few brief descriptions of typical cases from this waiting list. It is emphasised that these cases illustrated are quite representative of others on the waiting list, and give some idea of the human suffering within the City, caused by the inability of the Hospital Authorities to arrange for these urgent admissions.

Ambulance Service

A marked increase in the numbers of patients removed by the Ambulance Service occurred during the year as the increased patients carried numbered 10,676. (This is an increase of 5.6 per cent, and compared with an increase noted between 1952 and 1953 of 1.3 per cent.)

Searching investigations were carried out during the year to discover the cause of this increase. There seemed to be no doubt that the main cause is the increased number of patients attending hospitals (both in- and out-patients), and using the ambulance services.

Misuse of the service did not appear to be a cause of the increase.

Considerable concern was felt about the long delays which occurred in collecting out-patients from hospitals after they had attended various clinics. To enable the best use to be made of the service, a senior officer has attended out-patient departments of various hospitals to act as a liaison officer, and this has been most helpful in reducing delays.

However, it became obvious that the main reason behind these delays was the increase in the numbers of cases carried—the fleet no longer was able to manage the increased load. The City Council decided to increase the numbers of ambulances by 4 vehicles immediately, and that these should be fitted with Radio Telephony.

It is satisfactory to report that this is the first increase in the establishment of vehicles since 1949 which, when it is realised that the numbers of patients have increased from 93,471 to 199,244 (an increase of 113 per cent) is a quite remarkable fact, and is one which very clearly demonstrates the outstanding contribution which the installation of Radio Telephony has made to the problem.

It is impossible to feel complacent about the continued rise in the number of ambulances used, and it is disquieting to report that there are so far no indications that the peak has been reached.

This section of the report has been extended this year to describe the increasing work of this section of the Health Department.

**Welfare
Services**

With the exception of London County Council, this authority provides more residential places for old persons than any other County Borough. However, the waiting list is rapidly growing, and at the end of the year was 98 persons. One house suitable for adaptation was purchased during the year, and it is hoped two further properties may soon be acquired, but it is becoming increasingly difficult to find properties suitable for conversion. During the year, the City Council agreed in principle during the next five years to build one new hostel a year. This programme, although it may, at first, sound ambitious, will hardly keep pace with the demand from the general population, together with the housing of the 250 persons who will have to leave Westminster House when its upgrading is completed.

**Residential
Accommoda-
tion**

It has become increasingly obvious that, in addition to the need for more residential places, there is equally a need for more accommodation for the very frail old person who can just manage to get about but is unable to climb stairs. As the domiciliary services for the aged improve steadily, more old persons in need of care and attention can be helped to remain at home, and the proportion of very frail old persons taken into hostels is likely to rise. The converted hostel is rarely of much value for such cases, and the newly-planned hostels are being designed to serve this purpose.

**Upgrading of
Westminster
House**

In the last Annual Report, details were given of some of the plans for upgrading Westminster House. These changes have steadily proceeded during the year. The new sick bays now completed are models of their type and have been achieved at a cost of less than £400. The reaction of the residents to these changes has been most interesting. At first a little suspicious, they have soon accepted them and become eager to enter the newer accommodation and enjoy its increased facilities. It has been most noticeable how the behaviour in the newer units has improved. As the momentum of these upgrading changes has mounted, their success has been most obvious. There is, however, one sober fact which is inescapable—that upgrading must soon await the provision of more accommodation to take in those 250 old persons to be displaced. At the present rate of progress this stage will be likely to be reached in less than two years.

Another difficult problem regarding Westminster House has been brought to light during the year—the demonstration of at least 196 persons in Westminster House who are not aged but who are handicapped. The justification for keeping them there is solely based on the fact that there is no alternative accommodation. Separate accommodation, either within Westminster House or in special hostels, is most desirable for this group.

Reference is made to the distressing cases of old persons found to be living alone in deplorable conditions, particularly as some of these cases have only been reported when conditions are beyond effective help. This problem is particularly difficult in such a large City, but it is emphasised that it will never be solved until all the many and varied interested persons—doctors, social workers, church workers, hospitals,

old persons' clubs, or just good neighbours, realise that they have only to report a case to this Department for it to be immediately investigated.

The practice introduced in the last annual report of including some reports from the welfare visitors' case books has been continued, as these show clearly some of the difficult and frustrating cases which are being constantly dealt with.

The Pier Head Rest Room has continued to be of great assistance to many old people in the City, and has already become well known nationally, as visitors from many parts of the country interested in the social aspects of the aged have visited it during the year.

It has been possible, due to a gift by the former Lord Mayor, Alderman Tristram, to extend the premises by the use of two further rooms.

The average number of persons attending the Rest Room is steadily increasing, and now exceeds 150 daily.

Efforts have continued during the year to extend the scope of the assistance given to all groups of handicapped persons in the City. Particular attention has been given to those smaller groups previously not helped, and a number of such associations have been substantially aided by the arrangement made during the year to make available premises at Walton Village for meetings. Five separate organisations now use this accommodation and hold regular meetings there.

Blind welfare has continued to be a major portion of the welfare work, and it is interesting to note that there are now more registered blind persons living in the City than in any other County Borough in England and Wales. Emphasis in blind employment has been away from the sheltered workshop towards the placement of blind persons in open industry. Within the year an increasing number of blind persons have been found work within open industry, and it is satisfactory to report the valuable work of the Blind Placement Officer of the Royal National Institute of the Blind. Now, the stage has been reached that more blind persons are employed outside sheltered workshops than within them.

The very acute financial difficulties experienced by the blind workshops within the City in 1953 have eased a little during this year, but the cost of employing a blind person within these establishments still costs approximately £260 a year.

Deaf and Dumb Welfare

The needs of the deaf and dumb within the City have continued to be met by the two voluntary organisations—The Liverpool Adult Deaf and Dumb Benevolent Society, and the Catholic Deaf and Dumb Society of St. Vincent de Paul, to whom the City paid a grant of £1,740.

Physically Handicapped Persons

For the first time, during the year, financial help was given to the Robert Jones Memorial Workshops, which employ 45 severely disabled persons, most of them being employed upon book-binding and printing. This establishment, which is undoubtedly serving a very useful function within the City, has room for further employees, and the position is at present being reviewed. One of the difficulties encountered by these workshops is that at times insufficient orders are available, and this is particularly the case with book-binding, printing, and shoe repairing.

The problems of the Spastics have been considered, together with the many special facilities made available by the School Health Department.

The difficulties of the anti-social epileptics, discharged from colonies for this reason, which were mentioned in the last annual report have again been prominent, as six such cases occurred during the year. The suggestion that the question should be tackled on a national basis still appears to be relevant and urgent.

The welfare services for the handicapped within the City are slowly but steadily developing. The aim would appear to be twofold—firstly to provide a more balanced welfare service, particularly for those groups of handicapped for whom little is at present provided, and secondly that there shall be increasing co-ordination and working together between the various groups. Voluntary effort is particularly strong within the City, which promises well for the future.

Sanitary Administra- tion

The shortage of qualified sanitary inspectors and additional duties caused a re-organisation of staff during the year. The assistant sanitary inspector training scheme has worked very well, but the students have to work under the general supervision of qualified inspectors. It is in

the interest of the department that the staff should acquire knowledge of all aspects of the duties, and although specialisation is necessary in large cities, the many duties imposed by the Housing Repairs and Rents Act and other new legislation caused a gradual sharing of responsibility throughout the sanitary section of the department. This system is creating a mobile force of trained sanitary inspectors capable of bringing emphasis to bear on any particular aspect of the work engaging the immediate concern.

The advantage of this re-organisation was shown by the completion of the housing survey, involving 204,486 houses, in a period of six months, and greater efficiency in the investigation of infectious diseases.

The introduction of the Housing Repairs and Rents Act necessitated that the sub-committee should meet weekly to issue certificates of disrepair, and advantage was taken of this arrangement to combine authorisation of the issue of statutory notices for abatement of nuisances.

During the year one of the most troublesome problems was that **Caravans** connected with caravan dwellers, and it is regretted that firms selling caravans do not advise purchasers that there are no licensed sites in the City. 1,078 visits were made to sixteen unsuitable sites used periodically by caravan dwellers. In many cases the occupiers had invested all their savings in purchasing these modern vehicles, and were extremely distressed to find that they were unable to park on blitzed sites in main shopping centres, gardens adjoining large houses, or other open spaces within easy reach of their work.

The impetus to slum clearance was again given by this department, a **Slum Clearance and Housing** total of 2,207 houses were surveyed with a view to representation, and 1,831 were dealt with before the end of the year. A survey of all houses in the City was accomplished and a programme prepared concerning demolition, deferred demolition, and acquisition.

Details concerning all the houses have been incorporated in the report, but it was found that a total of 26,959 houses should be demolished, 61,274 houses required major repairs, making a total of 88,233 houses unfit in accordance with Section 9 of the Housing Repairs and Rents Act, 1954, and Sections 11 and 25 of the Housing Act, 1936.

There were many new duties connected with certificates of disrepair, improvement grants, loans on mortgage, and sub-letting. Special duties were also added by the introduction of a new Points Scheme which included investigation of housing conditions having regard to medical factors and subsidiary complications associated with a wide range of housing work. Also there were 627 certificates of disrepair issued, from which there were no appeals against the requirements of the local authority.

A close liaison between other departments concerned with slum clearance was maintained, and the operation is functioning smoothly to absorb and demolish approximately 1,000 houses annually. To maintain this rate, the department is two years in advance of other sections, and representations of unfit houses, varying between 1,500 and 2,000 are submitted each year.

Food Hygiene

The food trade during the past year has been putting its house in order to such good effect that it has not been necessary to carry out the drastic action of instituting legal proceedings.

The general improvement in the day-to-day cleanliness of food premises has now been appreciated by the general public, for the alterations within the City to many of the large establishments have been a source of pride.

The Food and Drugs (Amendment) Act, 1954, which received the Royal Assent on the 25th November, 1954, has not yet come into operation, but concern is already being expressed that our present progress under existing legislation will be retarded and not accelerated.

Meat Inspection

The greatly increased amount of meat inspection carried out in the year is shown by the total number of slaughtered animals rising by 93,023 to 559,853.

This great increase in slaughtering and in particular the introduction of Sunday slaughtering in Stanley Abattoir which followed the recommencement of private slaughtering in July 1954, produced many difficulties and problems. The staffing difficulties are described in detail in the portion of this report dealing with the supervision of food supply.

The shops inspectors have been busily engaged throughout the year with all problems connected with closing orders, half-holidays, and welfare arrangements. The gradual extension of duties, so that the district sanitary inspectors have assisted in routine work, helped considerably in the inspection of welfare arrangements. The welfare provisions of the Shops Act were accepted by most employers, but the standard had to be laid down by the department. For example, during inclement weather the inspectors have concentrated on heating of shops as many shopkeepers strictly adhered to the trade practice of keeping shop doors open as they considered closed doors detrimental to business, and further, some shops still possess open-fronted windows which cause considerable discomfort to employees. This outmoded practice, usually found in wet fish establishments, should be discontinued, for modern refrigeration equipment can provide means against deterioration of food caused by increased temperature.

**Shops Act,
1950**

The routine inspection carried out by district sanitary inspectors assisted considerably in keeping trade refuse from accumulating in the shops. The maintenance of cleanliness and improved sanitary accommodation and facilities for taking of meals were ensured by frequent visiting. It is the aim of the department that all shops receive at least one visit per year to ensure that the welfare arrangements are adequate.

For many years Liverpool has been regarded as a City with one of the highest atmospheric pollution records in the country, but although the general situation is still far from satisfactory, the considerable efforts made by this department have reduced the average deposited pollution record in 1939 from 535 tons per square mile to 263.96 tons per square mile in 1954.

**Atmospheric
Pollution**

The activity of the department has been concentrated on technical advice to owners, engineers and firemen, and continual observation of industrial establishments, together with action against persistent offenders. Prior approval of apparatus used for the combustion of fuel has now to be sought from the department. Special classes are arranged at the School for Hygiene for stokers and other factory personnel engaged in industry. In the majority of cases excessive industrial smoke was found to be due to the carelessness in hand firing or lack of

scientific knowledge of the correct and efficient methods of fuel utilisation. The boilerhouse personnel are responsible in most cases for the production of smoke, and the consequent waste of fuel, but owing to the labour situation today this problem cannot easily be solved.

The efforts of the smoke inspectors were extended to include action on the river, factories within the port area, and smoke from railway locomotives. Many of these problems are subject to legislative difficulties, but when approached in the right manner all the personnel responded to the technical advice and friendly co-operation was achieved.

Rodent Control

During the last few years there have been encouraging signs that the problem of rat infestation has been reduced, following the rat destruction carried out in the sewers. Rats can use the sewers as a means of travelling from one building to another through defective drainage systems, and, having reached the surface, soon breed and cause infestation throughout the building.

The systematic survey of the City was first commenced during 1944 when 3,277 rat infestations were found in 120 blocks in the dockside wards. In 1954 a survey of the same blocks revealed only 639 rat infestations—a clear indication of the progress made in reducing the rat nuisance in this area of the City. The treatment of the sewers during the year showed a reduction of the rat population when compared with the initial treatment which was carried out in 1953.

In 1953, 16,378 manholes were prebaited, of which 9,329 indicated that the bait had been taken. In the third treatment carried out in 1954 it was found necessary to treat only 13,326 manholes and only 6,222 showed evidence of bait being taken.

During the year, 21,428 buildings and lands were examined, of which 4,683 were subject to rodent infestation. In addition, 91,092 follow-up inspections were carried out by sanitary inspectors.

I have to thank Dr. Davies, my Deputy, and all the staff of the Health Department for their hard work and loyal support during the year. The data for this report are collected from a number of sources, and I acknowledge the assistance given by other departments in providing

certain information. In conclusion, I wish to record my sincere gratitude to the Chairman and Members of the Health Committee for the courtesy and kindness 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. Semple

Medical Officer of Health.

...In connection with the ...
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...and ... with which they have ...
...in the ... of the ...

I am,

Robert L. Sample

Medical Officer of Health

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CITY OF LIVERPOOL.

SUMMARY

OF

VITAL STATISTICS FOR 1954.

Area (land and inland water)	27,818 Acres
Population (Estimated by Registrar General)	...	...	...	...	...	786,100
Live Births ...	...	15,742	Live Birth Rate ...	20.0 per 1,000 of estimated population.		
Deaths (all causes)...	...	8,946	Death Rate ...	11.4 per 1,000 of estimated population.		
Deaths (under 1 year of age)	485		Infant Mortality rate	31 per 1,000 live births.		
Deaths from :—						
Pulmonary Tuberculosis	232		Pulmonary Tuberculosis death rate	0.29	} per 1,000 of the estimated population.	
Other forms of Tuberculosis	12		Non-Pulmonary Tuberculosis death rate	0.01		
Respiratory	1,251		Respiratory death rate	1.59		
Cancer	1,582		Cancer death rate	2.01		
Maternal Deaths ...	...	8	Maternal Mortality rate	0.49 per 1,000 births.		
Neonatal Death Rate	...	20.7				
Stillbirth Death Rate	...	24.8				

VITAL STATISTICS.

Birth Rate

The change introduced last year of grouping together lengthy statistical tables in an appendix at the back of the report has been continued in this report.

Births.

The number of live births during the year was 15,742, representing a rate of 20·0 per 1,000 of the estimated mid-year population. 8,126 of these births were male and 7,616 female. There were 847 illegitimate births (5·4 per cent of total births).

These figures show a slight reduction in the birth rate for the year, compared with 1953, but the illegitimate rate was unchanged. The birth-rate continued to be higher than the average for all the great towns which was 16·8 per 1,000 of the population, and for England and Wales as a whole where it was 15·2 per 1,000.

Variations in births and stillbirths since 1939 are shown in the facing graph.

Stillbirths.

Stillbirth Rate

There were 400 stillbirths registered in the City during the year, representing a stillbirth rate of 24·8 per 1,000 of the total births registered (compared with a rate of 24·0 in the preceding year).

The stillbirth rate among legitimate babies was 25 per 1,000 and among illegitimate babies was 22 per 1,000 (compared with rates of 23 and 33 in 1953). The marked reduction in the illegitimate stillbirth rate is most satisfactory.

Mortality.

General Death Rate

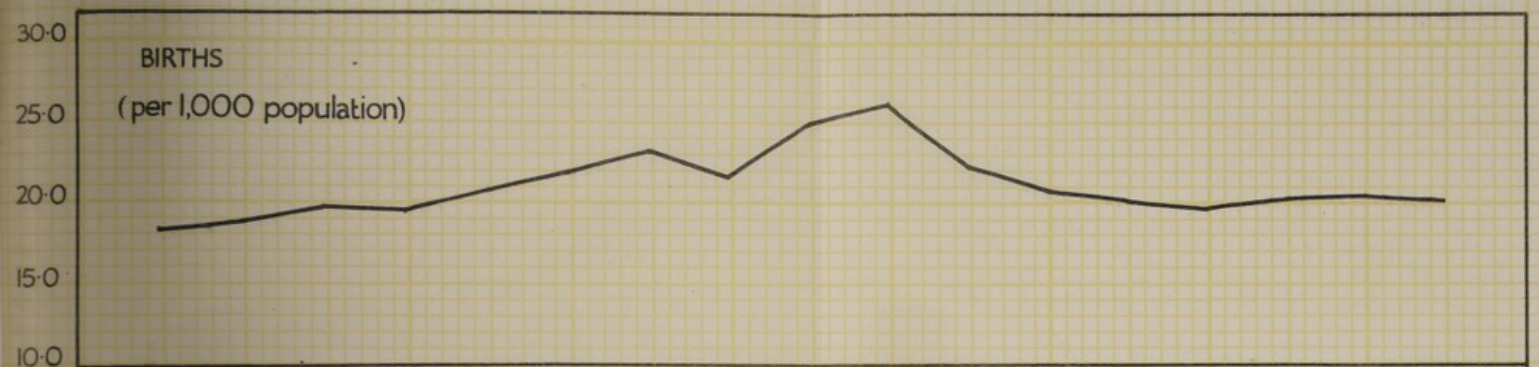
8,946 deaths were registered within the City during the year (4,667 males and 4,279 females). This represents a general death rate of 11·4 which is an increase on the rate of 10·7 for 1953.

Attention was drawn in the last Annual Report to the steady increase in the death rate from cancer of the lung, which had occurred since 1945. During the past year there was a reduction of this death rate and the total number of deaths from cancer of the lung fell to 383 compared with 432 in 1953. The cause of this welcome reduction is unknown. The trend in mortality from this condition is illustrated in the graph facing page 5.

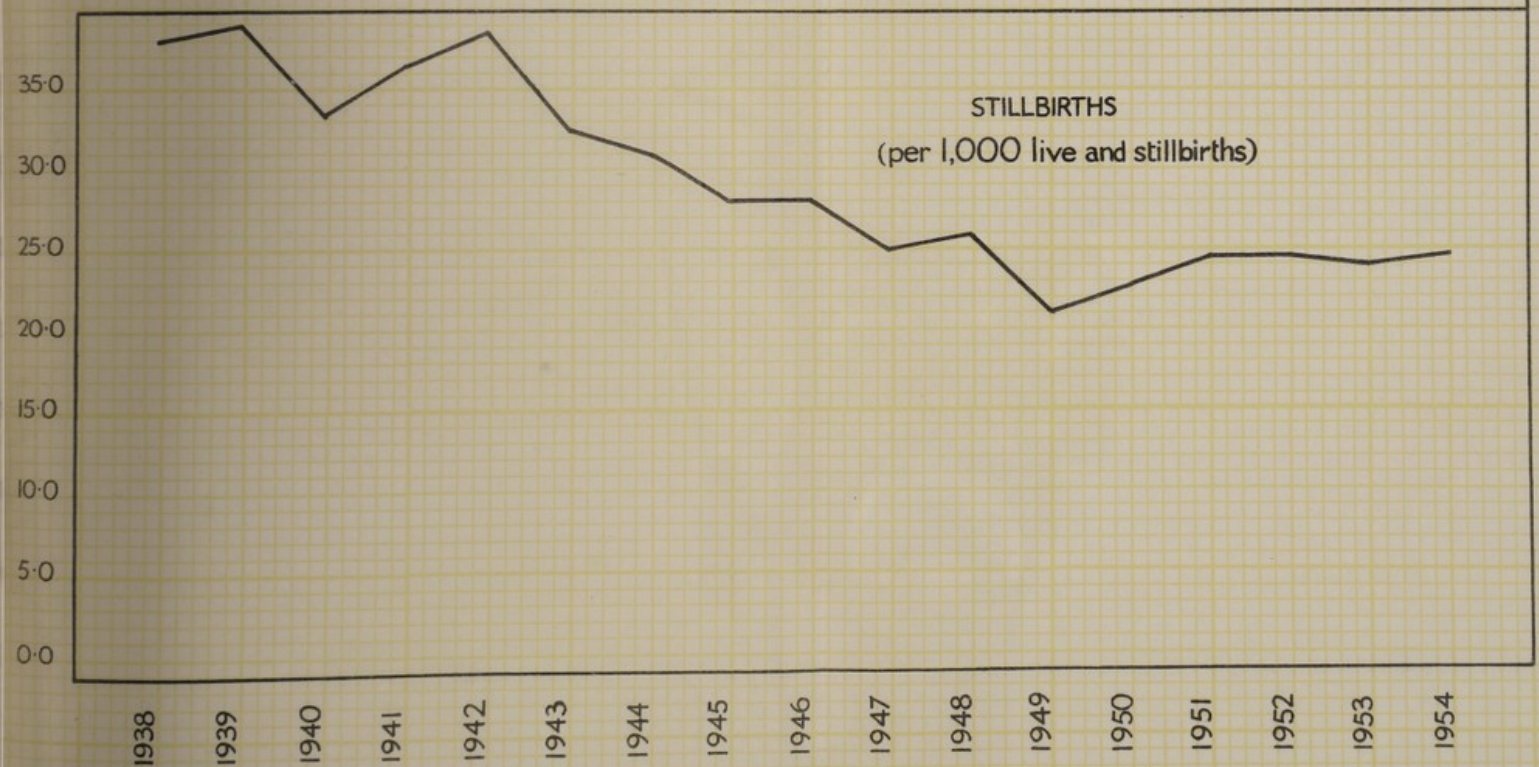
The number of deaths occurring from tuberculosis fell further to 244 compared with 284 in 1953.

CITY OF LIVERPOOL

BIRTHS - 1938-1954



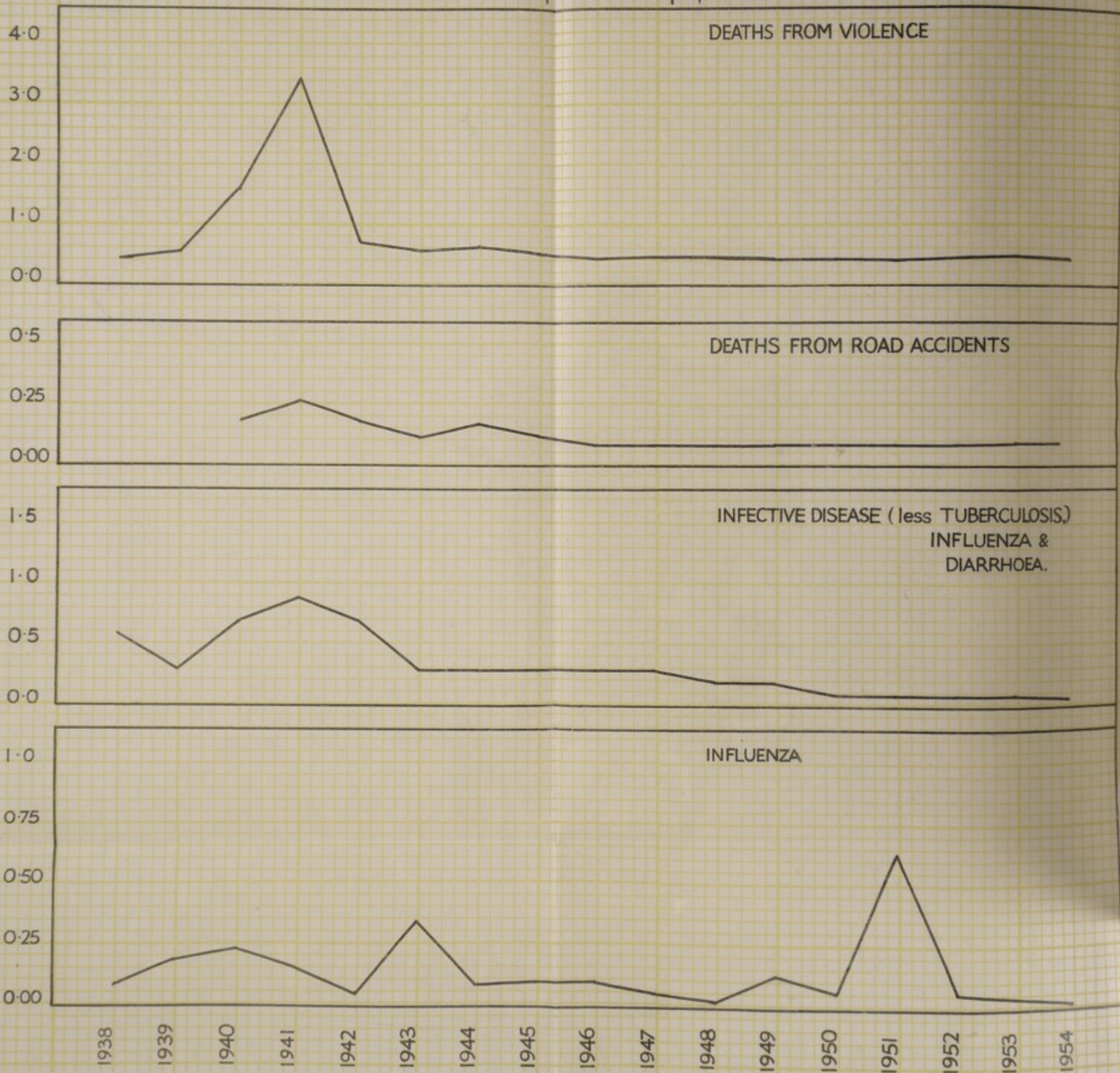
STILLBIRTHS - 1938-1954



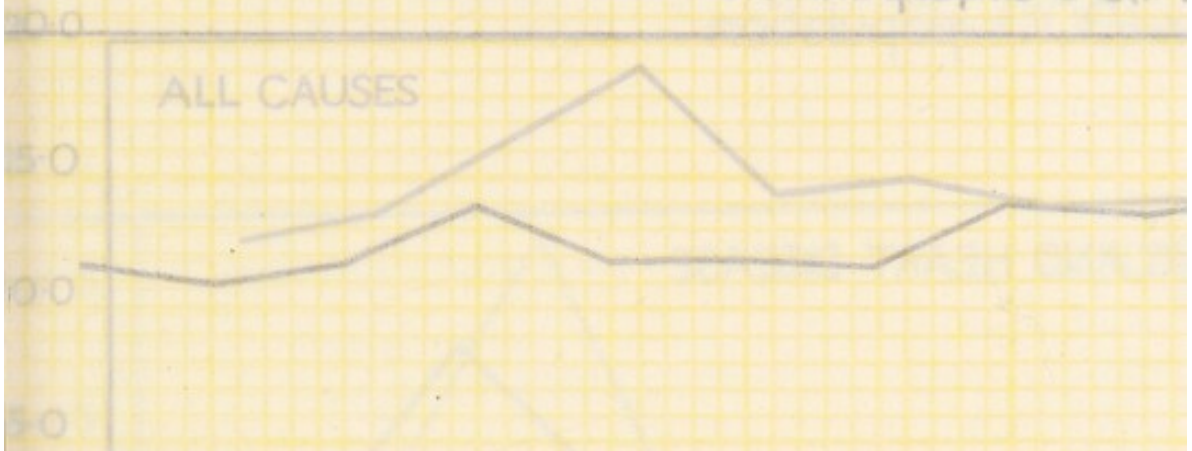
TRENDS OF MORTALITY—LIVERPOOL

1938 — 1954

Death rate per 1,000 population



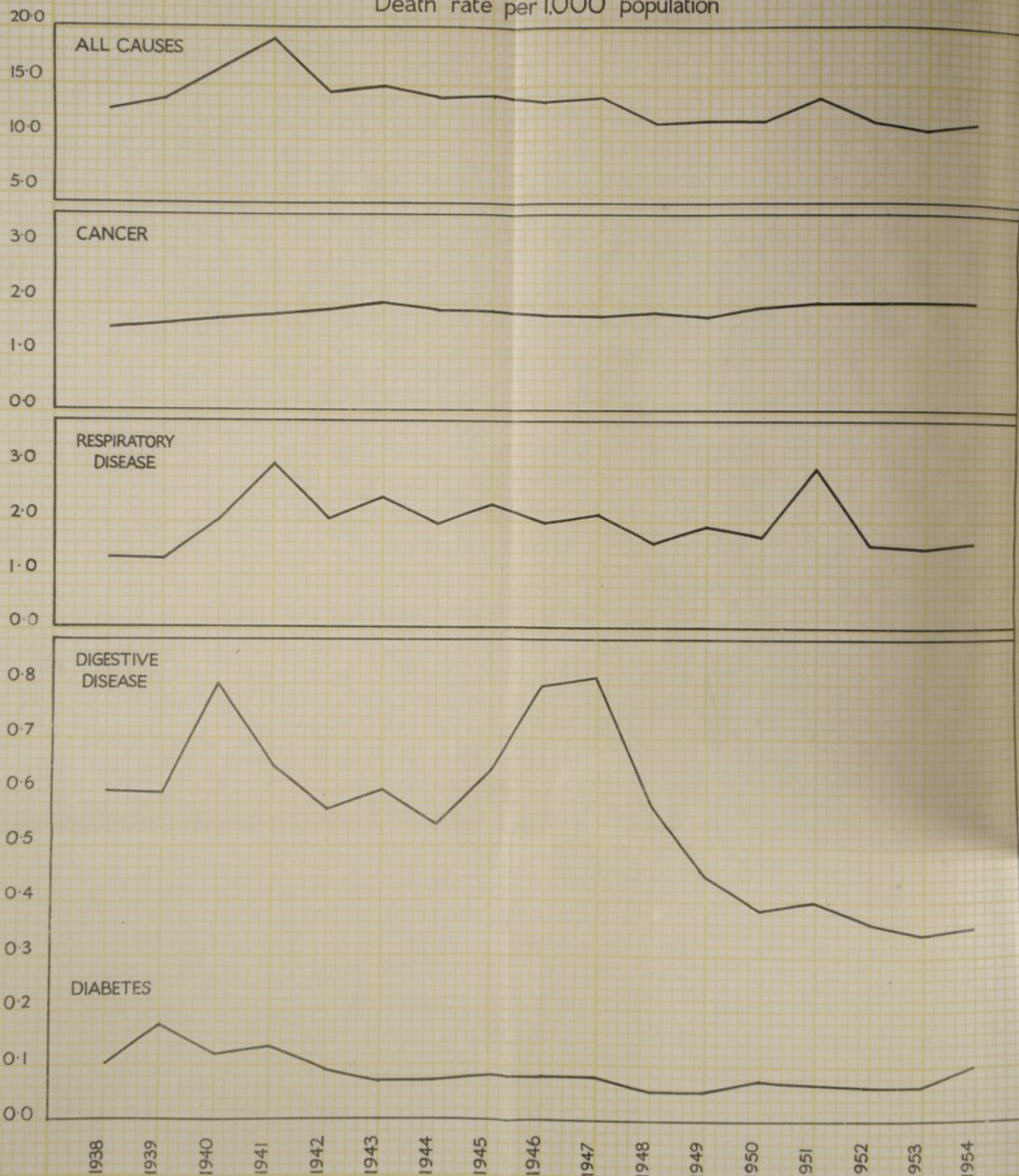
population



TRENDS OF MORTALITY - LIVERPOOL

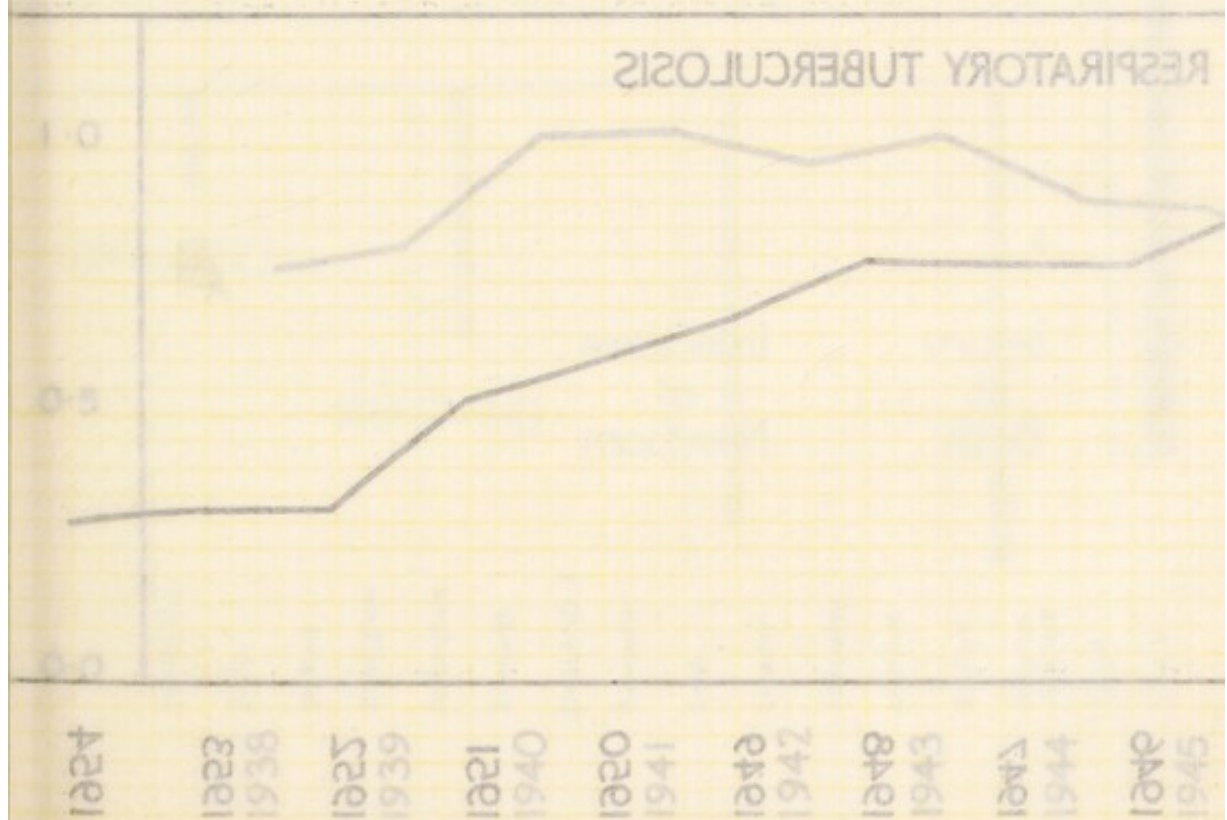
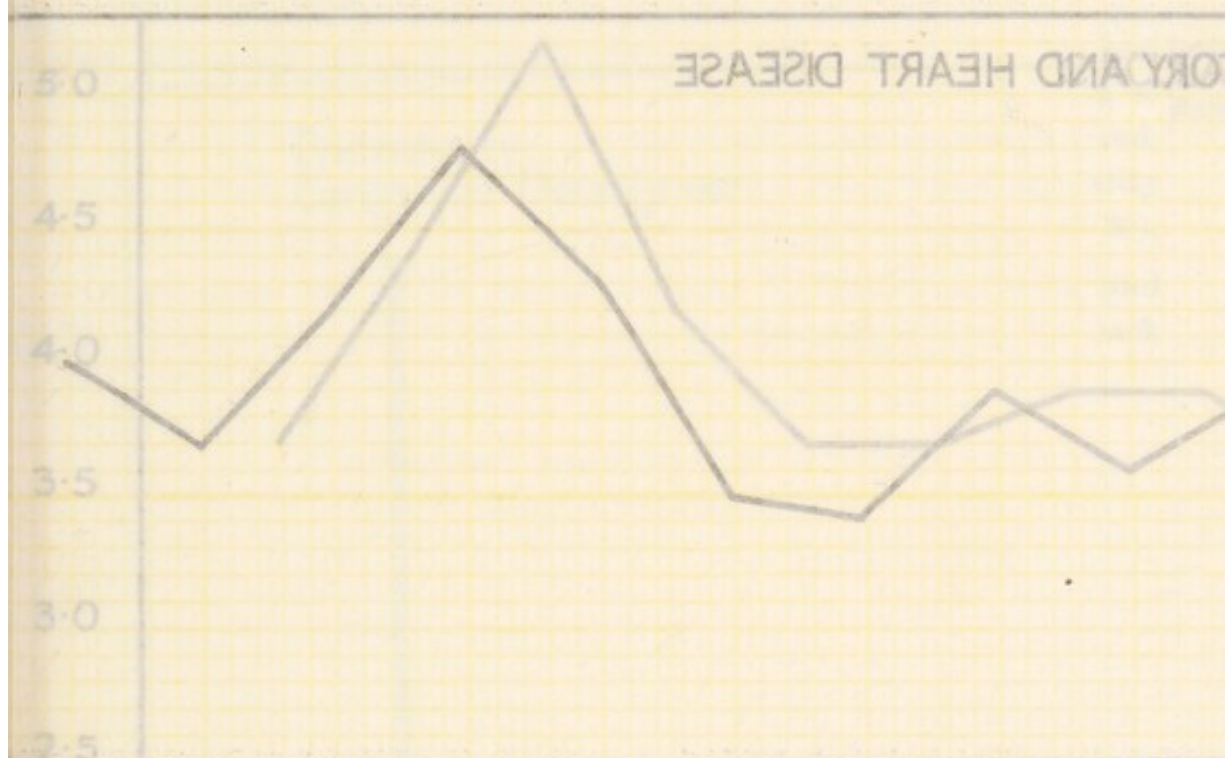
1938 - 1954

Death rate per 1,000 population



1954

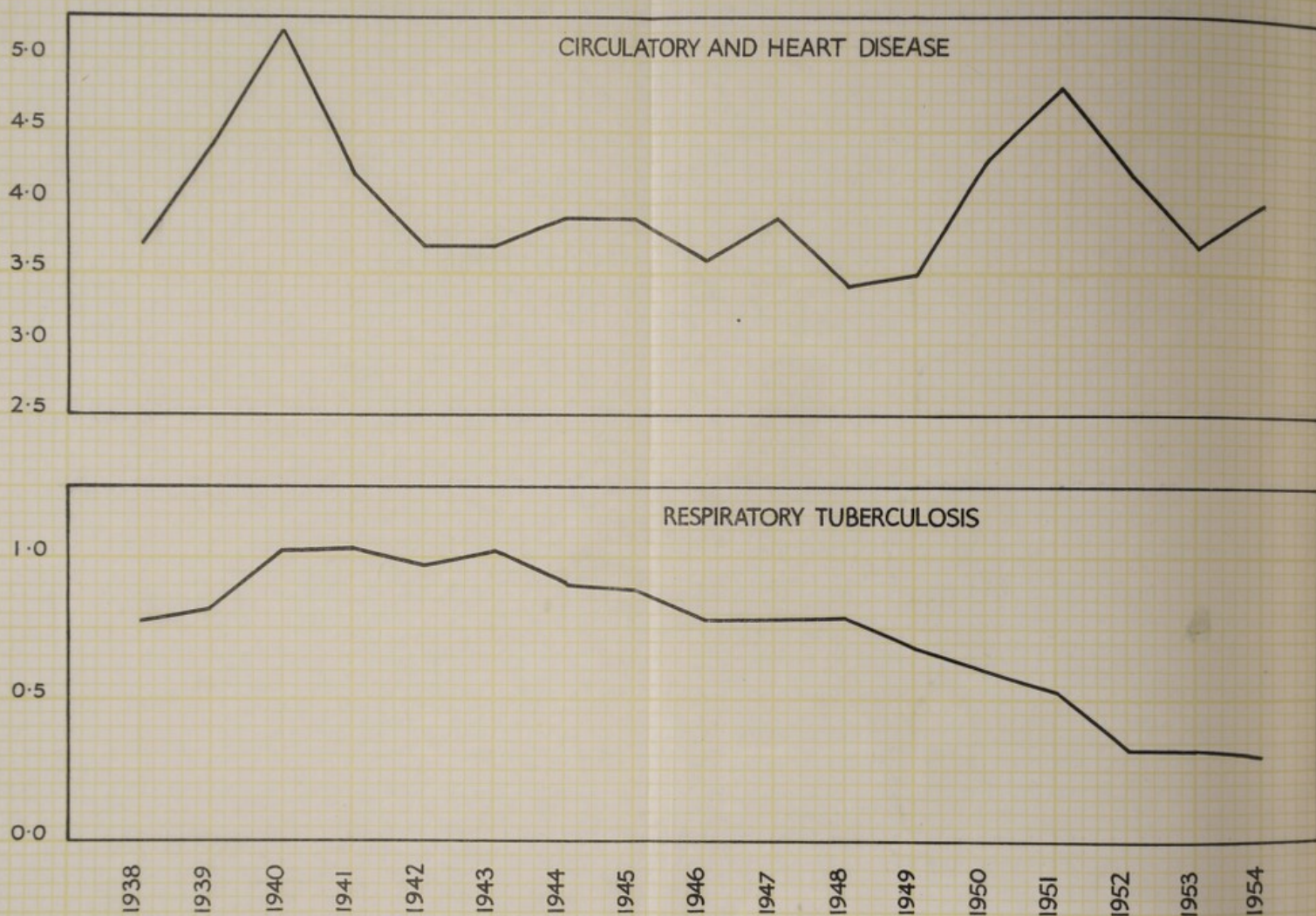
per 1000 population



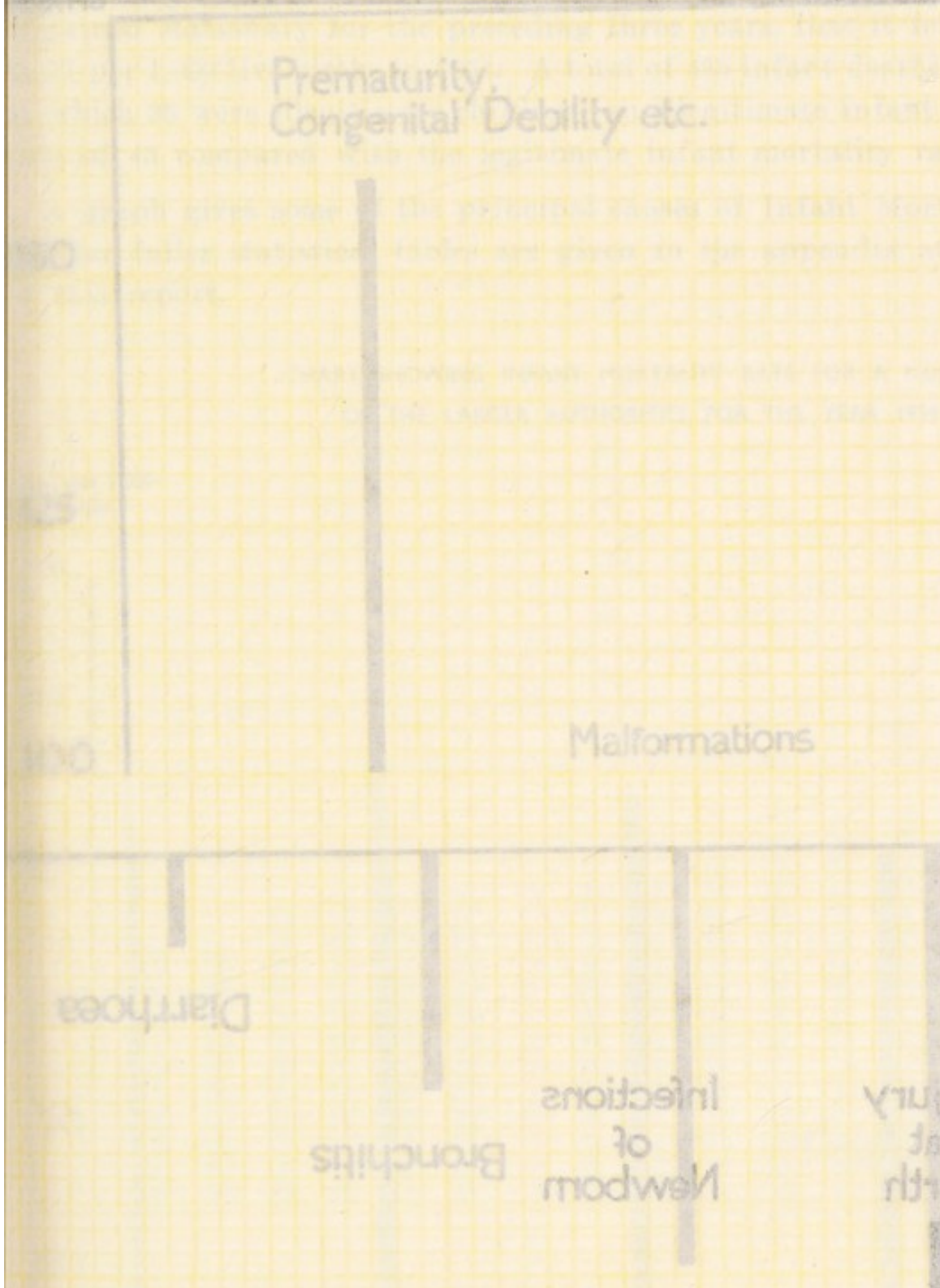
TRENDS OF MORTALITY—LIVERPOOL

1938 — 1954

Death rate per 1,000 population



FANTUMORTALITY 1954



CITY OF LIVERPOOL

PRINCIPAL CAUSES OF INFANT MORTALITY — 1954

Total
Deaths

Prematurity,
Congenital Debility etc.

150

125

100

75

50

25

0

Malformations

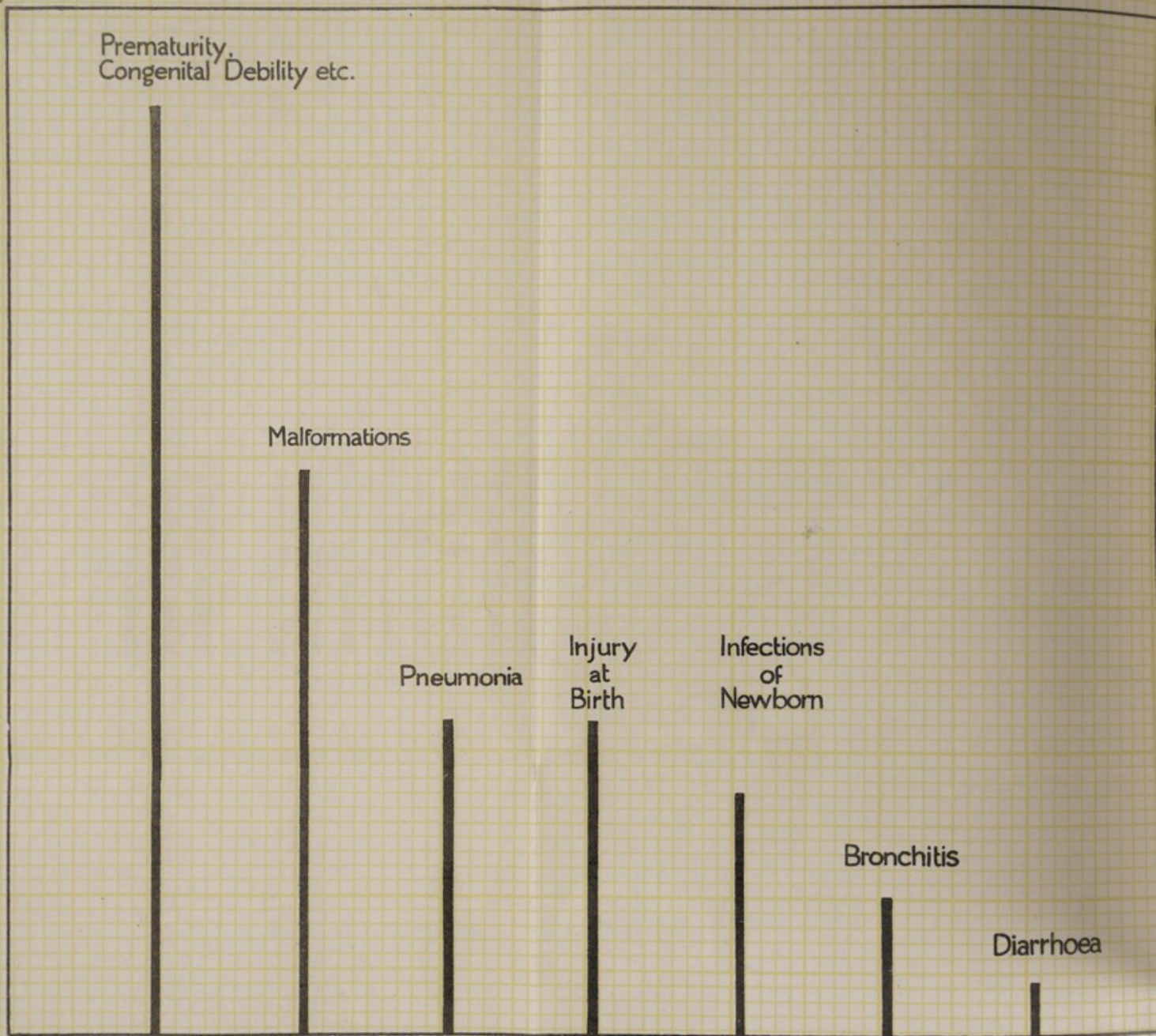
Pneumonia

Injury
at
Birth

Infections
of
Newborn

Bronchitis

Diarrhoea



The trends of mortality of all causes and certain specified diseases have again been prepared graphically and produced on the accompanying graphs.

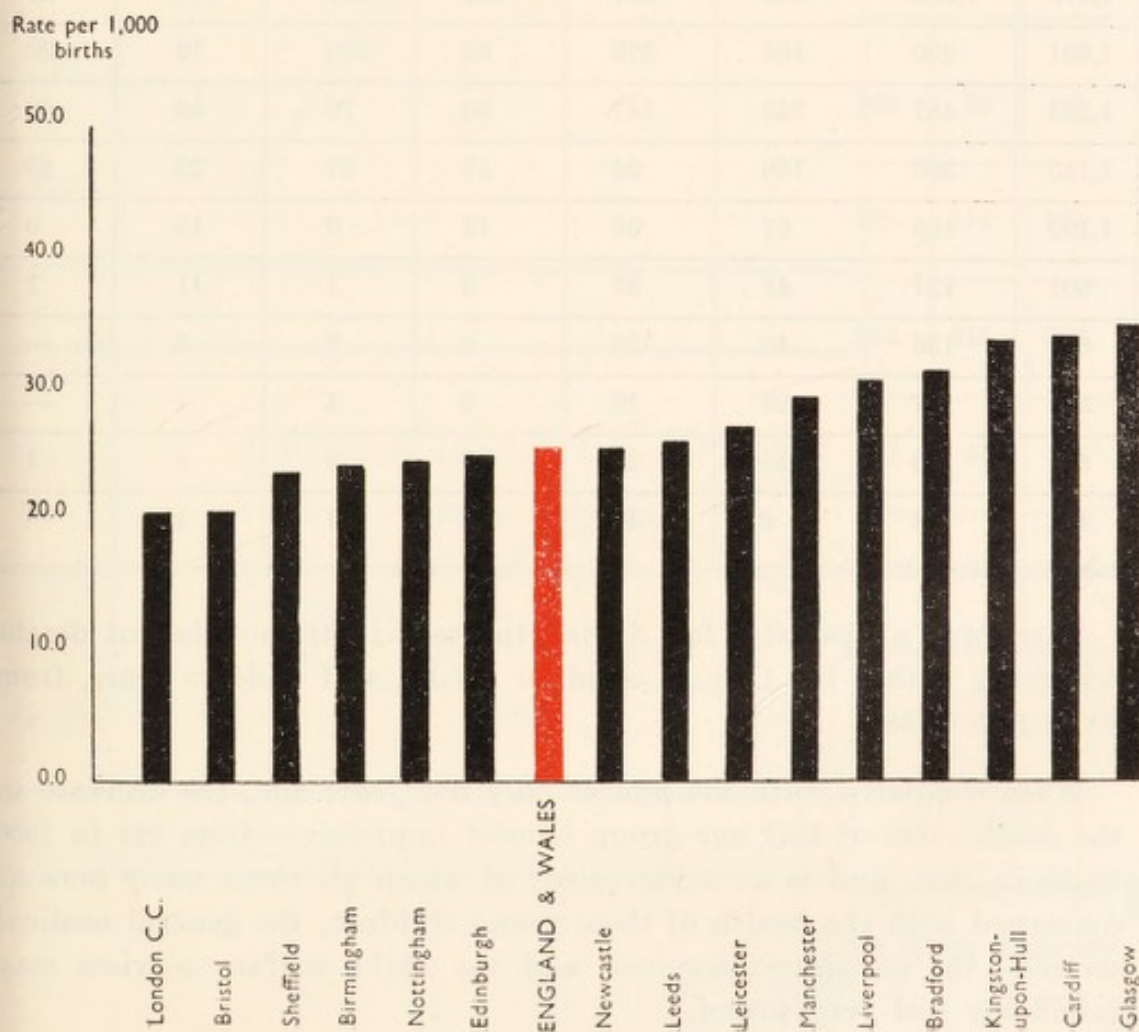
Full detailed causes of mortality are given in the statistical appendix.

Infant Mortality Rate.

It is most satisfactory to report after the infant mortality rate had remained stationary for the preceding three years, that it fell from 35 to 31 per 1,000 live births in 1954. A total of 485 infant deaths occurred, of which 36 were illegitimate children (an illegitimate infant mortality rate of 43 compared with the legitimate infant mortality rate of 30).

A graph gives some of the principal causes of Infant Mortality and further fuller statistical tables are given in the appendix at the back of this report.

CHART SHOWING INFANT MORTALITY RATE FOR A NUMBER
OF THE LARGER AUTHORITIES FOR THE YEAR 1954



The importance of prematurity as a cause of these deaths is clearly shown in the graph. It is to be hoped that the new measures planned to deal with premature babies at home, described in full later in the report, will assist in reducing the rate further.

The rate of 31 is the lowest ever recorded in the City, but is still higher than the national average (25.5).

Child Mortality.

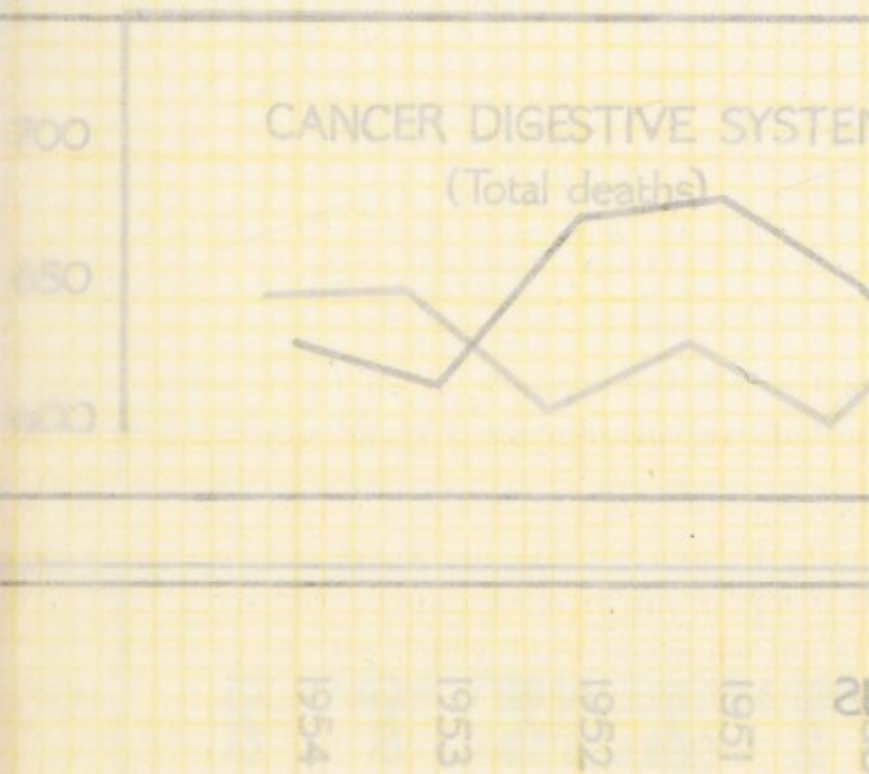
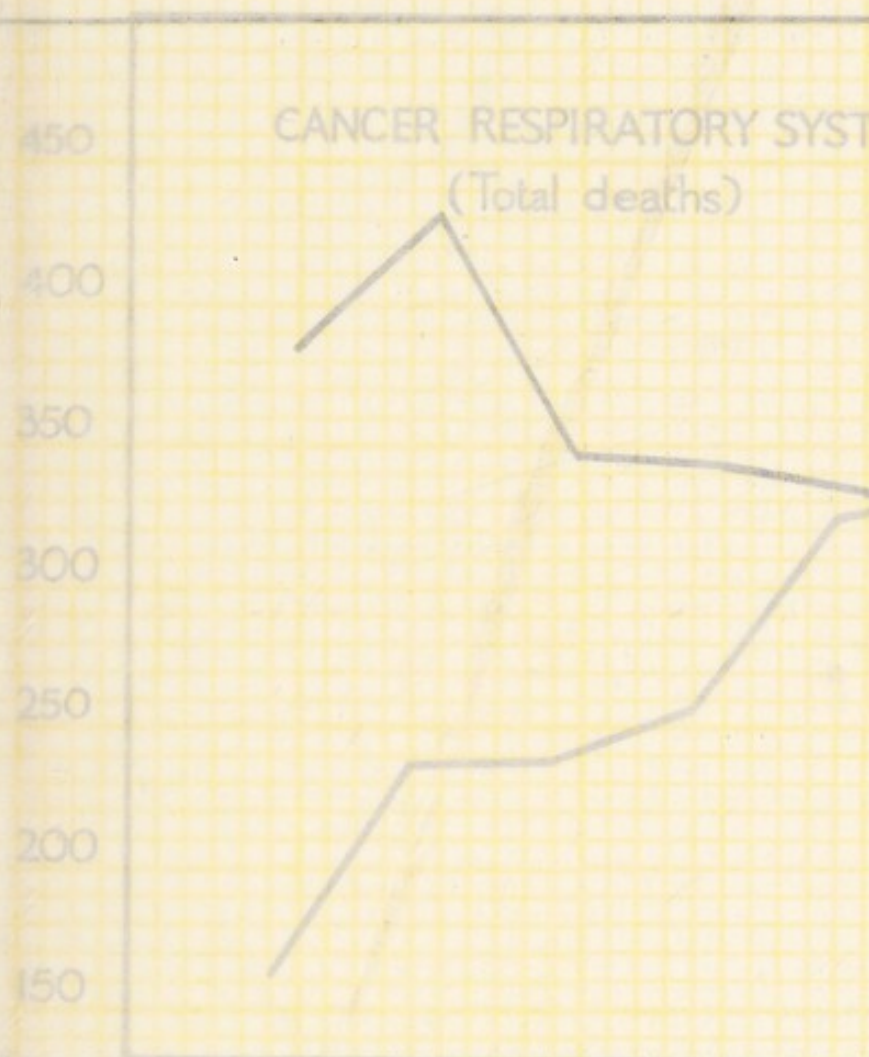
YEARLY AVERAGE NUMBER OF DEATHS IN SUCCESSIVE QUINQUENNIA, 1920-1949, AND TOTAL DEATHS IN 1950, 1951, 1952, 1953 AND 1954.

Year.	Deaths under 1 year of age.	DEATHS, 1 YEAR AND UNDER 5 YEARS OF AGE.						
		Total, 1 year and under 5 years of age.	General Diseases (including T.B.).	Respiratory Diseases.	Digestive Diseases.	Measles.	Whooping Cough.	Diphtheria. Scarlatina. Febrile.
						Included in General Diseases.		
1920-24	2,278	1,349	557	513	121	202	109	62
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	601	121	41	37	5	1	11	1
1951	548	136	40	26	4	3	5	—
1952	562	97	26	18	8	4	1	—
1953	569	90	15	20	5	2	1	1
1954	485	58	9	11	2	1	1	—

There was a dramatic fall during the year in the number of deaths occurring within the City in children aged 1 and under 5 years, from 90 in 1953 to 58.

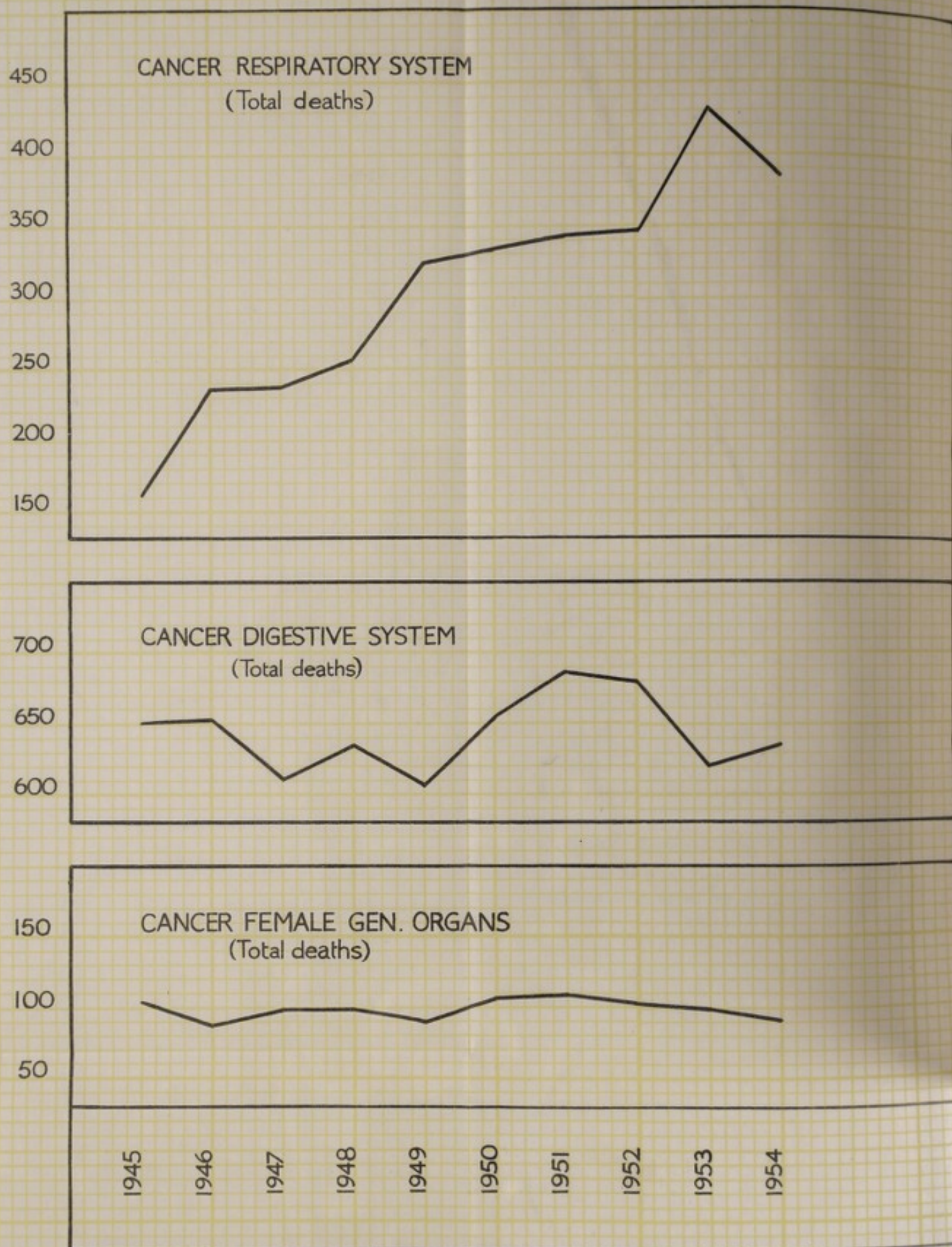
When compared with the figures only five years ago, the decrease in the death rates of this age group is most impressive—from 121 in 1950 to 58 in 1954, and is an achievement of which all those many persons concerned with the health of these young children, the general medical services, the paediatric services, and the child welfare services may justifiably feel very proud.

2 - 1954



TRENDS OF MORTALITY-LIVERPOOL

1945 - 1954



DEATHS FROM CANCER

1945—1954

Organs Affected	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954
Buc. Cavity	40	42	39	43	35	46	44	31	29	46
Digestive Organs ...	649	650	610	642	603	651	687	677	620	636
Respiratory System ...	160	234	235	252	320	331	344	346	432	383
Female Genital Organs ...	102	86	97	97	91	105	110	102	98	93
Breast ...	119	126	130	133	107	108	122	120	114	121
Other Organs	150	174	203	262	226	315*	218	264	215	252
Leukæmia ...	—	—	—	—	—	—	34	51	45	51
Total ...	1,230	1,312	1,314	1,429	1,382	1,556	1,559	1,591	1,553	1,582

*Including Leukæmia.

Cancer.

There has been little change in the number of deaths from cancer which occurred during the year. Reference has already been made to the halting noted in the cancer of the lung death rate.

Cancer Death
Rate

Deaths in the various Wards of the City.

Abercromby	215	Netherfield	176
Aigburth	266	Old Swan	277
Allerton	161	Picton	237
Anfield	296	Pirrie	240
Arundel	254	Princes Park	244
Breckfield	210	St. Domingo	215
Broadgreen	259	St. James	242
Central	159	St. Mary's	138
Childwall	196	St. Michael's	254
Church	241	Smithdown	211
Clubmoor	175	Speke	172
County	239	Sandhills	205
Croxteth	180	Tuebrook	229
Dingle	290	Vauxhall	217
Dovecot	197	Warbreck	256
Everton	251	Westminster	151
Fairfield	259	Woolton	145
Fazakerley	196	Miscellaneous (No fixed	
Gillmoss	171	abode or resident out of	
Granby	276	England and Wales) ...	43
Kensington	240		
Low Hill	209		8,946
Melrose	354		

1951 CENSUS.

During the year, the General Register Office published the County report for Lancashire based on the Census of England and Wales 1951. This report contained much interesting information, and I am indebted to the Controller of H.M. Stationery Office for permission to reproduce extracts. The following is a brief summary of those findings in the 1951 Census which particularly affected the work of the Health Department.

Population Trends.

Compared with the 1931 Census, the population of the City decreased by 7·8 per cent from 856,072 persons in 1931 to 789,532 in 1951. There have been two main causes responsible for this reduction:—

- (a) Migration of population to housing estates outside the boundaries of the City following the slum clearance programme.
- (b) The mass destruction of housing property during the bombing raids in World War II.

A Table giving full details of the population figures for the wards of the City is included in Table 49 of the Statistical Appendix.

Age Structure.

There has been a striking change in the age structure of the City's population. This is best illustrated by the following table:—

PERCENTAGE DISTRIBUTION OF POPULATION

Age Group (years)	Liverpool		England and Wales	
	1931	1951	1931	1951
0-14	28·4%	26·0%	23·8%	22·2%
15-64	66·1%	65·1%	68·8%	66·9%
65+	5·5%	8·9%	7·4%	10·9%

It will be seen that during the twenty years 1931-1951 there has been a change in the proportion of elderly persons within the population.

The figure of those aged 65 years and over has risen from 5·5 per cent in 1931 to 8·9 per cent in 1951. It will, however, be noticed that the Liverpool 1951 figure still is considerably less than the national figure.

At the same time there has been a reduction in the proportions noted in the other two age groups. In 1931 there were 28·4 per cent of persons in the City aged 0-14 and in 1951, 26·0 per cent. The proportions of persons aged 15-64 years fell from 66·1 per cent in 1931 to 65·1 per cent in 1951.

It will be noted that Liverpool still maintains a much higher proportion of young persons than in the country as a whole—26·0 per cent compared with 22·2 per cent—this finding directly follows the high birth rate in the City.

Social Structure.

Within the Census report, there is an analysis of the social structure of the City. Each occupation is classified into one of the following five groups:—

Class I—Professional, etc., occupations.

Class II—Intermediate occupations.

Class III—Skilled occupations.

Class IV—Partly skilled occupations.

Class V—Unskilled occupations.

In the 1951 figures the proportion falling within each of these classes is shown in the following table:—

	Proportion per 1,000 Occupied and Retired Males in Social Classes				
	I	II	III	IV	V
England and Wales	33	150	527	162	128
Liverpool	19	102	503	131	245
Lancashire	23	127	531	148	171

In the City there are lower proportions within Classes I and II and higher proportions within Class V than either in Lancashire or England and Wales.

This finding has a direct effect on much of the City's mortality rates for it is known that many mortality rates, particularly the infant mortality rates, are highest in Class V and lowest in Classes I and II. The higher proportion of the population within Class V will, therefore, tend to have an adverse effect on these mortality rates.

Marital State.

Details of the marital state of the population are given in the 1951 Census. They show that there has been a marked change compared with the findings in 1931 :—

MARITAL STATE, CITY OF LIVERPOOL				
Age Groups (Years)	Females		Males	
	1931	1951	1931	1951
15-19	2.1%	3.4%	0.3%	0.2%
20-24	24.6%	40.4%	14.4%	21.8%
25-29	55.5%	71.4%	49.9%	61.1%
30-34	71.9%	78.4%	74.1%	77.3%
35-39	74.5%	78.9%	82.4%	83.8%
40-44	73.6%	77.6%	83.9%	85.8%

Compared with 1931, the Census of 1951 shows that many more persons are marrying at younger ages.

Housing.

Much valuable information regarding housing was collected in the 1951 Census.

Some of the more important findings included :—

(1) 48 per cent of households were either without or had to share use of a bath (44 per cent in Lancashire).

(2) 21 per cent of households were either without or had to share a piped water supply with another household. (This figure is made up of 19.8 per cent shared and 1.2 per cent without water supply.)

This figure gives an accurate estimation of the proportion of households who shared accommodation. (A household by definition includes single persons living at home, and groups of individuals voluntarily living together, boarders, domestic servants or visitors are included in the household in which they were situated on the date of the Census.)

(3) 17 per cent of households are either without or have to share a water closet. (This figure is made up of 12·8 per cent shared water supply and 4·2 per cent without water supply.)

(4) 49 per cent of households have excluded use of bath, water closet, kitchen sink, cooking stove, and piped water.

(5) The percentage of persons living in overcrowded conditions at a density of more than two persons per room has fallen from 10·94 per cent in 1931 to 5·96 per cent in 1951. This represents a remarkable improvement in the twenty years, but the present figure still is much higher than the national average of 1·2 per cent.

HEALTH VISITING AND CHILD WELFARE SERVICES.

At the end of the year, the health visiting staff comprised:—

Staff

- 1 Superintendent Health Visitor.
- 2 Deputy Superintendent Health Visitors.
- 8 Clinic Superintendents.
- 1 Tutor to the Student Health Visitors.
- 53 Health Visitors.
- 7 Nurses engaged in a temporary capacity to assist the health visitors in clinics and some routine visiting.
- 2 Nurses undertaking the home visiting of notified cases of measles.

Other staff attached to the health visiting team include:—

- 1 Physiotherapist.
- 1 Research worker engaged in collecting data relating to deaths from cancer.
- 23 Full-time Welfare Foods Distributors.
- 6 Part-time Welfare Foods Distributors.

The health visitors continued their work as health teachers and family advisers and this is summarised in Statistical Appendix. (Tables 4-11.)

Earlier visits are now being paid by the health visitors to normal maternity cases discharged from hospital between the 10th and the 14th day. All abnormal cases leaving hospital during any part of the lying-in period are visited by the midwives.

Maternity Cases

Arrangements are made for a health visitor to call at one maternity hospital to see the mother of every premature baby before discharge.

Premature Babies

The health visitor also has the opportunity of discussing the baby's progress and treatment with the ward sister in the presence of the mother. This provides for a more efficient follow-up of the advice given in hospital and a better reception for the health visitor on her primary domiciliary visit. Close contact is also being made with the Children's Hospitals and liaison is being maintained by a health visitor paying a weekly visit to four of the hospitals' paediatric clinics.

Paediatric Clinics

**Psychiatric
Clinic**

Arrangements have also been made for contact with the psychiatric clinic for children under five years of age and it is hoped that with the exchange of information, great help will be afforded to these children.

**Poliomyelitis
Contacts**

The health visitors have again visited all cases of poliomyelitis contacts and have carried out a follow-up of the Trichinosis outbreak of 1953. They have also undertaken a very large part in the special investigation into Sonne Dysentery.

**Whooping
Cough
Immunisation**

In conjunction with the Medical Research Council, the Whooping Cough Trial has continued and through the efforts of the health visiting team, and the excellent response of the population, the target of 5,000 children immunised was reached by the end of the year.

The health visitors continue to take part in the follow-up of babies of women who had a virus infection during pregnancy.

Work has increased in connection with the welfare of the aged in the community and more visits have been paid to their home.

Research

The work on the survey relating to the growth of babies continued during 1954. A large part of the work in collecting data for the North Wales, West Cheshire and South West Lancashire Cancer Research Committee is still being done by the health visitors—in all, 917 cases were visited.

**Care of the
Unmarried
Mother**

The care of illegitimate children still constitutes an important part of the health visitors' work. A large number of the girls having illegitimate babies have become estranged from their families, and arrangements have to be made for their care during the ante-natal and post-natal periods, and it is because of the close co-operation existing between the health visitors and the various voluntary workers that this can be achieved. The voluntary organisations undertaking work in connection with unmarried mothers and their babies provide several mother and baby homes in this City, to which the health visitors can pay periodic visits, to give any help and advice which may be necessary. The City Council continues to pay grants to these voluntary organisations.

Infant Mortality.

The infant mortality rate in the year was reduced to 30·8. The special **Infant Mortality Rate** attention given by the health visitors to young infants has, without doubt, contributed to this figure—the lowest on record for the City. The infant mortality rate is, however, still higher than that for England and Wales (25·5) and an analysis has been made of the causes of death **Neonatal Mortality** in infants under a month. Enquiry was also made regarding the ante-natal care of the 303 mothers of the 326 infants who died before reaching the age of 4 weeks. It was found that there was little overlap between the different agencies responsible for ante-natal care. In 104 cases it was shared between the hospitals and the general practitioners, and in 80 cases the general practitioners were responsible while in 55 cases the hospital undertook the entire ante-natal care. Domiciliary midwives were responsible for the ante-natal care in 20 cases while a further 20 did not have any ante-natal care. (See Table 5.) No information is available concerning the ante-natal care of the 8 neonatal deaths which were inward transfers. Of the 326 neonatal deaths, 121 were associated with prematurity, 67 to malformations, 52 to injury at birth, 41 to infections of the newborn and 45 due to various other causes (Tables 6-10, Statistical Appendix).

At the end of 1954, medical staff at the clinics comprised 4 full-time assistant medical officers and 26 part-time medical officers (including 2 consultants and 1 hospital registrar).

During the year health talks and practical demonstrations were given at all clinics on subjects of interest to the family. This year extra emphasis was placed on the care of the infant under a year. This did mean, however, that rather less attention could be paid to the toddler group. Facilities for immunisation and also for vaccination are available at all welfare centres.

Statistics relating to the centres are shown in Table 11 (Statistical Appendix).

The number of new cases attending the ante-natal clinics has fallen **Clinic Attendances** from 5,744 in 1953 to 4,534 in 1954 and the number of total attendances has fallen from 31,008 to 22,890. On the other hand, the total number

of attendances of infants under one year at the welfare clinics has increased from 74,349 to 75,216, but the number of new cases of infants under one year has decreased from 8,617 to 8,317.

**Co-operation
with General
Practitioners**

During the year a circular was sent to all practising doctors in the City reminding them of the facilities available at the clinics for mothercraft teaching and dental care. There was also a reminder that clinic medical officers would be pleased to take blood for rhesus testing without necessarily doing the ante-natal care.

**General
Practitioners
meetings at
clinics**

With the aim of achieving closer co-operation between the general practitioners and the Public Health staff, meetings were held at thirteen welfare centres in the City between members of the staff, including health visitors, midwives and medical officers, and the general practitioners practising in the different areas. That a very real need was fulfilled is evidenced by the good attendance of general practitioners at these meetings and by the discussion of points of mutual interest which followed and the clarification of many outstanding problems.

Considerable interest in the working of the maternity and child welfare clinics was, of course, shown by the general practitioners, many of whom expressed the hope that further meetings of this nature would be held to consolidate the interested co-ordination already created.

New Clinics

There is an increasing need in the housing estates at Croxteth and Speke for local authority clinics. In the case of Speke the clinic has for some time been held in a Church Hall which was a considerable distance from the centre of the estate. (This has now been closed.) During 1954, the City Council agreed in principle to the building of two small clinics on these estates, and plans for these clinics are in the course of being drawn up. The Health Committee were, however, impressed with the urgency of the need, and permission was given for the immediate acquisition of two Corporation houses at Croxteth and two ground floor flats at Speke for use as school, dental, ante-natal and infant welfare clinics. During the short time that the maternity and child welfare clinics have been functioning in the temporary clinics, the attendance has been very good—indeed it is anticipated that in the very near future it will be necessary to hold a non-medical infant clinic in both places to ease the load on the doctors' sessions. Welfare Foods are distributed from both these centres.

The number of women who attended ante-natal relaxation classes at the welfare centres was 303, and the attendances they made were 1,166. These represent an increase in attendances during 1954, mainly by women who attend the local authority's ante-natal clinics. Few have been sent by general practitioners, or hospitals, and more from both these sources would be welcomed.

**Relaxation
Classes for
Expectant
Mothers**

By arrangement with the Education Committee, children under the age of 5 years suffering from defective vision or orthopaedic defects may receive treatment and advice at the School Health Service special clinics. During the year, 459 cases were referred to the School Health Service, namely:—

**Special Treat-
ment for Pre-
School
Children**

Defective vision	...	...	...	310
Orthopaedic defects	...	...	...	149

Infestation by head lice still persists among mothers and young children and the health visitors continue to give it their attention. In addition to those cases they discovered themselves, other infected families were referred to them by nursery matrons, school nurses, general practitioners, hospitals and others.

**Infestation by
Head Lice**

During the year, 595 children and 187 adults were found to be verminous and in all cases advice was given as to cleanliness, and arrangements made for cleansing at home or at cleansing stations.

In all, 109 adults and 292 children were cleansed at the cleansing stations, the remainder being cleansed at home.

In June of this year, the Government Welfare Foods Scheme was transferred to the local authority and welfare foods are now being distributed from 21 infant welfare centres and 6 other centres in the City by the 23 full-time and 6 part-time staff of distributors working under the supervision of the Superintendent Health Visitor. The demand for welfare foods has been more than maintained and the amount distributed up to the end of the year was:—

**Welfare
Foods**

National dried milk—367,227 tins.
Cod liver oil—46,875 bottles.
Orange juice—200,296 bottles.
Vitamin tablets—16,599 packets.

MIDWIFERY SERVICE.

At the end of 1954 the staff of the Municipal Midwifery Service comprised 1 medical and 3 non-medical Supervisors responsible for the supervision of all domiciliary midwives in the City, including 54 full-time and 1 part-time municipal midwives.

During the year, 285 midwives gave the required notice under Section 15 of the Midwives Act, 1951, of their intention to practise midwifery in the City (see Table 12) (Statistical Appendix).

Hospital and Domiciliary Deliveries In 1954, 13,082 women were delivered in hospital and 4,872 were delivered in their own homes, of these, 3,810 cases were delivered by municipal midwives (see Table 13) and 1,043 by Liverpool Maternity Hospital District Homes (see Table 14) (Statistical Appendix).

Early Hospital Discharges The average case load of the municipal midwives was 70. There was a total of 6,638 special visits paid by the midwives in addition to their ordinary routine work. Of these visits 1,393 were to maternity cases discharged from hospital before the 9th day and 4,367 were to maternity cases discharged after the 9th and before the 14th day. This number is lower than last year owing to the fact that since the beginning of November, 1954, all normal cases discharged from hospital on and after the 10th day have been visited by the health visitors. Abnormal cases were handed over to the midwives. 355 special visits were also paid by the midwives to premature infants who were discharged from hospital after the 14th day, and they also paid 523 extra visits to premature infants born at home who required further nursing care.

Analgesia 2,833 domiciliary deliveries had gas/air analgesia and 1,906 had Pethidine. (See Table 15) (Statistical Appendix).

Co-operation with General Practitioners The midwives continued to work in close co-operation with the general practitioners. When a domiciliary midwife books a patient, a formal note is sent to the patient's private doctor to find out whether he wishes to supervise the pregnancy. If he does so, he is asked to state whether he wishes to be present at the confinement or merely to be called in case of emergency.

Three general practitioners in the City had midwives attending their ante-natal clinics, this enabled the midwife and the doctor to examine their patients together. In these cases the midwives themselves carry out intermediary examinations of their patients as requested by the practitioners. This type of co-operation is welcomed by both the doctors and the midwives, and gives the midwives a better opportunity of getting to know their patients in the doctors' booked cases. When possible, the midwives arrange a rota to attend the doctors' clinics and as they work in groups of 2, 3 or 4, they are thus enabled to see their partner's cases with the doctors, so that if they are called in an emergency they are familiar not only with their own but with their partner's patients.

**Midwives at
General
Practitioners
Ante-Natal
Clinics**

The non-medical supervisors have given considerable assistance in the initiation of this liaison between the midwives and the private doctors.

**Work of the
Supervisors**

During 1954, 1,254 visits were paid by the administrative staff to midwives, and 408 special visits were also paid by them in respect of cases of puerperal pyrexia, etc.

Under the rules of the Central Midwives Board midwives sought medical aid in 1,249 cases—908 mothers and 341 infants.

**Medical
Assistance**

The total number of occasions on which consultant obstetricians were called in connection with obstetrical emergencies or complications was 70—47 mothers and 23 infants.

The Obstetric Flying Squad was called in 49 cases and in 29 of these blood transfusions were given.

During the year, the midwives were called out by the Ambulance Service to 43 cases.

The number of cases of puerperal pyrexia notified during the year was 974. Of these, 52 occurred in the practice of midwives and in 20 cases the services of a district nurse were provided.

Thirteen municipal midwives were suspended from practice in order to prevent the spread of infection.

Care of the Premature Baby.

Home care of Premature Babies

Out of 15,855 births during 1954, 1,326 (8.4 per cent) were born prematurely, of these 248 were born at home.

In view of the high infant mortality rate in Liverpool, and the fact that it had remained at the same figure (35) during 1953, 1952 and 1951, an analysis was made of the causes of death of the infants who died in 1953. It was found that 57 per cent were associated with prematurity. This is in general agreement with the findings of other authorities. It was then decided to take action as suggested in Circular 20/44, which made provision for local authorities appointing specially trained domiciliary nurses to care for the premature babies and also to provide special equipment on loan. A suitable scheme has been approved by the City Council and will commence some time during 1955, providing for the appointment of two municipal midwives (both in possession of S.C.M. & S.R.N. qualifications) who will be given a course of intensive training in the nursing care of premature babies in one of the Liverpool hospitals. A third nurse, who will receive similar specialised instruction, will be seconded from the health visitors or midwifery staff to act as a relief nurse during holidays or sickness.

Loan of Special Equipment

As a necessary corollary, approval has been given to the provision, on loan, of various items of special equipment.

When appointed, the nurses will visit three or four times a day to supervise the general nursing care and feeding of these babies, and also to train the mothers themselves how to look after their own babies. The mothers will look after the babies under supervision and gradually gain confidence in their own efforts.

Looking after these babies is a highly specialised undertaking and the midwife allocated to this work must possess infinite patience and understanding of the difficulties of these mothers and babies. The mothers are invariably most anxious to look after their own babies and are very grateful for the assistance of the highly skilled nurse.

Breast Feeding

One of the non-medical supervisors of midwives attended a two weeks' course at the Woolwich Hospital for Mothers and Babies in October, 1954. Since her return she has been instructing the midwives in the

district adjacent to the Children's Hospital, in the methods used at Woolwich for encouraging lactation, and also discussing the problems of lactation with both midwives and patients in that area.

The interest of these mothers has been stimulated and a few have been lactating so successfully that they were able to donate some milk to the Children's Hospital.

The Supervisor has also been visiting the clinics to discuss lactation problems with health visitors in this particular area.

There has been, therefore, an extra impetus given to breast feeding in one of the City districts and it is hoped to extend this to other parts of the City at an early date. Unfortunately, this Supervisor can only be spared for short periods from her administrative duties, so that it will take some considerable time to cover the City. It is hoped that ultimately the hospitals in the different parts of the City will be able to obtain human milk, if they require it, from the domiciliary service supply.

A refresher course for the domiciliary midwives was arranged with the co-operation of the consultant obstetricians. A series of ten lectures was held, one of which was illustrated with a colour film and another with a display of X-ray films. The final meeting was a brains trust with an obstetrician, a general practitioner obstetrician and the medical officer of health on the panel, and a member of the health committee in the chair.

The lectures were all exceptionally interesting, of considerable practical help to the midwives, and certainly greatly appreciated by them.

The Part II Midwifery Training School in conjunction with Sefton General Hospital is proving popular and advantageous both to the hospital and local authority. The pupil midwives receive three months' practical midwifery training from municipal midwives approved by the Central Midwives Board. Theoretical teaching and administration of the training school is carried out by one of the non-medical supervisors of midwives. During the year, 15 pupil midwives completed their training. Nine have been appointed to the permanent staff of Sefton

**Breast Milk
to Children's
Hospital**

**Co-operation
between Mid-
wives and
Health
Visitors in the
further educa-
tion of the
mothers about
breast feeding**

**Refresher
Course for
Midwives**

**Part II
Training of
Midwives**

General Hospital, one has been appointed by the local authority to the position of municipal midwife and is proving very satisfactory. Permission has been received to increase the number of pupils in training and it is hoped that in the not too far distant future most of the vacancies in the local authority midwifery service will be filled by midwives from our own Part II training scheme.

Ophthalmia Neonatorum and Pemphigus.

Special attention is paid to cases of ophthalmia neonatorum and two nurses devote their full time to the supervision of infants treated at home. During the year, 658 cases were brought to the notice of the Department (including 124 notified cases). Of these, 517 were mild and 141 severe cases. In no case was vision either lost or impaired, one case was treated in hospital. 6,490 visits were paid by the ophthalmia nurses.

Arrangements are made with the City Bacteriologist for the examination of discharge from inflamed eyes in the newly-born in special cases. Out of 658 cases traced, one was found to be due to gonorrhoea.

Seven cases of pemphigus occurred in domiciliary midwifery practice during 1954. All were associated with a normal delivery. In two cases the babies remained at home under the care of the private doctors. Five babies were admitted to hospital. All seven babies made good recoveries. In every case a visit was made to the baby's home in an endeavour to trace the source of infection, but no possible focus was found either in the patients' homes or among the midwives who had been in attendance on the cases.

Nursing Homes

The nursing homes on the register at the end of the year numbered 9, the approximate number of beds being 160. Babies born in nursing homes numbered 330 including 3 twin births.

Stillbirths.

Stillbirths

There was a total of 476 stillbirths during the year, 72 of these related to mothers living outside the City and two were inward transfers. The remaining 402 stillbirths were fully investigated.

Table 19 shows the distribution of stillbirths according to parity. 82 per cent of the cases were delivered in hospital and the distribution

of responsibility for ante-natal care is shown in Table 21. It is apparent from this Table that there is very little overlap between the different people who are giving ante-natal care. (Tables in Statistical Appendix.)

It is shown in Table 22 that there were 27 stillbirths delivered at home where there was no record of the rhesus factor having been tested, that is 42·8 per cent of the mothers delivered at home did not have their blood tested. No information was available in 9·7 per cent of the hospital deliveries.

The causes of the stillbirths are listed in Table 26, and in Table 27 there is also a list of associated maternal diseases not directly responsible for the stillbirth.

The period of pregnancy when the patient was booked for hospital is shown in Table 24. (Statistical Appendix.)

There were 20 illegitimate stillbirths, which is 4·9 per cent of the total of 402 stillbirths which are the subject of this investigation.

In two cases the stillbirth was associated with positive Wasserman test.

The birth occurred in hospital in 336 cases, in a private nursing home in 4 cases and at home in 62 cases.

Maternal Mortality.

The maternal mortality rate is slightly higher than last year. There were 8 deaths due directly to pregnancy and childbearing and 7 due to associated conditions. **Maternal Mortality**

Of the deaths due to pregnancy (See Table 17) one died of sepsis following on self-inflicted abortion, one from obstetric shock and another from syncope during induction of labour. Two deaths were associated with post-partum haemorrhage, two were associated with toxæmia, one being due to an acute pyelonephritis of pregnancy and the other due to obstetric acute yellow atrophy. One patient died at home on the 19th day of the puerperium from pulmonary embolism. This patient had booked her private doctor and she arranged to have

the confinement in a nursing home. She was, however, transferred from the nursing home to hospital for the delivery on account of post maturity and hypertension. Only one case did not have any ante-natal care. The remaining 6 patients were booked hospital cases, 4 were booked before the 24th week, 1 was booked at the 27th week and the remaining case booked at the 32nd week.

Taking the social classes as defined by the Registrar General, 4 out of the 8 belonged to Class V, one to Class IV, two to Class III and one to Class II.

Of the deaths due to associated conditions, three had mitral stenosis, other conditions were acute ulcerative colitis, pheochromocytoma of adrenal gland, myasthenia gravis and cerebral ischaemia. (See Table 18) (Statistical Appendix).

Day Nurseries.

Day Nurseries There are 14 Day Nurseries (788 places) in the City for women who are obliged to go out to work for domestic reasons. In two of the nurseries the accommodation is of a temporary nature, one being in Mill Road Hospital and the other at Salisbury Street School. It is hoped to close both of these nurseries within the next 18 months, and to accommodate the children in new premises to be built in Shaw Street.

In January, 1954, the number of places at Salisbury Street was reduced from 63 to 42, owing to the fact that three classrooms were required by the Education Authority. The premises at Salisbury Street are not very satisfactory for use as a day nursery as it is difficult to maintain reasonable standards of hygiene there. The facilities for bathing the babies and also for laundering small items of clothing, for the preparation of bottle feeds and also vegetables for the older groups are poor.

In the case of the Mill Road Nursery, the nurses' home is situated above the nursery and the night staff are disturbed by the activities of the children. There is no room for outdoor play.

It will therefore greatly improve the day nursery services when the new nursery in Shaw Street is completed and the two unsatisfactory premises in Salisbury Street and Mill Road can be closed.

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 1954.

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

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

When the scheme was initiated in 1952, it was not anticipated that the demand would be as great as it is now. Indeed, it was only in the latter part of 1954 that there was such a considerable increase in the demand for this service.

Every effort is made to deliver the articles to the patient within twenty-four hours of a request for assistance.

For the future, there is good reason to believe that the demand has not yet reached its peak and it is to be expected that as the public becomes increasingly aware of the existence of the scheme, so, proportionately, will the number of applications for assistance multiply.

Tables referred to in this section will be found in the Statistical Appendix.

DISTRICT NURSING

The Liverpool Queen Victoria District Nursing Association continued to act on an agency basis for the Local Health Authority, operating from the following centres:—

HOMES—

- Central Home, 1, Princes Road—ROY 1134.
- Derby Home, Knotty Ash—STO 3129.
- Lady Williamson Home, Aigburth—GAR 340.
- Walton Home, Walton—AIN 3267.

DOUBLE DISTRICTS—

- Clubmoor—39, Malleson Road—STA 3961.
- Fazakerley—60, Manica Crescent—AIN 5542.
- Norris Green—192, East Lancashire Road—STA 2421.
- Speke—95, Heathgate Avenue—HUN 2112.
- Woolton—2, Hillfoot Avenue—HUN 2134.

The Nursing Staff at the 31st December, 1954, was comprised as follows:—

- 1 Senior Superintendent of Home Nursing.
- 1 District Nurse Tutor.
- 3 Superintendents.
- 4 Assistant Superintendents.
- 63 Queen's Nurses (Full-time).
- 5 Queen's Nurses (Part-time).
- 3 State Registered Nurses (Full-time).
- 12 State Registered Nurses (Part-time).
- 7 State Enrolled Assistant Nurses.
- 6 Student District Nurses.

which, in terms of full-time staff, was 12 below the approved establishment.

The following statistics are in respect of the work undertaken in the twelve months ending 31st December, 1954:—

Cases	...	...	20,866
Visits	...	...	383,956

Analysed as follows:—

<i>Cases</i>				<i>Visits</i>			
On books 1st January, 1954			1,847				
Medical	...	...	12,784	Medical	...	...	276,726
Surgical	...	...	2,896	Surgical	...	...	56,793
Tuberculosis	...	...	795	Tuberculosis	...	...	33,403
Maternity & Child Welfare	...	...	2,231	Maternity & Child Welfare	...	...	15,363
Infectious	...	...	42	Infectious	...	...	325
Diabetic	...	...	271	Casual	...	...	1,346
			<u>20,866</u>				<u>383,956</u>

Included in the above figures are:—

(a) Analysis of Injections:—

				<i>Cases</i>	<i>Visits</i>	District Nursing
Insulin	...	...	...	557	68,484	
Penicillin	...	...	...	10,480	74,386	
Streptomycin	...	...	...	1,133	31,497	
Haematen	...	...	...	1,355	25,093	
Others	...	...	...	2,164	46,397	
				<u>15,689</u>	<u>245,857</u>	

(b) Patients who were 65 years of age or over at time of first visit:—

<i>Cases</i>	<i>Visits</i>
6,041	166,588

(c) Children who were under 5 years of age at the time of first visit:—

<i>Cases</i>	<i>Visits</i>
2,241	14,290

(d) Patients who have had more than 24 nursing visits during the year:—

<i>Cases</i>	<i>Visits</i>
4,173	201,285

Source of origin of cases:—

Sent by Doctors	...	...	...	...	...	17,914
Sent by Hospitals	...	...	...	...	...	647
Sent by Public Health Department	...	...	...	...	...	197
Applied direct	...	...	...	...	...	226
Other sources	...	...	...	...	...	35
						<u>19,019</u>

Nursing visits were 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. Morning and evening visits were always paid to ill-patients requiring twice a day visits, and a skeleton staff was on duty each evening until 10.30 p.m. for "emergency calls" and for those ill-patients requiring late morphia injections; 1,295 such late visits were made during the year.

A number of requests for late evening visits were received from general practitioners, and whilst a nurse was always sent in a case of genuine emergency, it has not always been possible to send nurses to give antibiotics to patients late in the evening who have been able to attend the doctor's surgery.

**District
Nursing to
Elderly
Patients**

During the year an additional eight nurses were engaged in order to provide late evening visits to elderly folk who might need a late evening visit to make them comfortable and settle them for the night. This scheme so far has worked well, and it is interesting to record comparative figures for 1953 and 1954 in respect of visits made to patients over 65 years of age:—

			<i>Cases</i>	<i>Visits</i>
1953	...	...	5,410	107,680
1954	...	...	6,041	166,588

The training of District Nurses has continued throughout the year, 26 having qualified as Queen's District Nurses. Of these, 19 were staff students, 4 were trained on behalf of County Authorities and 3 on behalf of County Borough Authorities.

In addition to District Nursing, the Liverpool Queen Victoria District Nursing Association continued to maintain on a purely voluntary basis, entirely outside the National Health Service, a Mobile Physiotherapy Service comprised of three Mobile Units staffed by three Chartered Physiotherapists. The volume of work showed an increase over the 1953 figures, 5,429 treatments being given to 342 patients. The treatments given were of a varied nature and included: Massage and Remedial Exercises, Radiant Heat, Infra Red and Ultra Violet Irridiation, Faradic and Galvanic Stimulation, Ionisations, High Frequency, Paraffin Wax Baths and the making of Plaster of Paris Splints. The addition of ten Remploy Walking Sticks to the equipment has proved very successful, and patients who have been unable to walk for long periods are now ambulant. It has been very encouraging and gratifying to note that more general practitioners made use of this branch of our Service.

The maximum use has been made of the "Night Attendant's Service" organised by the Old People's Welfare Committee of the Personal Service Society. This scheme provided "Sitters-In" to enable tired

relatives have a night's rest in case of long-term illness. The Service continued to be run on a voluntary basis and a charge of 10s. per night plus 'bus fares and insurance was made, but necessitous cases were assessed on income.

Our grateful thanks are accorded to the members of the St. John Ambulance Brigade for their continued assistance in dealing with heavy patients and their help in many other ways, e.g., transferring heavy patients from upper floors to ground floor levels, dismantling and removing beds, and getting patients who were unable to help themselves out of bed to sit by their fireside for a few hours, returning later to put them back to bed.

THE HOME HELP SERVICE.

Service was supplied to 1,870 households during the year ended 31st December, 1954. The amount of service varied from 4 to 44 hours per week, according to the needs of the applicants.

Patients requiring daily attendance numbered 739 and included:—

Home Confinements	...	...	...	...	262
Post-maternity cases (confinements in hospital)	...	...	...	...	139
Influenza, Bronchitis, etc.	...	...	...	...	36
Tuberculosis	...	...	...	...	23
Cancer	...	...	...	...	10
Other illness	...	...	...	...	269

The number of Home Helps provided for Home Confinements remained small. This was undoubtedly because of the charge, which invariably far exceeded the £3 Maternity Allowance provided for this purpose. There was a big difference between the number who made prior arrangements for the service and the number who actually applied for the Help when the child was born. The length of service was also affected by the high cost, many mothers dispensing with the Help after one week's assistance.

The Post Maternity Service was provided for approximately one week to mothers immediately on their return from hospital or nursing home. This service was used mainly by those in the higher income groups and was rarely requested by tenants of the new housing estates.

All daily service was provided on a temporary basis and patients requiring indefinite assistance were encouraged to make their own arrangements, when possible.

In 30 cases, however, it was found impossible to terminate the service because the patient was extremely ill, was living alone and his income would not permit him to employ outside help.

One such case was that of an elderly man who had a Cancer of the bowel and who had refused hospital treatment. The Home Help attended daily, washed and fed him, took his washing to the laundrette (the laundry would not accept it) and kept his house in order. It was not possible to give him the constant attention which he required and his relatives refused to help. He had, however, a good neighbour who visited him in the afternoon and prepared his tea. The patient was eventually found dead by the Home Help when she arrived one morning.

The Pensioners Service was supplied to 1,131 households during the year and at the 31st December, 1954, 515 were receiving help on at least one morning per week.

This service is intended for the aged and infirm who live alone or with others equally infirm, who cannot keep their homes in order and who are unable to pay for a private employee. If the need is urgent and the patient cannot find other help, the service is provided on a temporary basis during which time other arrangements can be made. A charge is made to every applicant, depending on the income of the household. If there is an allowance from the National Assistance Board, the Area Officer concerned is informed and in most instances the allowance is increased by the amount of the charge made.

INFECTIOUS DISEASE.

SUMMARY.

Number of cases of infectious diseases reported during 1954:—

Anthrax	...	...	...	...	3
Enteric Fever	...	...	...	...	9
Scarlet Fever	...	...	...	...	860
Measles and German Measles	...	...	...	...	8,629
Diphtheria	...	...	...	...	6
Cerebro-spinal fever	...	...	...	...	58
Poliomyelitis—Paralytic	...	...	...	...	26
Non-paralytic	...	...	...	...	9
Pneumonia and Influenzal Pneumonia	...	...	...	...	522
Dysentery	...	...	...	...	494
Whooping Cough	...	...	...	...	1,933
Food Poisoning	...	...	...	...	268

No case of plague, smallpox or typhus fever occurred during the year. Details of the monthly incidence of these diseases are given in Table 28 in the Statistical Appendix.

Anthrax

Three cases of anthrax occurred during the year. One was employed at the Government Wool Disinfecting Station, and the other two at different docks.

Typhoid and Paratyphoid Fevers.

Typhoid and Paratyphoid Fever

Seven cases of typhoid fever and two cases of paratyphoid B fever were recorded during the year. One of the cases of typhoid had been infected in the Middle East and of the other six, three were Type A, two were a degraded Vi strain, and one was Type El. Both the cases of paratyphoid B were Type 1. Three of the cases of typhoid, all children and belonging to two families, were thought to have been infected by carriers discovered in these families. In the case of the single child, her father, found to be a carrier, was working on sewer repair work in a neighbouring town, and it was thought that he might have become infected there, although no other positive findings were made amongst his workmates. The two children in the other family were presumed to have been infected by the grandmother aged 89 years who was found to be a carrier. Both these families resided in the same street, but

absolutely no connection could be found between them, and in spite of the examinations of a wide range of contacts, no further cases or carriers were discovered.

The Type El case and one of the degraded Vi strain cases were isolated cases, no positive contacts being found and the source of the infection was not detected. The second degraded Vi strain case had been in association with other cases which occurred in a neighbouring borough, and it was thought that he had contracted his infection in that borough, as several cases occurred there.

However, the actual source of infection was never traced.

No connection was traced between the two paratyphoid Type 1 cases and no source of infection was discovered. A number of cases of Type 1 infection occurred in the City a few years ago, but no connection with any of these cases could be traced.

Register of Chronic Typhoid and Paratyphoid Excretors.

Examinations of two chronic typhoid carriers and three paratyphoid carriers have been continued throughout the year. One of the typhoid carriers referred to in the paragraph above has been added to the carrier list, the other having become clear after treatment. One other carrier of paratyphoid B Type 1 infection was discovered during the year as a result of the development of paratyphoid fever in a relation's home the carrier had visited in another town.

**Register of
Chronic
Typhoid and
Paratyphoid
Excretors**

This carrier, an old lady of 72 years, had visited her son's family in a neighbouring town at Christmas time, and in January two children of the family developed paratyphoid fever. She had also visited another son's family in another town in the middle of January, and one child there developed paratyphoid at the end of the month. An interesting feature was that the carrier was in much closer contact with the families of two married daughters in Liverpool, and yet none of the members of these families was found to be infected. The carrier was admitted to hospital and in spite of long courses of treatment, and finally the removal of the gall bladder, she continued to excrete the organism.

*Whooping Cough.***Whooping
Cough**

During 1954, 1,933 cases of whooping cough came to the notice of the Health Department, a figure representing a case rate of 2.46 per 1,000 of the population. Five cases proved fatal, four in children under one year of age, and one between one and two years old, corresponding to a death rate of 0.06 per 10,000 of the population.

*Diphtheria.***Diphtheria**

During 1954, six cases of diphtheria were confirmed, a case rate of 0.008 per 1,000 of the population. There was no fatal case. Details of the cases are as follow:—

Sex	Age	Type of Infection	Inoculation State
(1) Male	5 years	Mitis	Fully inoculated.
(2) Male	12 years	Mitis	Fully inoculated.
(3) Male	5 years	Mitis	Fully inoculated.
(4) Female	8½ years	Intermedius	Not inoculated.
(5) Female	3½ years	Intermedius	Not inoculated.
(6) Female	13 years	Intermedius	Not inoculated

In case (1) this boy was admitted to Fazakerley Hospital as a virulent mitis infection, and contracted a cross infection of Diphtheria intermedius. (This hospital cross-infection is an example of the all-too-prevalent danger of close-nursing in hospital.) In no other case was it possible to trace the source of infection, though it must be pointed out that the first three cases were brothers in one family, and the second three were sisters in another family.

Age Incidence of Cases.

	Under 1 Year	1—4	5—9	10—14	Over 15	All Ages
Ages of Cases ...	—	1	3	2	—	6
Ages at death ...	—	—	—	—	—	—

Measles.

During the year, 8599 cases of measles were reported, representing a **Measles** case rate of 10.9 per 1,000 of the population. The number of deaths was three, making a fatality rate of 0.03 per 100 cases and a mortality rate of 0.38 per 100,000 of the population. Two of the deaths occurred in children under one year of age, and one in a child under two years.

Poliomyelitis.

35 cases of poliomyelitis occurred during the year, 26 paralytic cases **Poliomyelitis** and 9 non-paralytic cases, compared with 38 cases in 1953.

Among these cases of poliomyelitis there was one outbreak affecting **Outbreak of Poliomyelitis in Nursery School** the pupils at a nursery school. This nursery school had 58 pupils and a staff of eleven. A girl of two years was removed to isolation hospital on the 24th of July, having last attended the school on the 22nd of July, and was immediately diagnosed as suffering from paralytic poliomyelitis. A boy of two years was removed to hospital on the 28th of July, having ceased attendance at the school on that day. He developed non-paralytic poliomyelitis. A boy of five years, a brother of a child who attended the nursery school was removed to hospital on the 30th of July, and was also diagnosed as a case of poliomyelitis. The remaining pupils at the school, their families, and the staff, were kept under surveillance for a period of three weeks from the date of removal of the last case. No illnesses were recorded among the staff, but 30 of the pupils had various mild illnesses of which six, from the general symptomatology, might have been minor illnesses associated with poliomyelitis. One boy, who had been off school for a fortnight prior to the occurrence of the outbreak, was found to have a facial palsy, and it is probable that he was, in fact, the initial case in the outbreak.

Dysentery.

During 1954, 494 cases of bacillary dysentery were reported in the **Dysentery** City. 478 of these cases were Sonne Dysentery, and 16 were diagnosed clinically only. This is a reduction compared with 1953 when 728 cases of Sonne Dysentery were traced.

Special Investigation.

There is very close liaison in Liverpool between the Physician Superintendent of the Infectious Diseases Hospitals and the Medical

Officer of Health, and when it began to appear in 1951, from the bacteriological results in hospitalisation and non-hospitalisation cases of Sonne Dysentery that the sulphonamides were losing or had lost their effect, it was decided to begin a joint investigation covering, on the one hand a comparison of the merits of the various sulphonamides and antibiotics in the treatment of the disease, and on the other hand, an investigation of the social background of the cases. This latter part of the investigation included not only a bacteriological investigation into the amount of infection in the family, but the gathering of particulars relating to the type and size of the home; the numbers in the home and sleeping arrangements; the standard of mothercraft; whether the mother went out to work or not; and the father's occupation, wages and social grade.

Where the patient was a child the history of previous illnesses and whether or not the child was breast fed or had been breast fed was noted, and also whether or not the child was upset by its stay in hospital.

This investigation was completed towards the end of 1954, and it is hoped that results will be published shortly.

Weils Disease.

Weils Disease One case of Weils Disease occurred in the City during the year and once again the victim was a man employed in sewer work. A considerable amount of investigation was done on the infectivity of rats in the areas where the patient had been working, and every possible measure against them has been taken.

Canicola Fever.

Canicola Fever

One case of canicola fever occurred. This patient, a boy of 17 years, was admitted to Fazakerley Hospital with symptoms of meningitis. However, it was very shortly discovered that he was, in fact, a case of Canicola Fever and on investigation at his home, it was found that the family did possess a dog, and that this dog had been quite ill about three months before the onset of the boy's illness. By arrangement with the Veterinary hospital, a specimen of blood was obtained from the dog and this blood gave a positive agglutination titre of 1 in 3,000 to leptospira canicola. The owner of the dog was advised to have it destroyed or to have it treated by a veterinary surgeon.

Other Salmonellae Infections.

175 cases of infection with various salmonella organisms other than S.Typhi or S.Paratyphi came to the notice of the department during the year. These infections involved 150 families. 563 contacts were investigated and of these, 100 proved to be positive. 157 of the cases were due to Salmonella Typhi Murium; 6 to Bovis Morbificans; 4 to Salmonella Thompson; 3 to Salmonella Anatum; 1 to Salmonella Newbrunswick; 1 to Salmonella San Diego; and 3 to Salmonella Reading.

Other
Salmonellae
Infections

Chlorine Gas Poisoning.

A party of 56 High School girls attended a public baths on the 22nd of June, 1954. During the latter part of their hour of instruction in the baths, a smell of chlorine gas became evident. This was reported to the staff and the girls were cleared from the water when they dressed and left the building. When they arrived back at the school, 28 (or 50 per cent) of the girls complained of feeling unwell. They complained of sore throats and a feeling of faintness. The Headmistress got into touch with the Health Department and a Medical Officer was immediately despatched to the scene. He noticed a smell of chlorine on entering the school and, on examining the girls, he found that 19 of them complained of an irritating cough, but little could be detected on examination. 8 of the girls were rather more severely affected having, as well as the irritating cough, some reddening of the fauces and a feeling of faintness. All these girls appeared to be recovering from the effects of the chlorine very rapidly and, inside about 1 hour, they all seemed fairly well.

Chlorine Gas
Poisoning

One girl who was coughing very badly had a very marked injection of the fauces and a rapid pulse. She was, in fact, in a semi-collapsed state. This girl was immediately admitted to a Liverpool Hospital under the care of a specialist in industrial diseases. She however, rapidly recovered, the only physical sign discovered was the injection of the fauces, and she was allowed home the next day. All the 8 girls more seriously affected were visited by the Medical Officer who saw them originally, the next day, and they were all found to be well, although two still complained of some soreness of the throat.

Conditions at the baths implicated were quickly investigated, and it was established that the water pressure on the supply to one of the two chlorinators had dropped, presumably as a result of a partial choke in the line. However, no logical reason could be found for the presence of chlorine gas in the plunge hall, and it was only after 48 hours' work that the real cause was established. The type of chlorinator present functions by injecting a small measured quantity of gas into the water stream where it dissolves. This solution of chlorine is then applied into the circulating water feeding the plunges. The chlorinator requires a small but continuous supply of water to provide a water seal for the gas, and this water runs to waste down an effluent pipe. The effluent pipe is led into a nearby buildings drain, which runs down the side wall of the ladies plunge, through the floor of a dressing box, and so into the main drains.

Under rare conditions, with a reduced sealing water pressure, it has been found that chlorine gas can then flow down the effluent pipe and so into the drains. It was discovered that the drain pipe running down the wall of the dressing box was cracked just above floor level. It was clear that the chlorine gas entered the plunge hall through the crack in this drain. It seems likely that the girl who was most affected may have used this particular dressing box. The effluent pipe arrangement had been in continuous use for more than 30 years without an accident. The piping has now been modified, and the possibility of further accidents has been obviated.

IMMUNISATION AND VACCINATION.

Diphtheria Immunisation.

The total number of children immunised for the first time during 1954 was 10,605, and 8,236 received a booster inoculation. The age groups of the children inoculated during the year and an estimate of the percentages of the child population immunised during the past five years are given in the table below.

	Under 1 year.	1-4 years.	5-9 years.	10-14 years.	Total under 15 years.
Primary Inoculations completed in 1954	3,286	2,858	4,005	456	10,605
Booster Inoculations completed in 1954	—	144	6,552	1,540	8,236
Percentage of child population immunised during past five years.	*20.8%	49.1%	43.6%		—
Percentage of child population immunised	43.0%		82.4%		

*The maximum percentage of immunisation possible in children under one year, where immunisation is given at about eight months, is 33%.

It will be seen that it is now estimated that 82.4 per cent of the child population aged 5-14 years of age are at present protected against diphtheria by immunisation and that 43.0 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 is below.

NUMBER OF PRIMARY DIPHTHERIA IMMUNISATIONS.

Where or by whom immunised.	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954
Immunisation Clinics	9,292	8,902	8,482	9,824	8,219	5,973	6,442	5,316	4,896	3,920
Schools ...	7,178	8,862	5,709	5,510	3,471	2,858	2,941	3,307	3,586	3,732
Medical Practitioners	75	82	40	688	1,617	2,066	2,396	2,579	2,694	2,973
Miscellaneous	414	334	269	208	228	322	283	109	—	—
TOTALS ...	16,959	18,180	14,500	16,230	13,535	11,219	12,062	11,311	11,176	10,625

In addition to the above immunisations, 8,253 previously immunised children received a reinforcing injection either at school or at one of the clinics during the year.

Whooping Cough Immunisa- tion

The fall in the total number of diphtheria immunisations steadily continues. There has, at the same time, been a considerable increase in the numbers of children immunised by general practitioners.

Whooping Cough Immunisation.

During the year an immunisation campaign against this disease was continued. The same arrangements used for diphtheria immunisation were carried out, and whooping cough immunisations were offered at Child Welfare Clinics and by general medical practitioners. During the year, 5,082 children had been immunised under this scheme.

At the end of the previous year, in conjunction with the Medical Research Council, a whooping cough trial was commenced comparing the value of the Kendrick type of vaccine then being used, and a new type of American vaccine in which the bacterial bodies had been lysed by high frequency sound waves. The trial continued satisfactorily throughout the present year.

Vaccination.

Vaccination

Vaccination of infants against smallpox is carried out by Special Clinics and by general practitioners in their own surgeries. The follow-

ing table illustrates the number of births and the number of primary vaccinations given during the past three years:—

							1952	1953	1954
Births	...	...	...	...	...	...	15,839	16,022	15,742
Number of primary vaccinations	...	...	...	...	...	...	8,240	7,605	6,989
Number of re-vaccinations	...	...	...	...	...	...	1,777	1,222	240
Number insusceptible	...	...	...	...	...	...	69	57	—
							<u>10,086</u>	<u>8,884</u>	<u>7,229</u>
Number vaccinated at clinics	...	...	...	...	...	...	4,174	3,884	2,942
Number vaccinated by private doctors	...	...	...	...	...	...	5,912	5,000	4,287
							<u>10,086</u>	<u>8,884</u>	<u>7,229</u>

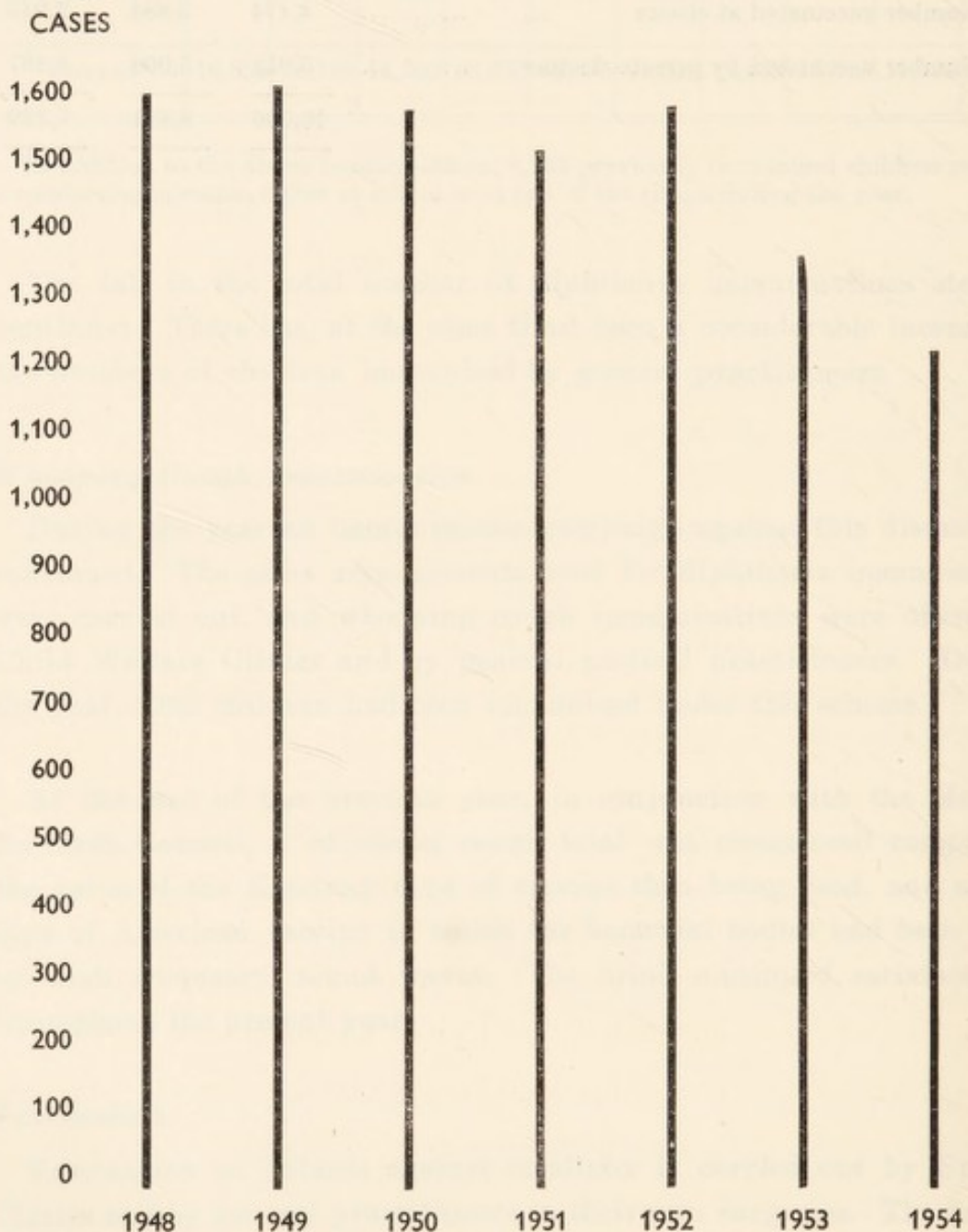
TUBERCULOSIS

Incidence of Tuberculosis.

Notifications of Tuberculosis

During 1954, 1,135 new cases of respiratory tuberculosis were notified. This continues the downward trend of notifications which has been apparent since 1952. The way in which notifications of respiratory tuberculosis have varied since 1948 are shown in the accompanying graphs:—

CHART SHOWING CASES OF RESPIRATORY
TUBERCULOSIS DURING THE YEARS 1948 TO 1954



Details of the age groups and sex of the new cases notified during the year are given in the Statistical Appendix (Table 29).

Deaths from Tuberculosis.

There were 232 deaths from respiratory tuberculosis within the City during the year, giving a death rate of 0.29 per 1,000. In the following table the details of the deaths are given:—

TABLE I.

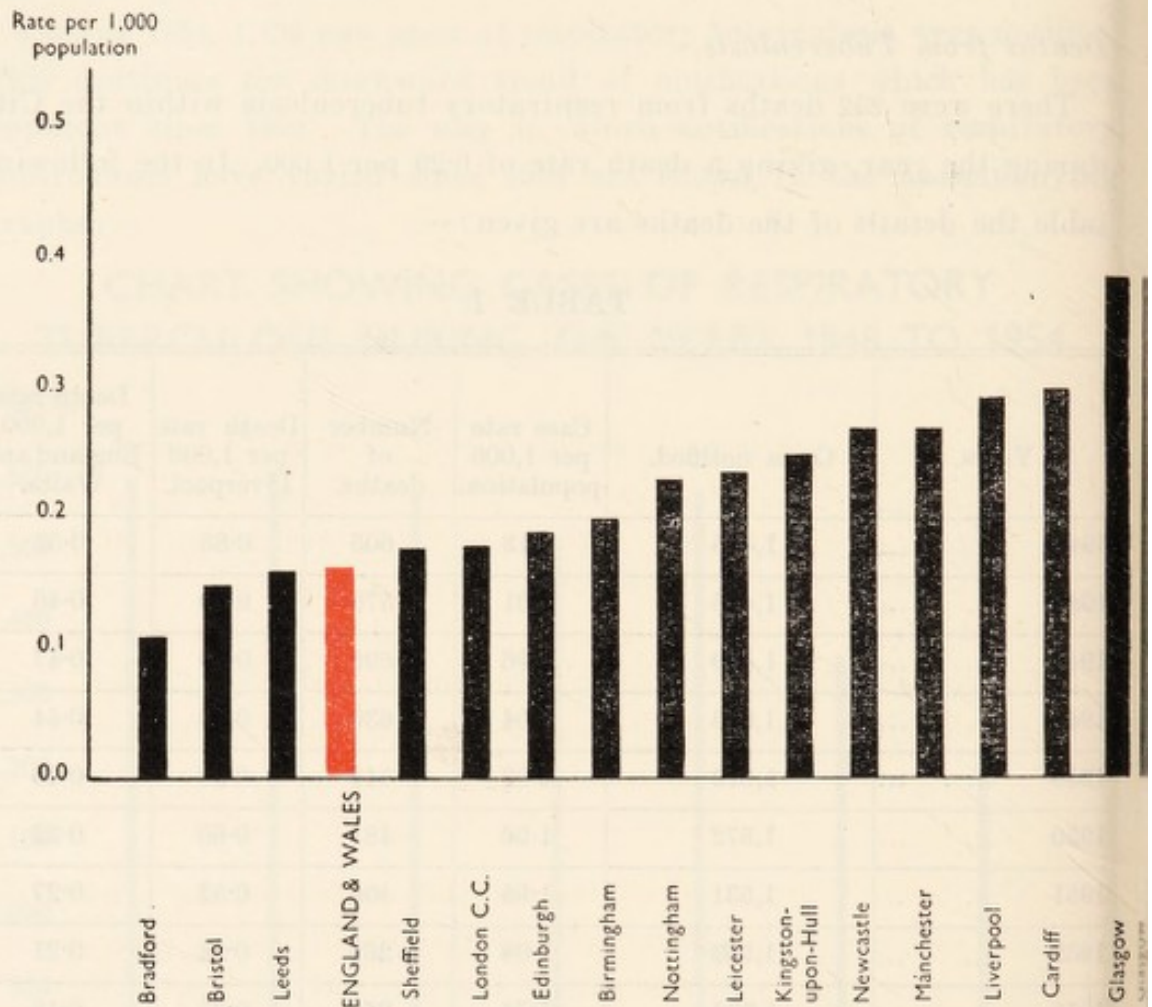
Years.	Cases notified.	Case rate per 1,000 population.	Number of deaths.	Death rate per 1,000 Liverpool.	Deaths Rate from Tuberculosis per 1,000 England and Wales.
1945	1,455	2.13	605	0.88	0.52
1946	1,478	2.01	579	0.79	0.46
1947	1,479	1.96	599	0.79	0.47
1948	1,618	2.04	630	0.79	0.44
1949	1,619	2.02	542	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	1.08	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

The age periods of deaths from tuberculosis and details of deaths from non-respiratory tuberculosis during 1954 are given in Table No. 33 in the Statistical Appendix.

Comparison with other large Local Authorities.

The following diagram illustrates the death rates from respiratory tuberculosis of the major cities of the United Kingdom, and shows that the mortality in Liverpool is higher than any other city except Glasgow and Cardiff, and provides strong evidence of the large amount of infection present within the City.

CHART SHOWING MORTALITY RATE FOR RESPIRATORY TUBERCULOSIS
FOR A NUMBER OF THE LARGER AUTHORITIES FOR THE YEAR 1954



During the year, further interesting confirmative information on this point was obtained by the results of Mantoux Testing of 80 per cent of school leavers carried out in connection with B.C.G. Vaccination against the disease. 34 per cent of these children were found to be positive, indicating the proportion of children within the City who have come into close contact with tuberculosis by the time they have reached the age of 14 years. Comparative figures for other areas are:—

London	...	...	16%
Birmingham	...	...	18.4%
Nottingham	...	...	23%
Leeds	...	...	29.8%
Liverpool	...	...	34%

This means that a school child aged 13 years in Liverpool has roughly run double the risk of coming into close contact with a case of tuberculosis than one in London, a difference which results from, firstly, the

higher amount of tuberculosis infection present in Liverpool and, secondly, from the adverse overcrowded living conditions which has facilitated the spread of the disease.

Prevention of Tuberculosis.

In the last report, it was stressed that much of the most valuable preventive work in tuberculosis is connected (a) with the Tuberculosis Visitors who are responsible for tracking down infection and ensuring that patients at home take proper precautions to limit the chances of their spreading the disease, and (b) with adequate housing for tuberculous patients.

**Tuberculosis-
After Care**

Faced with such a large problem, it was essential to ensure that the Tuberculosis Visitor staff to undertake this work was as strong as other large cities. Consequently, information was obtained from other large areas and the number of Tuberculosis Visitors employed compared. It was found that the Liverpool figure of 1 Tuberculosis Visitor per 890 patients in the Tuberculosis Register compared unfavourably with other Authorities, and the City Council decided to increase their numbers from 10 to 14 Visitors immediately and that probably at least 17 would be needed to reduce the figure to 1 Visitor per 500 patients.

At the same time, the organisation and control of the work of the Tuberculosis Visitor has been carefully examined. In this type of work, which involves firstly investigating the contacts of newly diagnosed cases and then carefully following up these cases, often for many years, a satisfactory statistical filing system, which relieves the Tuberculosis Visitors of unnecessary clerical work, is essential. At the same time, the Tuberculosis Visitors have continued to work attached to Chest Clinics so that they have been able to retain the helpful and useful day-to-day contact with the Chest Physicians and staff.

**Re-organisa-
tion of
Tuberculosis
Visitors**

A follow-up system has been *planned to ensure regular visiting of all patients on the Register*. Patients will be divided into two groups:—

- (a) *Active cases*—these will be visited at least once in two months.
- (b) *Quiescent cases*—these will be visited once in six months until they are removed from the Register as cured.

In a longstanding disease such as tuberculosis, routine careful follow-up is essential, preferably by regular home visiting as well as by observation at Clinic attendance.

To enable this follow-up system to be controlled, a modern Cope Chat filing system will be maintained at the Public Health Department, so that the selection of cases for visiting is automatic, and so that the Tuberculosis Visitor will concentrate on preventive and medical matters. Because of the time taken to print these cards it is not expected that the system will be able to be introduced until May 1955, and working completely by the end of the year. In addition, a great deal more detailed statistical information will then be available of all the new cases discovered which will give a much more complete picture of the problems throughout the City. This should enable effective counter measures to be planned in those parts of the City where the level of disease has been unduly high.

Tuberculosis and Housing.

Housing of Tuberculosis Patients

The disastrous effect of bad housing and overcrowded living conditions making separation or segregation of the *infectious* patient impossible has been noticed in some families during the year. To enable the spread of the disease to be minimised, the Medical Officer has reported up to six specially urgent cases each month to the Allocation Sub-Committee of the Housing Committee for consideration for special priority. This arrangement has been of great assistance as it has allowed the really urgent case to be helped promptly. The importance of this cannot be over-emphasised in a disease like Pulmonary Tuberculosis, for delay may easily mean spread of the disease to other members of the family, usually children. In addition, cases of tuberculosis receive from 1-5 Basic Housing points dependent on their disease and housing conditions.

Garden Shelters.

Garden Shelters

To help those few cases where segregation may best be achieved by erecting either temporarily or semi-permanently a small garden shelter for the patient to sleep in, the City Council have decided to include £1,000 towards provision of such shelters in the next financial year. Cases which can be helped in this way will be limited either on account of the patient's condition or the lack of garden space, but in the occasional case such provision will be most helpful.

B.C.G. Vaccination of School Children.

B.C.G. Vaccinations

In February 1954 a scheme was approved for the B.C.G. vaccination of school children between their 13th and 14th birthdays. The purposes

of this vaccination is to give increased resistance to the individual against contracting tuberculosis. Arrangements were made for this work to be undertaken by the School Health Staff.

The Medical Officer of Health sent letters to all general medical practitioners in the area and to the head teachers of the schools explaining the purpose of the scheme and asking for their co-operation, and the scheme commenced on 1st May, 1954.

From May 1st to the end of the year 6,522 children had been offered the facilities of this scheme. If the parents accepted, the children were then tested to see whether they were susceptible to infection by having a NEGATIVE tuberculin test, or if they already had some immunity, as shown by a POSITIVE tuberculin test. The susceptible children were all given protection with B.C.G. vaccine.

In 5,293 instances (81 per cent) parents agreed that their children should be included in the scheme. 34 per cent of these children were found to have a positive Mantoux Test and did not require vaccination, and the remainder were vaccinated.

Work of the Chest Clinics.

A statistical summary of the work of the Tuberculosis Clinics, so far as all cases on the dispensary registers are concerned, is given in Table 30.

"The Chest Physician Reports."

Extracts from reports by Chest Physicians are shown below:—

Dr. Crawley, South Chest and Central Tuberculosis Clinics—

The numbers of patients on the clinic registers have again increased. Fewer patients are dying of tuberculosis due to the more effective means of treatment and the disease is now much more frequently discovered in its earlier stages with greater prospects of cure, but there can be no relaxation in the efforts to prevent a disease which even in its early stages requires treatment lasting six months or longer to get under control, usually in a sanatorium. Every new patient discovered must have been infected from some source. Sometimes this cause is already known, at other times it requires patient search and even early cases may have passed on the infection in their home, or working circle, to others who require examination.

**Reports of
Chest
Physicians**

In the work of the clinics both aspects of treatment and prevention must go hand-in-hand, the first aim of treatment emphasising the preventive aspect in its endeavour to ensure that the patient becomes non-infectious. Though not directly concerned with treatment, the five Health Visitors attached to the two clinics are aware of the clinical progress of the patients in their area, and are invaluable connecting links between the patient, the family and the clinic doctor. They encourage regular attendance of patients and their contacts, advise on health and social problems and ensure when necessary the patients and their families obtain the help made available by the Public Health Department in matters of care and after-care. To them is in great part due the credit for the popularity of preventive B.C.G. vaccination of contacts.

During the year an incidence of tuberculosis in a large school was reported by the Public Health Department which carried out an investigation with the help of the Health Visitors with a speed and efficiency which reflects great credit on all concerned.

Dr. Osborne Hughes, East Chest Clinic—

The year's figures show an increase in the work done, there are more patients on the Tuberculosis Register, which now numbers over 2,300. The number of new cases, however, continues to decline; this decline is more marked in men, and for the first time the women on the register outnumber the men.

Because of lack of facilities at the Clinic, patients cannot be seen as often as we would like, and the work done by the Health Visitors in maintaining liaison between Clinic and patients is increased. The opening-up of new housing estates in the suburbs has resulted in the visitors having to travel further afield, and valuable time is spent in travelling.

The addition of another Health Visitor to the staff will be welcomed, but the provision of transport, if only to take the visitors out to the areas would, in my opinion, be worth while, visitors could then devote more time to actual contact with patients.

With regard to the allocation of new houses, my impression is that the situation is easier; if home helps could be provided for longer periods. Hospital treatment can be shortened when housing conditions are satisfactory.

The figures for B.C.G. vaccination show a slight increase; now that the scheme has been extended to school children in the 13-14 year age group, it seems reasonable to relax the rather limited use of the cavvine in Chest Clinic and offer B.C.G. vaccination to any child found tuberculin negative at the clinic, if the parents are willing.

Dr. Gray, North Chest Clinic—

The Preventive and After-Care work here continues to be handicapped by sickness of the existing Health Visitor's Staff, and also by the fact that the existing establishing of Health Visitors is insufficient.

My impression is that during the past year quite a large number of our patients have been rehoused on health grounds. On the other hand, there are still many individual cases remaining to be dealt with.

It has always been my custom to leave in the waiting rooms of the Clinic leaflets of the N.A.P.T. dealing with Tuberculosis in its many aspects, B.C.G. vaccination, etc. To some extent this is preaching to the converted, and I wonder if the time has come for a wider appeal to be made, e.g., by leaving such leaflets in Child Welfare and School Clinics or even Hospital Out-Patient Departments.

Our Health Visitors still report from some homes the existence of a wrong attitude towards Tuberculosis. Some people think it is a disgrace and report also that their neighbours treat them as lepers if they know they have it. In these cases they frequently request that no Health Visitors should call.

Mass Radiography.

The static Mass Radiography Unit at Hood Street, Liverpool, administered by the Liverpool Regional Hospital Board, deals mainly with persons within the City Boundary. Persons continue to be referred to this unit and are derived from three main sources:—

**Mass
Radiography**

- (a) Persons referred from Firms in the City and adjacent areas.
- (b) National Service Recruits.
- (c) Cases referred by General Practitioners.

Out of a total of 50,487 examinations made at this unit during 1954, 28,940 were referred by General Practitioners mainly within the City. The number of National Service recruits examined was 10,840 and 10,707 were referred chiefly from firms in the City and adjacent areas.

The mobile units of the Regional Hospital Board continue to co-operate to the full with the Medical Officer of Health's Department by arranging visits to schools and other establishments whenever a case of tuberculosis has been discovered, with a view to the detection of contact cases. Routine examinations of secondary schools have also been carried out.

As in former years, all prospective employees in the City Nursing Staffs are X-rayed by the static unit at Hood Street before their engagement, and members of the City Engineer and Surveyor's Staff who have been exposed, by reason of their occupation, to industrial respiratory infection such as silicosis, are referred to this unit for X-ray. Candidates for employment as school teachers are automatically referred before appointment, and the same procedure applies in the case of recruits for the Liverpool City Police.

Tuberculosis Welfare.

During the year 1954, 683 cases have been the subject of reports to the National Assistance Board with a view to determining their eligibility for the special rates applicable to cases of tuberculosis.

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

Rehabilitation.

Rehabilita- tion

Summary of cases dealt with during the year 1954:—

Total cases referred by Ministry of Labour to Tuberculosis Officers	...	521
(a) Examined and found fit for light, part-time or full-time employment	...	482
(b) Not fit for employment	...	20
(c) Failed to attend for examination	...	13
(d) Certified as non-tuberculous	...	6
Letters sent by Tuberculosis Welfare Section to patients offering advice and assistance to obtain suitable employment	...	28
Number availing themselves of this assistance and referred to Ministry of Labour	...	28
Actual number of patients reported by Ministry of Labour as placed in employment	...	83
Total number of cases dealt with under Rehabilitation Scheme by Tuberculosis Welfare Section	...	603

The Ministry of Labour has now instituted a Review Survey of persons in receipt of allowances, in the form of a stencil requesting confirmation that the person is still receiving treatment under the supervision of Chest Physician concerned. This system has not yet been in operation for a full year, but the number averages about 20 per week.

In addition to the persons shown above, five patients are undergoing rehabilitation at the Tuberculosis Colony, Great Barrow, Chester.

These patients have been in the Colony since January 1951, June 1951, September 1952, September 1952, and October 1953, respectively. All are making very good progress.

Notification and Deaths.

During the year, 15 persons within the City died from tuberculosis without notification having been effected prior to death. The result of enquiry into the reasons for such failure to notify are summarised in Table 31.

The contacts of such persons were called in for examination in the usual way.

It is pleasing to note that the number of deaths of non-notified cases of respiratory tuberculosis continues to fall.

MENTAL HEALTH SERVICE.

Services Provided

The Mental Health Section has continued to provide the following types of service to the community:—

- (a) Initial visiting and care of people reported as mentally ill.
- (b) Legal and other procedure in connection with admissions to mental and mental deficiency hospitals.
- (c) Ascertainment, supervision and training of mental defectives.
- (d) Provision of pre-care and after-care facilities.

The last of these duties is potentially one of the most important functions delegated to a local health authority and special attention has been paid to the subject in this report. An opportunity has been taken, also, to include a more detailed account of the work of the Duly Authorised Officers than has previously been given.

Administra- tion

Committee arrangements have remained as in previous years and the only staff changes during the year have been at Occupation Centres where 3 additional supervisory officers have been appointed to help with the growing number of defective children being trained. At 31st December the following were the staff employed:—

Medical—Senior Medical Officer (Mental Health).

Administrative and clerical—1 Senior Administrative Assistant, 1 Senior Authorised Officer, 1 Administrative Assistant, 8 Clerks and Typists.

Visiting—9 Duly Authorised Officers, 5 Female Visitors, 1 Removals Officer.

Occupation Centres—3 Supervisors, 1 Supervisor of Industrial Class, 12 Assistant Supervisors, 4 Trainees, Domestic Staff.

Co-ordination with other Services

Because the local health authority's mental health service is of necessity an incomplete one (in that it does not include treatment), co-ordination with the hospitals and other services is all-important.

The shortage of hospital accommodation is, however, a severe obstacle in the path of co-operation and much effort which might, under happier circumstances, be more constructively employed, is devoted to discussing this question.

Meetings called with a view to easing the difficulties regarding admissions under the Lunacy Act have been held with successful results and clinical conferences have been held with the Regional Board's Adviser in mental deficiency.

Much work is willingly done on behalf of hospitals including case-histories for psychiatric clinic patients, after-care reports on patients discharged and visits to mentally defective people on licence.

Contact is constantly being made with the various voluntary associations in the city and their valuable help is appreciated. Thanks are also offered to the local officers of the National Assistance Board who have been very helpful in dealing with the many enquiries made by the Mental Health Service on behalf of patients.

Prevention, Care and After-Care.

Persons referred for after-care during the year ...	777
Visits and interviews during the year ...	3,093
Persons under active supervision 31.12.1954 ...	1,140

Twelve full-time officers spend between a third and half of their time in visiting and helping people who have been under treatment for mental illness or have been referred for care.

Measures for prevention of mental ill-health, as well as after-care, **Prevention** are within the province of local health authorities as laid down in the National Health Service Act. The officers each have about 10 pre-care cases on their case-loads at any one time and no reference from a responsible source is ignored, but on the whole it is true to say that by the time the department is consulted the illness is usually well established. The term "prevention" in such cases is thus a misnomer.

To provide a real preventive service the department would need to cover a vast territory, much of which is not yet recognised as proper to the activities of public authorities; nevertheless a limited area is being explored and in the next few years it is hoped that a planned service may be developed, to include, among other things, (a) a link-up between the Maternity and Child Welfare and Mental Health Services which will help to ensure sound mental health in children, and (b) a basis for closer co-operation with the general and industrial medical practitioner.

After-Care

Up to the present the emphasis has been on after-care which itself has, of course, a preventive aspect in its endeavour to arrest the need for further admissions to hospital.

There can be no doubt that patients derive benefit from the advice and help given but the benefit cannot be measured exactly and in most cases the officers cannot expect spectacular results. This will be seen more clearly if we consider the mental condition of patients discharged from mental hospital.

During 1954 there were 1,350 such patients on the department's list for after-care visits. Many of them had been in-patients before and the following analysis of their condition on discharge takes account of *all* their periods in hospital:—

Recovered	...	...	...	...	467 or 21·6%
Relieved or improved	...	...	...	...	405 or 18·8%
Discharged themselves before treatment was completed (voluntary patients)	...	...	...	...	407 or 18·8%
Taken out by relatives	...	...	...	...	201 or 9·3%
Discharged after Section 20 admission, as being "not certifiable"	...	...	...	...	322 or 14·8%
Circumstances of discharge not notified to mental health service	...	...	...	...	361 or 16·7%

These figures show that there are many mentally ill people in the community for whom treatment has proved partly or wholly unsuccessful or who have failed to take full advantage of treatment facilities. Both the need for after-care and the reasons for anticipating its limited success are apparent.

It is a counsel of perfection, for example, to suggest that after-care can prevent the need for re-admission to hospital in all cases and the following statement of recurrent hospitalisation among the patients receiving after-care in 1954, referred to in the last table, is of some interest.

No. of periods as patient in mental hospital.	No. of patients.	Percentage of total patients.
1	856	63·4
2	286	21·2
3	102	7·5
4	52	3·9
5 and over	54	4·0
	1,350	

The above figures are for all patients—it has not been possible to separate certified from voluntary. A random sample has, however, been taken of cases of each type discharged from mental hospitals early in 1953 and it has been found that about two-fifths of each group had been re-admitted once or more by the end of 1954—i.e. there was no appreciable difference between the re-admission rate for the two types of case.

These facts exemplify the inherent difficulties of the after-care service but at the same time make the social worker realise how important is the community care aspect of mental illness.

There are, of course, other difficulties in after-care. Often an officer can see clearly enough the predisposing factor in a person's mental illness but is powerless to alter it; often, too, he realises that the root cause of difficulty is a basic inadequacy of personality which cannot be changed either by treatment or social help. There are also a few sources of frustration which, it is hoped, will disappear in time, e.g., the fact that so rarely can a patient be given better housing accommodation immediately and the delay which sometimes occurs before clinic attendance can be arranged.

But even if difficulties are many and spectacular changes few, there are plenty of cases in which the benefit of the service can be seen. The following are a few examples:—

Specimen
After-Care
Cases

Miss A, aged 28, was a brilliant student and attained a B.A. degree with honours. Ten years ago she was forced to identify her father's body after he had been killed by a fall from scaffolding into a vat of acid. Mental illness which supervened 3 years later was attributed to the shock caused by this experience. She suffered from delusions and ideas of persecution and was admitted to a mental hospital. She has had two other periods in hospital since and has spent, in all, $2\frac{1}{2}$ years as an in-patient.

Her last period was as a certified patient and the recommended treatment could not all be given as the mother refused her consent. Her discharge in June, 1952, was "directed" by her mother against medical advice and the discharge notice mentioned the likelihood of a relapse.

After-care had two aims in particular—to place the patient in suitable employment and to induce a frame of mind in her mother which

would help in her recovery. In both of these aims success seems to have been achieved. After strenuous efforts on her behalf by the visiting officer, Miss A was accepted for a teaching post and has held it for the past 6 months and her mother has expressed gratitude for the department's help.

Miss B, an elderly spinster living alone, a case of acute melancholia, was discharged from a mental hospital "relieved". The visitor saw that unless the patient could be induced to take up a hobby her improvement would not be maintained. After several false starts the visitor succeeded in interesting her in gardening, chiefly by practical example, and patient and visitor together have now planned and planted a rockery and flower beds. The patient spends much time in her garden and in perusal of seed merchants' catalogues.

The health of Mr. C, a single man of good social and industrial standing suddenly deteriorated in 1952 for no apparent reason. He became depressed, lost self-confidence and was unable to concentrate. He spent 4 months in hospital as a voluntary patient and derived benefit from treatment. This was a case in which the patient and his parents welcomed and co-operated enthusiastically in after-care. Again the efforts of the department resulted in his obtaining the type of employment recommended for him by the hospital and he has now been nearly 2 years in the post obtained. The patient exhibited tenseness and lack of initiative after discharge from hospital and it is considered that the many visits and the encouragement given, as well as the vital help in employment, have been factors in his rehabilitation which is apparently complete.

Employment It will have been noticed that in two of the above cases, employment was an important factor. The Ministry of Labour and National Service has, of course, the main responsibility for placing people in employment, but the Health Committee's policy of having an Employment Officer on the staff has been fully justified. The officer is able to give attention to individual cases whose background he knows personally: he sees employers and is able to evoke their interest in people who can be useful employees though, left to themselves, they would be unable to make a good impression at an interview.

Without employment, rehabilitation is impossible in many cases and this side of the mental health service is regarded as being of the utmost importance.

At the end of the year there were 223 patients including mental defectives on the Employment Officer's register. 59 posts were found during the year as follows:—

Labourers, etc.	21	Painters	2
Porters	5	Nursery Assistants	2
Domestics	10	Bag Stitcher	1
Packers, Assemblers, etc. ...	10	Counter Assistant	1
Machinery Operators	2	Clogmaker Trainee	1
Farm workers	2	Laboratory Trainee	1
		Typist	1

The service can also take credit in the many other cases where patients themselves have found employment after receiving advice and encouragement.

The duties are performed in close co-operation with officers of the Ministry, who have expressed appreciation of the help given to them.

Duties under Lunacy and Mental Treatment Acts.

1,250 cases were referred to the Mental Health Service for investigation as compared with 1,324 last year, the requests for the services of the Duly Authorised Officer coming from the following sources:—

General Practitioners	672
Psychiatrists	86
Hospitals	246
Police	97
Relatives	68
Other Corporation departments	14
National Assistance Board	8
Shipping firms	9
Duly Authorised Officers (outside areas) ...	24
Other sources	26

**Patients
Referred**

The following was the action taken after visiting:—

Admitted to Hospital (Section 20 Lunacy Act)	...	...	...	...	657
Referred to J.P. (Section 14 Lunacy Act)	...	...	...	...	137
Admitted to Hospital (Section 21 Lunacy Act)	...	...	...	...	4
Admitted to Hospital as voluntary patients	...	...	...	...	16
Admitted to Hospital as temporary patients	...	...	...	...	3
Admitted to Hospitals other than Mental Hospitals	...	...	...	...	18
Referred to Psychiatric Clinics	...	...	...	...	50
Referred to Welfare Services	...	...	...	...	87
Referred to National Assistance Board	...	...	...	...	2
Referred for pre-care	...	...	...	...	37
Referred back to patient's doctor	...	...	...	...	63
Action deferred	...	...	...	...	5
No further action needed	...	...	...	...	171
					<hr/> 1,250 <hr/>

As regards the patients brought before the Magistrate at summary reception order proceedings, 212 orders were made in respect of patients already in hospital and 74 for patients at home. In 160 cases no order was made.

Hospital Admissions

Admissions to mental hospitals during the year were:—

Hospital.	Patients certified under Section 16 Lunacy Act.	Voluntary Patients.	Temporary Patients.
Sefton	42	105	3
Rainhill	200	291	2
Winwick	49	38	—
Deva	3	3	—
Ormskirk	6	5	—
Whiston	3	1	—
Hospitals outside Liverpool R.H.B. area	3	3	—
	*306	446	5

*Including 20 dealt with by Duly Authorised Officers following admission to hospital from other areas.

Old People

Included in the 1,250 cases notified were 130 people over the age of 70 (95 female, 35 male). In their cases the action taken was as follows:—

Admitted to hospital, Section 20	...	...	...	30
Section 14 action—dismissed	...	...	...	6
Certified Section 16	...	...	...	1
Referred to Welfare Services	...	...	...	20
Admission to accommodation other than mental hospital requested	...	...	...	49
Referred back to doctor	...	...	...	8
No further action	...	...	...	14
Admitted Part III accommodation	...	...	...	2

It will be seen from these figures that the Duly Authorised Officers carefully consider alternative procedures before carrying out their duties under the Lunacy Act. It is, however, not possible to avoid the reference, by doctors and others, of old people who have some confusion of mind and the Mental Health Service must continue to act as a "sorting house" to try and ensure that the patients are referred to the right quarter. In a few cases, of course, action under the Lunacy Act is essential.

Accommodation in mental hospitals has continued to be marginal. There were several cases in which a magistrate's order could not be complied with because of lack of beds. In one case the magistrate, with a doctor, examined the patient three times and completed three orders before the patient was finally admitted. Accommodation

The figures of patients dealt with give no real picture of the duties of the Duly Authorised Officer. This somewhat forbidding title conceals rather than describes the work of one of the most important and least known social welfare workers in the community and it has been felt that a description of his statutory activities will be particularly of interest at this time, for the recommendations of the Royal Commission now enquiring into mental health legislation may conceivably affect his future status. Work of the
Duly
Authorised
Officer

In Liverpool the Duly Authorised Officer performs after-care and mental deficiency visits, as referred to elsewhere in this report, but the duty which makes him unique among social workers is that imposed by the Lunacy Act, 1890, to initiate action to deal with mentally ill people. Before 1948 this duty was carried out by Relieving Officers and when the old poor law was abolished and the National Health Service Act came into operation, many Duly Authorised Officers (including most of the Liverpool officers) were recruited from their ranks.

The most important duty is under Section 20 of the Lunacy Act—to investigate cases of alleged mental illness reported from responsible sources and decide (a) whether there is reasonable ground for believing the reported person to be of unsound mind, and (b) if so, whether it is necessary for the public safety or the welfare of the person concerned that he or she be placed under care and control. If the Duly Authorised

Officer decides the answers to both of these questions are in the affirmative he has the power to remove the person to a hospital designated for the purpose and to give an order for detention for not more than 3 days.

Many cases of mental illness do not come to the Duly Authorised Officer's notice at all, for doctors can arrange treatment for patients willing to have it. But if the patient is without volition or refuses treatment almost certainly the Duly Authorised Officer will be approached by the doctor, a relative or some other interested party, e.g., the police.

It is not a job for a timid person, to walk into the home of somebody who may be maniacal. At best the Duly Authorised Officer can expect to be regarded as a necessary part of the process of law and at worst he may have to defend himself against physical assault. Officers have, in fact, achieved great success in putting patients at their ease and persuading them to go to hospital and a resort to force is comparatively rare.

If possible the Duly Authorised Officer obtains a doctor's note beforehand but it must be emphasised that when he sees the patient he must act on his own responsibility and not the doctor's. His power to admit to hospital is limited to cases in which not only is there apparently unsoundness of mind but also a lack of care and control—both elements must be present. This limitation sometimes gives rise to misunderstanding; in the past year the Duly Authorised Officer has more than once felt unable to act under Section 20 though exhorted to do so by a doctor who was, of course, concerned only with the medical aspect of the case.

At first sight the advisability of a layman retaining this power might seem doubtful, but the law is based on a sound principle that, when the liberty of the subject and the safety of the public are concerned, social and other factors as well as medical considerations must be taken into account; that, in fact, welfare and safety must come before treatment and that a reasonable layman can best assess all the facts.

Section 20, which is sometimes referred to as if it were an outmoded and unnecessary provision, works very fairly in practice. By detaining the patient for 3 days only it ensures his safety and that of the public—

the immediate concern—whilst enabling medical opinion to assess the need for treatment. Further detention is dependent on medical and judicial procedure.

The object of this short account of what is only part of the Duly Authorised Officers' duties has been not to describe the full process of the Lunacy Act (which would entail a record of the part played by the Justice and the hospital medical officer as well as the procedure for discharge) but to give a little publicity to work which is so useful and can so easily be lost sight of.

Duties under the Mental Deficiency Acts.

(a) *Ascertainment.*

150 new cases were ascertained as mentally defective during the year; 19 others were, after investigation, considered not subject to be dealt with under the Mental Deficiency Acts and of these, 11 accepted voluntary supervision. Ascertain-
ment

The sources of notification of those ascertained over the past 5 years have been as follows:—

	1950	1951	1952	1953	1954
Under Secs. 57 (3) or (4) Education Act (ineducable or inexpedient)	92	65	88	70	59
Under Sec. 57 (5) Education Act (needing supervision after leaving school) ...	73	88	78	42	70
Other sources	13	13	17	33	21
Total	178	166	183	145	150

143 were placed under statutory supervision (including 31 who were recommended for institutional care which could not be obtained) and 7 were admitted to mental deficiency hospitals.

One child was referred back to the Education Department as provided for in the Education (Miscellaneous Provisions) Act, 1948, a somewhat remarkable improvement in his condition and behaviour having been observed after he had attended an Occupation Centre. He was accepted for school education.

When a child is ascertained as mentally defective the parents are often at a loss to understand the procedure and duties of the Mental Health Service. A booklet has been produced which explains these in simple terms and this is being distributed upon notification of each new case.

(b) *Supervision.*

Supervision 1,602 defectives were under supervision at 31.12.54, as follows:—

	Males.		Females.	
	Over 16.	Under 16.	Over 16.	Under 16.
Statutory Supervision	584	206	503	175
Guardianship	23	7	48	5
Voluntary Supervision	27	1	23	—
Totals ...	634	214	574	180

5,678 home visits were paid including 448 to patients on licence from hospitals or with a view to licence being granted.

When people who have been under statutory supervision have proved their ability to hold their own in the community it is the practice to cease supervision, recommendations to this effect being approved by the Committee each month. Cessation of supervision was recommended in 28 cases during the year—18 had maintained employment over a substantial period, 6 had married and 4 had left Liverpool.

The Board of Control discharged 28 Orders under the Mental Deficiency Acts—27 in respect of patients who had been in mental deficiency hospitals and 1 for a patient under guardianship.

The numbers under all forms of supervision in the community (except licence cases) at 31st December in the last 5 years were:—

1950	1951	1952	1953	1954
1350	1421	1545	1615	1602

(c) *Guardianship.*

Guardianship Of the 86 cases under guardianship at 31st December, 1954, 11 were receiving allowances. The total cost of allowances for the year was £429 13s. 9d. All defectives over the age of 16 who cannot work are entitled to a National Assistance allowance.

(d) Training.

Expansion of training in Occupation Centres has again taken place, though unfortunately it has not been possible to open a new Centre. The increase in numbers on the rolls during the past 5 years is as follows:—

	Number on roll at 31st December.				
	1950	1951	1952	1953	1954
Princes Road Centre ...	105	115	137	146	156
Dovecot Centre ...	—	70	73	84	86
Garston Centre ...	—	30	33	44	63
Total ...	105	215	243	274	305

There is a waiting list of 30. Princes Road Centre is already overcrowded and there can be very little further expansion at Dovecot and Garston.

Long term plans for a new Centre in Fazakerley will not mature in the coming year but it is hoped that it will be possible to open a separate Centre for senior boys and men who at present form two classes at Princes Road Centre.

The following were among developments which took place during the year:—

(a) Two new special 'bus routes were started. There are now 4 'buses taking children to and from the Occupation Centres. No charge is made to parents for this service.

(b) Provision of free mid-day meal was authorised for all defectives over the age of 16.

(c) Classes were started at Princes Road and Garston Centres for training older girls in laundrywork and domestic science.

The Sports Day at Westminster House has now become an annual event. This year's proceedings were particularly enjoyed by parents and children as the Lord Mayor and Lady Mayoress attended, the latter presenting the prizes. The inter-Centre shield was won for the second year in succession by Garston Centre.

All three Occupation Centres are working well. They were visited towards the end of the year by an Inspector of the Board of Control and favourable reports were received.

(e) *Institutional Care.*

Shortage of
Hospital
Accommoda-
tion for
Defectives

It is depressing to have to report year after year that there remain in the community, a burden to their parents and a barrier to normal family life, a large number of defectives who should be accommodated in mental deficiency hospitals.

Details of individual cases have not previously been given in these reports but it is felt that by having such details the reader can realise more clearly the misery caused by the absence of accommodation.

The following brief descriptions are not of isolated cases but are representative of many others on the list:

Girl aged 16: on waiting list 5 years: an idiot, hydrocephalic, unable to walk or talk, makes animal noises: doubly incontinent: is so grossly obese that mother cannot lift her and cleaning must be left all day until father comes home from work: disturbs household at night with her screaming.

This is a good working-class home where decent people have done their best. There are 4 other children aged from 2 to 9 years and the mother's health is suffering as a result of her efforts to bring them up and at the same time give constant attention to the defective.

Boy aged 8: on waiting list $2\frac{1}{2}$ years: an idiot, spastic, doubly incontinent: requires total supervision.

The mother is a single woman with 3 other illegitimate children, living in one room as sub-tenant, under dirty and malodorous conditions. She does her best but is below average intelligence.

Boy aged $12\frac{1}{2}$: on waiting list $4\frac{1}{2}$ years: epileptic imbecile with adult physique: doubly incontinent: can only be cleaned in evening on father's return from work. Dribbles constantly and laughs uproariously.

A good home where parents have done their best but are worn out by the boy's behaviour.

These cases are not exceptional and similar conditions are present among most defectives on the waiting list.

The following figures show the waiting list, admissions and numbers accommodated in institutions:

Waiting List
for Mental
Deficiency
Institutions

(i) Waiting list :						At. 31.12.53.	At 31.12.54.
Highest urgency	...	...	...	...	...	90	93
Second urgency...	...	...	...	...	...	27	30
Third urgency	...	...	...	...	...	19	23
						136	146

(ii) Cases added to waiting list in 1954 ... 54

(iii) Admissions.

Type of Admission.	1950	1951	1952	1953	1954
Section 3 (placed) ...	—	—	14	2	1
Section 6 (petition) ...	26	12	28	29	33
Section 7 (varying order) ...	2	—	4	2	—
Section 8 (court) ...	15	15	10	6	2
Section 9 (Approved School, etc.) ...	1	—	—	4	1
To places of safety ...	16	16	27	9	15
Total ...	60	43	83	52	52*

*35 of these were from the waiting list.

(iv) Defectives in M.D. Hospitals.

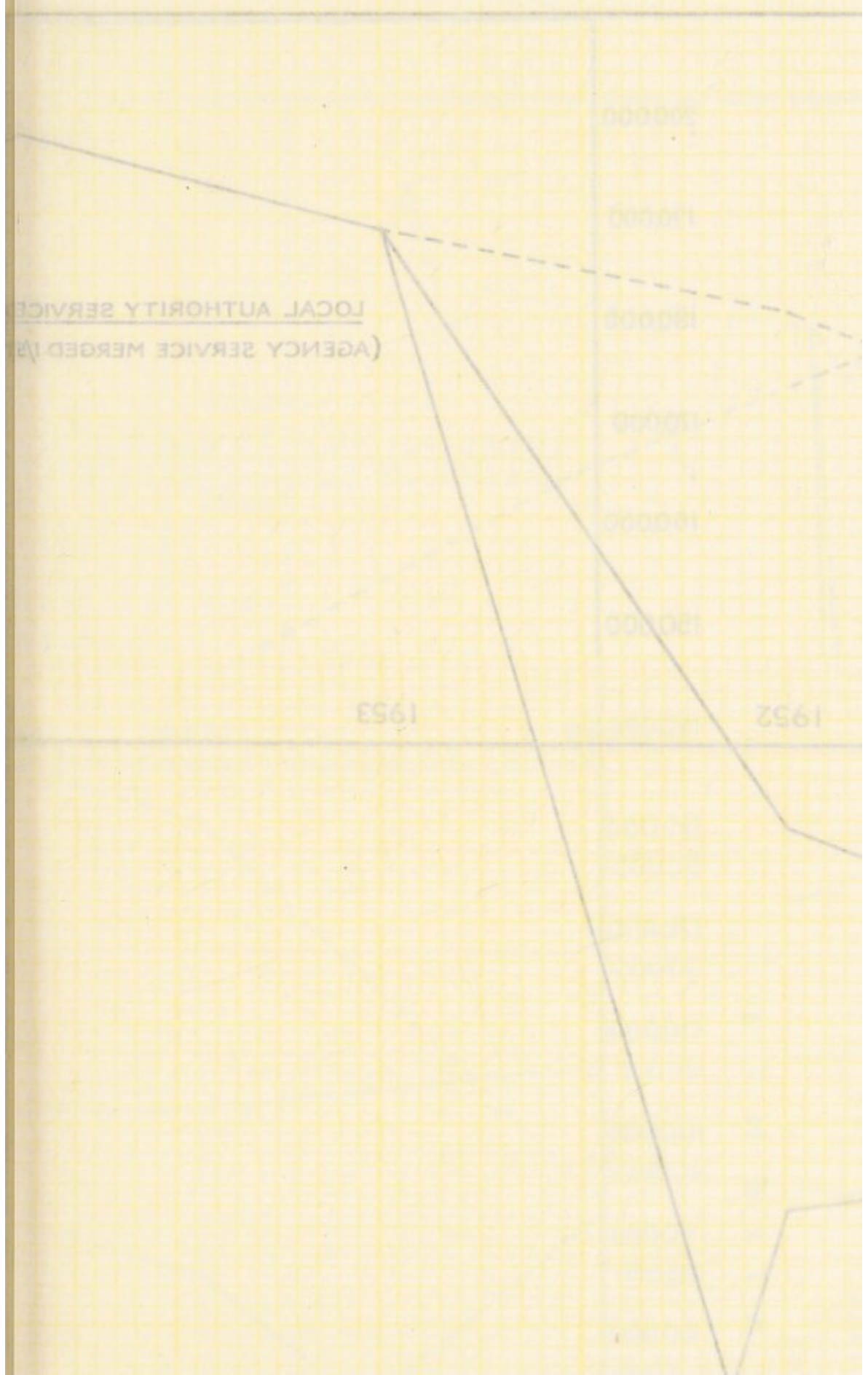
	At 31.12.53		At 31.12.54	
	Certified.	Place of Safety.	Certified.	Place of Safety.
Hospitals of Liverpool R.H.B. ...	201	48	227	52
Hospitals of Manchester R.H.B. ...	1,108	2	1,112	2
Hospitals of other Authorities ...	34	1	34	—
Total ...	1,343	51	1,373	54

Of the 1,427 in hospitals and places of safety at 31.12.54 only 109 were under 16 years of age.

The accommodation picture would be one of unrelieved gloom but for two points. The first is that a start is about to be made on the first stage of the new Greaves Hall Hospital; the second, that the

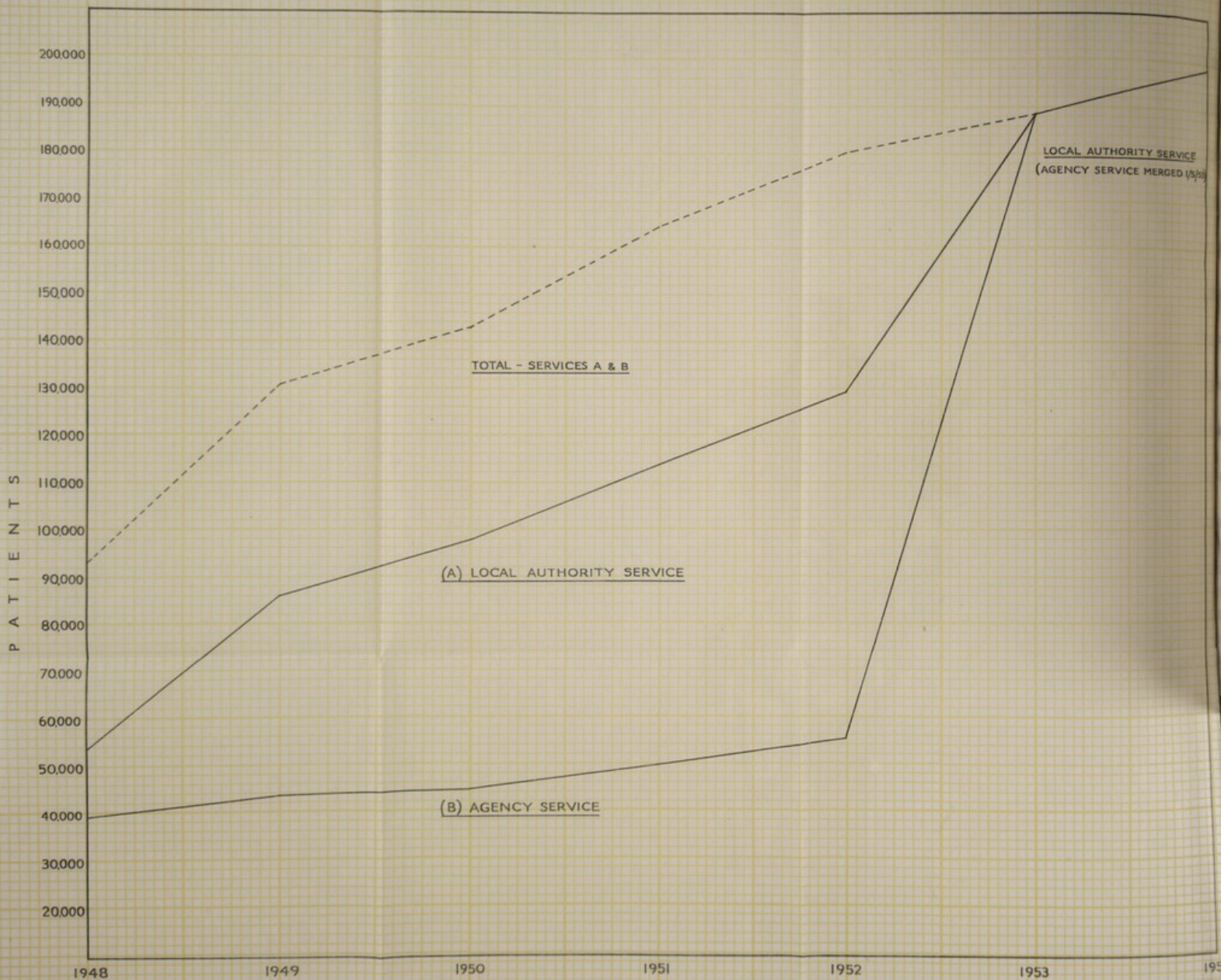
hospitals have arranged more temporary (short-stay) accommodation than in the previous year. 38 defectives have been given a total of 117 weeks' stay to relieve difficulties at home; for the same reason 17 have been admitted to the voluntary home, Orchard Dene, the total stay being 45 weeks.

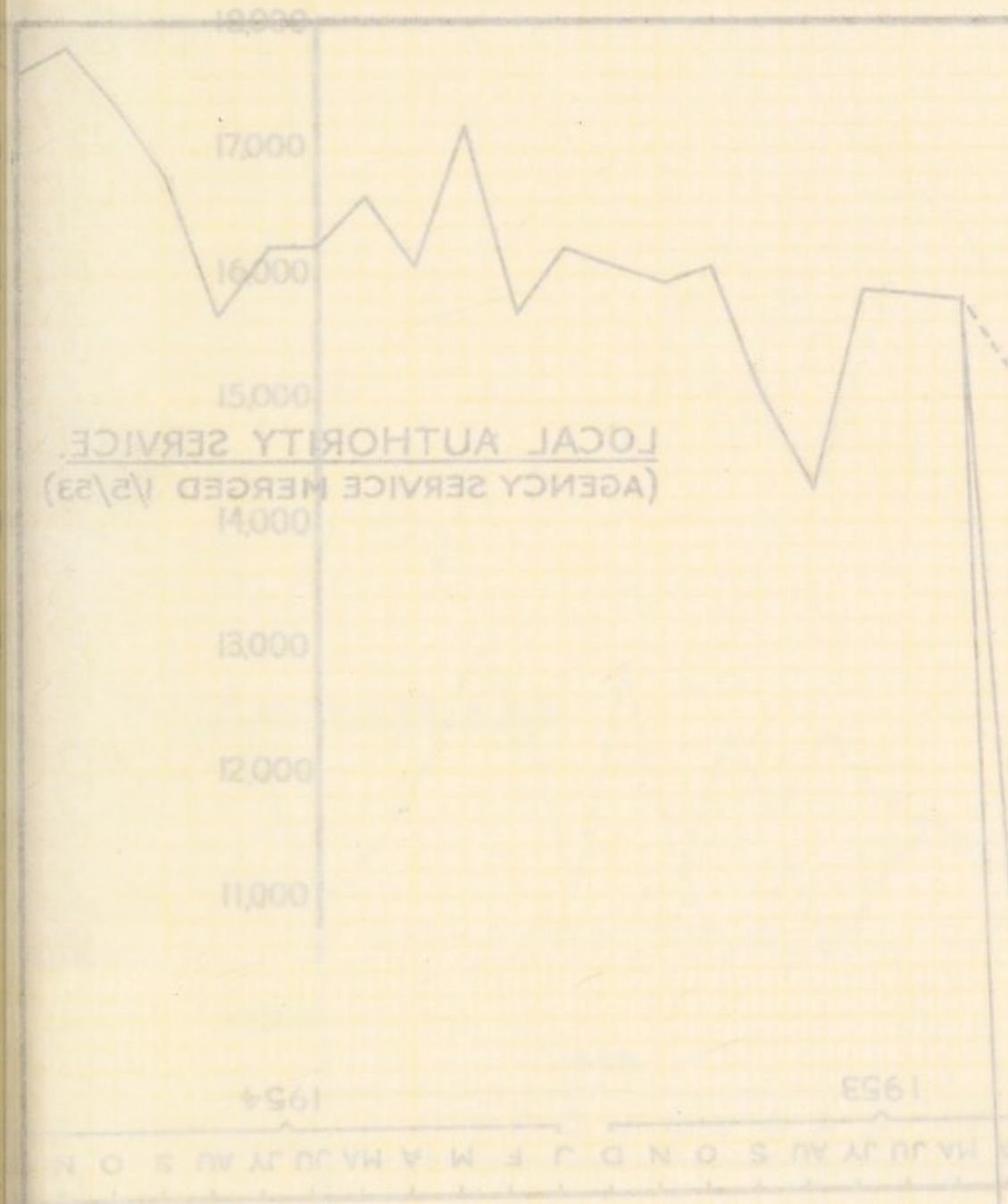
Altogether, despite the accommodation difficulties, the year has been one of steady progress and it is hoped that the foregoing details will have shown that a good deal of useful work is being done.



CITY OF LIVERPOOL AMBULANCE SERVICE

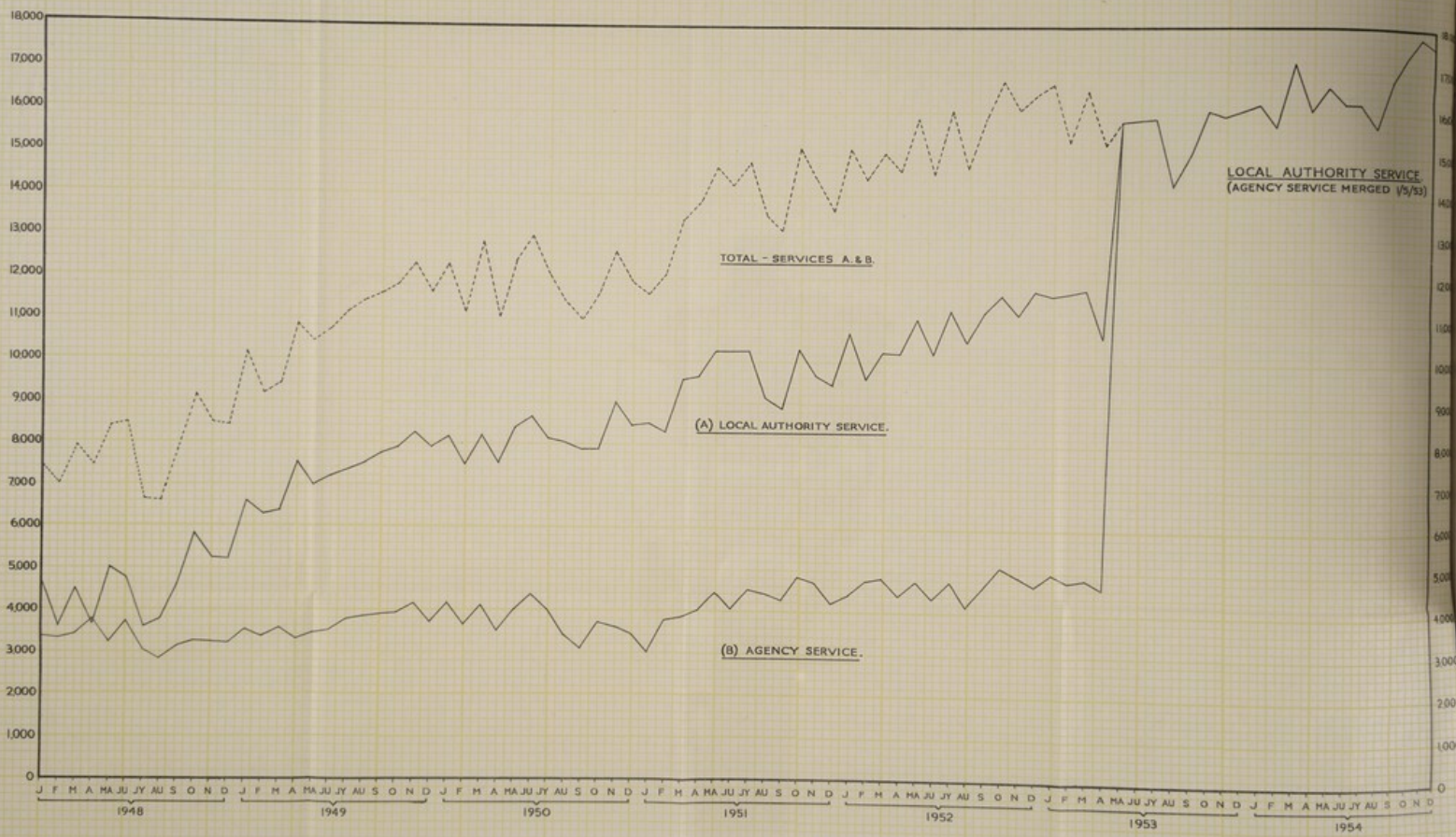
PATIENT REMOVALS 1948 - 1954.





CITY OF LIVERPOOL AMBULANCE SERVICE

MONTHLY TOTALS OF REMOVALS - 1948 - 1954



AMBULANCE SERVICE.

The major problem for the year under review has again been the increased demand upon the Service. The percentage increase was 5.66 per cent, representing an extra 10,676 patients. The total increase since 1948 is very clearly shown on the accompanying graphs.

The total number of patients moved during 1954 was 199,244 and the ambulance vehicles travelling 887,148 miles. These figures represent the first complete year's working with the enlarged Service formed by the amalgamation of the former Merseyside Hospital Council Ambulance Service.

The recommendations contained in Circular 30/51 have been rigidly applied and regular treatment cases formerly conveyed to distant hospitals have been curtailed.

The Headquarters switchboard with six exchange lines has been sufficient to meet the demand, but additional direct lines have been installed by Hospitals. There are now four of the larger Hospitals using this system. Six additional mobile radio telephony sets have been installed and there are now 38 sets in operation. There can be no doubt of the necessity for this equipment both from an economical and efficiency view point.

**Communica-
tions**

**Radio
Telephony**

A new system of message recording has been introduced into Headquarters Control Room. This is based on two copies of the request being recorded at one time by using Lampson-Paragon machines. The original copy is handed to the Driver, who completes the section applicable. On completion of the work, it is returned to the Control Room when the second copy is destroyed. This system has eased the problem of re-writing names and addresses and will eventually enable statistics to be more easily obtained.

**Recording of
Messages**

The large number of specialist hospitals in this City causes an increasing number of patients requiring conveying after treatment. The majority of such patients are from North Wales. Every effort has been made to use the vehicles of other local authorities and train transport provided when possible. The transport of patients from

**Removals to
Places Out-
side the City**

Liverpool to the Maternity Annexe at Southport continued, and the two ambulances equipped with four-berth hydraulic loading have been in regular use.

The arrival of patients from overseas and requiring ambulance transport has decreased and train transport has been largely used for this purpose.

**Major
Civillian
Disasters**

The equipment consisting of First Aid Materials, Stretchers and Blankets, has continued to be held in reserve for this purpose.

**Infectious
Patients**

The transport of infectious patients has continued to be dealt with by a separate staff and vehicles. The main work of this Depot is concerned with the transport of patients suffering from tuberculosis who are receiving regular clinic treatment.

**Resources
Available**

The fleet of 48 stretcher ambulances, 10 sitting-case ambulances and 6 cars continued to be housed at Headquarters, Central Depot, Gascoyne Street Depot, and 4 accident ambulance Stations. The majority of the staff of 130 driver/attendants performed duty on a rota system covering the various stations and providing 8 fully-manned ambulances throughout the night and the balance between 7 a.m. and 11 p.m.

During the year, six new stretcher-carrying ambulances were purchased. These are fitted with the new type stretcher equipment with Dunlopillo Beds. Heavy duty electrical equipment has also been installed, which has completely solved the battery and electrical failure problem.

Four old Ambulances have been disposed of, whilst 3 Austin Ambulances have been earmarked for Civil Defence purposes.

**Oxygen
Therapy**

Following the recommendation of the Medical Research Council, all carbon dioxide equipment has been withdrawn from the ambulance vehicles. Nine vehicles have now been fitted with Oxygen Therapy Flowmeter Outfits and 2-18 c.ft. cylinders of oxygen. The equipment has been used on many occasions during the year and has proved of value in resuscitation.

**Liaison with
Hospitals**

The increased demand led to a review of the system of requisitioning ambulances. A senior officer attended at the main hospitals for extended periods. His reports proved exceptionally useful in remedying staff faults and calls which were not considered proper. Continued use has

been made of regular visits of this nature which have helped to keep misuse of the service to a minimum and to aid hospitals by thus ensuring a quicker turn-round of ambulances.

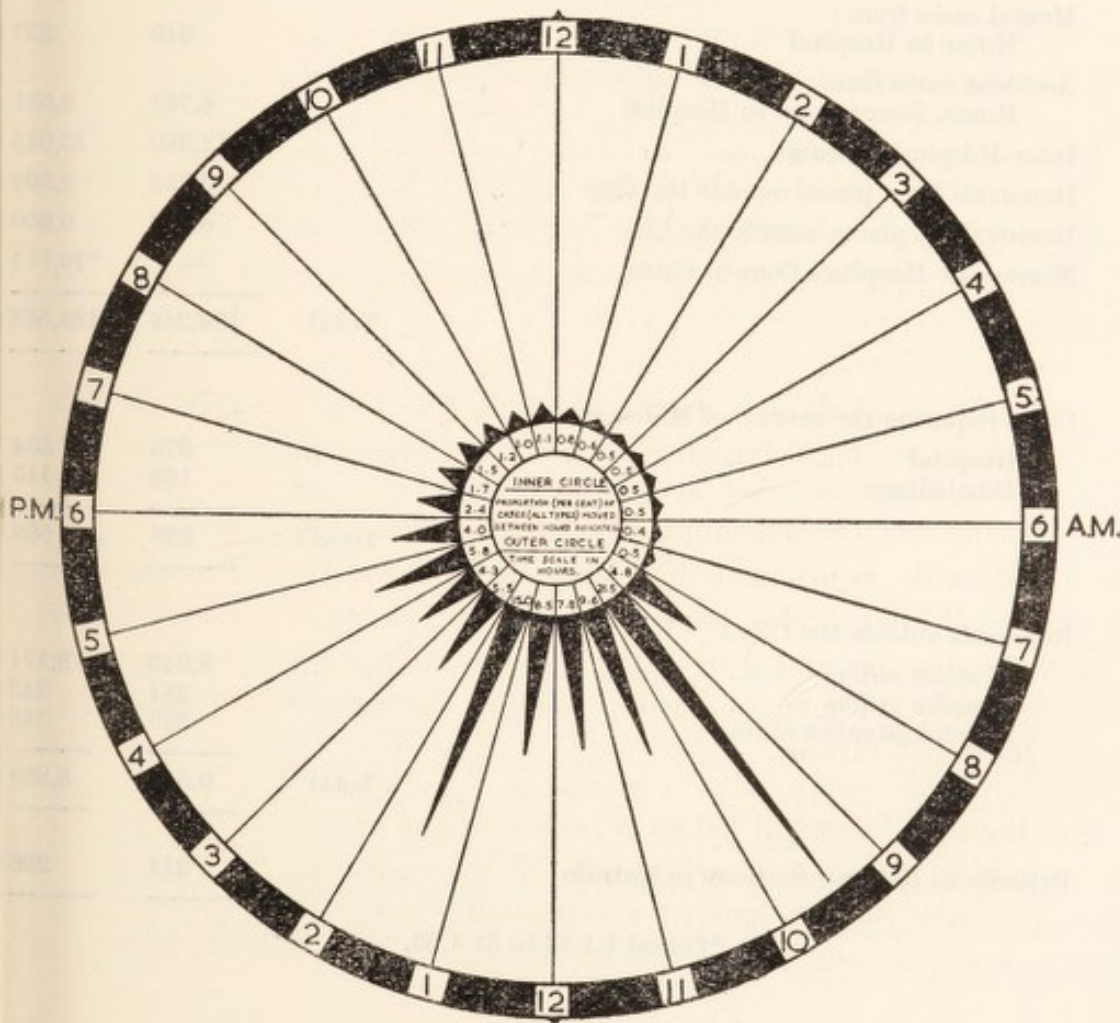
Considerable delays have occurred during the year in the collection of patients attending out-patient departments of hospitals and a special investigation was undertaken to find the basic cause of these delays. One of the most important causes has been that the call for return of patients has necessarily been unequal. Most arrive at hospitals between 9-10 a.m., and then most will be available for return between 12-1 p.m. The liaison officer attending the hospital as described above has been able to help a little, but it became increasingly obvious during the year that the volume of work had steadily increased beyond the capacity of the ambulances available.

**Delays in
Collection of
Patients from
Out-patients
Departments**

The hourly demand on the ambulance service work is shown clearly in the following diagram.

AMBULANCE SERVICE.

DIAGRAM INDICATING PEAK PERIODS OF DEMAND ON SERVICE.



The City Council decided that, in order to reduce the delays which were becoming inevitable, 4 ambulances fitted with radio telephony should be added to the establishment of vehicles, and provision was made in next year's estimates for the purchase of these vehicles.

Civil Defence

Extensive training has taken place for the Ambulance Section of the Civil Defence Corps. In addition to ordinary Section Training the volunteers have been invited to serve on the Ambulance Stations for 2 hours per week, and have worked on ambulances additional to the normal crew. The training of drivers continued throughout the year, and the percentage passing the official test was over 90 per cent.

STATISTICAL REPORT

	YEAR 1954	YEAR 1953
Non-infectious cases from :		
Home to Hospital	82,710	68,124
Hospital to Home	69,600	55,890
Maternity Cases	7,288	6,847
Infectious cases from :		
Home to Hospital	8,584	8,824
Mental cases from :		
Home to Hospital	349	337
Accident cases from :		
Home, Streets, etc. to Hospital	8,742	8,531
Inter-Hospital transfers	12,386	12,045
Removals from places outside the City	2,752	2,209
Removals to places outside the City	6,833	6,650
Merseyside Hospitals Council Cases.	—	*19,111
Total :	199,244	188,568
Cases requiring the service of Midwives :		
Hospital	675	554
Domiciliary	163	115
Total :	838	669
Removals outside the City :		
25 miles radius	8,945	8,171
50 miles radius	281	342
Beyond 50 miles radius	359	346
Total	9,585	8,859
Patients to Railway Stations to Entrain	314	296

*Period 1.1.53 to 31.4.53.

VEHICLES.

Ambulances.	Mileage covered.	Petrol used (gallons.)	O/Authorities issues.
Non-infectious	471,740	47,714	392
Infectious	86,944	8,553	—
Accident	37,228	5,156	—
Sitting case cars	116,083	6,630	5
Sitting case ambulances ...	175,153	10,942	—
TOTALS	887,148	78,995	397

WELFARE SERVICES.

Residential Accommodation.

General

Before dealing with the progress and development of this service during the year, reference might well be made at the outset to the position of Liverpool in relation to other County Boroughs in England and Wales. The provision of residential accommodation for the aged, infirm and other persons requiring care and attention is a mandatory service imposed upon all County and County Borough Councils under the National Assistance Act, 1948 and the extent to which this statutory responsibility has been developed by local authorities is contained in annual statistical returns prepared by the Institute of Municipal Treasurers and Accountants.

The return for the year ended 31st December, 1954, which contains information supplied by seventy-eight County Boroughs indicates that at the present time more residential accommodation is being provided in this City than in any other County Borough. With regard to costs, the average cost per resident week for all County Boroughs was £4 3s. 5d., whereas the average cost in Liverpool was £3 14s. 8d., a figure lower than those of sixty-three other County Boroughs. The net expenditure per 1000 population for Liverpool was £202 7s. 0d. and the average net expenditure per 1000 population for all other County Boroughs was £220 11s. 0d.

It will be seen, therefore, that in comparison with the achievements of other local authorities, the progress made in Liverpool, including its financial aspects, may be reviewed with satisfaction.

Nevertheless, the problem of providing more adequate accommodation is still one of the utmost importance.

Residential Accommoda- tion

It is estimated that, to meet the needs of an ageing population and to provide alternative accommodation for 250 residents from Westminster House during the process of its upgrading, further hostel accommodation will be required for at least 400 persons during this next five years. The City Council during the year approved in principle the building of a new hostel in each of these years and the selection of suitable sites is under consideration.

The requisition of existing properties, suitable for adaptation, is proving difficult, but the purchase of Croxteth Lodge, Ullet Road, which will accommodate 31 persons, has been completed and will be ready for occupation in 1955. Approval has also been given to negotiate the purchase of a further two properties to accommodate approximately 60 persons.

The question of the standard of accommodation is also one of concern. Certain properties have been acquired, where, without the installation of mechanical lifts, the excessive number of stairs is now proving too much for very old persons to negotiate. Whilst every effort is made to transfer them to ground floor accommodation, only a limited amount of this type of accommodation is available. The waiting lists for persons requiring residential accommodation show that more and more, due to their very frail condition, require ground floor beds or, at the most, first floor accommodation where few stairs need be negotiated. To meet this need, newly built hostels providing as much ground floor accommodation as possible have been approved.

To improve the wellbeing of the residents and to help them retain their individuality the question of the renewal of their clothing has been carefully considered. Suits, dresses, underclothing, etc., are now being provided to suit the individual taste and the "institutional" appearance is gradually disappearing. Furthermore, the old practice of underclothing being laundered on a communal basis has ceased and each resident now receives his own individual garments upon their return from the laundry.

The provision of butter at all meal times is a further amenity which has been introduced during the year.

Whilst structural alterations are still being carried out to complete the first phase of providing separate units in this large building, rapid progress has been made in providing improved accommodation with more homely conditions in those parts of the building requiring little or no alteration. On the male side the existing day rooms have been re-decorated and tubular lighting installed. On the ground floor a large room has been converted into a lounge bedroom for the use of frail ambulant persons. It has been equipped with modern furnishings

Westminster
House

including wardrobes and dressing tables together with carpets and bedside rugs. Improvements have also been made in the female side and two rooms have been decorated and re-furnished in modern style.

The male sick bay, hitherto in the main building, has been transferred to the South End and is now adjoining the female sick bay. Both sick bays have been re-decorated and installed with tubular lighting. There is little doubt that already these improvements have been appreciated by the residents and the progress has been encouraging.

The Merseyside Hospitals Council kindly granted the sum of £1,000 for the provision of television and eight sets have been installed.

To enable the work of adaptation to be carried out and to provide more space and improved accommodation the number of beds has been reduced from 980 to 907.

During the year a survey has been made to ascertain the residents' various age groups and in particular to find out the disabilities of those who are being provided with care and attention for reasons other than old age or infirmity. There are 196 residents under the age of 65 years who have been admitted on account of other causes. All are persons suffering from some form of physical or mental handicap and unfit to look after themselves under normal conditions. At the present time quite a number of them, due to the limitations of the accommodation, are mixing with aged and infirm residents and as the general upgrading of this building takes shape, consideration will need to be given for separate premises to be made available to deal with their special needs and disabilities.

Hostels

Applications for admissions to hostels have increased considerably and at the end of the year there were 88 persons on the approved waiting list compared with 29 at the beginning of the year.

The standard of accommodation has been maintained in all hostels and improvements such as schemes for the papering of residents' bedrooms in various designs, the provision of books from the public libraries, etc., have been introduced.

The total accommodation available for use on 31st December, 1954, and particulars of the admissions, discharges and deaths are contained in Tables 34-35 (Statistical Appendix).

In addition to the number of residents accommodated in hostels directly administered by the City Council, 129 Liverpool residents are maintained in establishments administered by voluntary organisations and other local authorities. The income of each resident is supplemented appropriately by the City Council to enable him to pay the agreed charge for maintenance. Many of the voluntary homes have special features to meet the needs of the various disabilities of the residents.

Voluntary
and other
Local
Authority
Homes

Particulars of the number of residents maintained in these homes, together with information relating to the admissions, discharges and deaths are contained in Table 36.

Temporary Accommodation.

The Liaison Sub-Committee has continued to deal with the problem of temporary accommodation and its outstanding success and achievements are shown when it is recalled that in May, 1952, 219 persons were accommodated, but that figure has now been reduced by 31st December, 1954, to 46. It may be that this low figure is now approaching an irreducible minimum but undoubtedly the problem is now well within reasonable dimensions.

In view of the smaller numbers accommodated, arrangements were made with the Liverpool Regional Hospital Board to reduce the reserved accommodation from 128 to 90 beds, effecting a saving in expenditure of about £2,500 per annum.

Lower Breck
Road

To improve the general living conditions in the premises, the dining-hall and one block of the sleeping quarters have been re-decorated.

Particulars shewing the number of persons admitted to and discharged from temporary accommodation during the year are contained in Table 37.

Domiciliary Welfare Services for the Aged.

Whilst the primary work of the Welfare Visitors has been concerned with those in need of care and attention seeking residential accommodation, and the development of welfare services for the permanently handicapped, their field has widened greatly. From particulars

contained in Table 38 it will be seen that nearly 10,000 visits have been made, the majority to persons requiring assistance for which there is some statutory provision.

A most difficult and distressing problem now becoming increasingly apparent is concerned with old persons, mostly living alone, found existing in unsatisfactory conditions. Some of these cases have only been reported when it is too late for anything effective to be done except remove the old person permanently to a hostel as some of them have been found alone in conditions of indescribable filth and squalor. General practitioners, social workers, church workers, old persons' clubs and many other interested persons have all been requested to inform the Department of any old person in need of help. Provision by Home Help or arranging neighbourly help will usually prevent conditions deteriorating provided the call for assistance is not too long delayed. No official visiting system can ever cover all possible cases and reliance always will have to be placed on interested individuals informing the Department when help is needed. A certain amount of voluntary visiting of the aged living alone has been arranged by various old persons' clubs and it is felt that better co-ordination of these efforts and extension of them should reduce the likelihood of these forgotten old people sinking into such conditions.

The following are a few of the various problems dealt with during the year by the Welfare Visitors.

1. *A young married woman suffering from severe epilepsy.* After being turned out of various furnished apartments, the mother took in the young woman but would not have the husband who had to go into lodgings.

**Domiciliary
Welfare
Services**

Arrangements were made for her admission to an Epileptic Colony but she absconded several times and had to be removed.

Her mother allowed her to return home for one week only and in that time the young couple managed to obtain furnished rooms but it is doubtful whether she will be able to manage alone during the day.

2. *An old lady, aged 71, referred by an Almoner of a large Hospital.* She had been admitted to that Hospital after having collapsed

in her home, and the Almoner was concerned about the home conditions in view of the extremely neglected state of the old lady. A Welfare Visitor saw the old lady in hospital but was unable to persuade her to give up her home and enter residential accommodation. The Welfare Visitor then arranged for the National Assistance Board to provide a grant to pay a woman to clean the house which was very filthy. Upon the old lady's return, her neighbours rallied round and were extremely helpful. She was, however, still unable to manage her financial affairs and fell into arrears with her rent, rates, etc. The National Assistance Board were again contacted and arrangements were made for the rent and rates to be deducted each week from the old lady's allowance. The electricity account then presented a problem but the Welfare Visitor was able to arrange for the Post Office Welfare Officer (the old lady's late husband having been a Post Office employee) to pay off the outstanding account. Arrangements were then made for a meter to be installed but before this could be carried out, the old lady became ill again and was admitted to hospital where she now remains.

This case clearly shows how much improvisation has been necessary in many cases and the efforts which the Welfare Visitors have made to solve the problems of such aged living at home.

3. *An old lady, aged 67, is visited regularly as she lives alone and is crippled with arthritis. She has a domestic help every morning but for the rest of the day she is on her own.*

She is quite unable to move more than a few steps. She is very fond of her little home and does not want to give it up. Her only sister lives in N. Wales and cannot visit her very often.

4. *An old lady believed to be over 70 and who is a registered blind person lives alone in premises behind a shop. The shop is run by a daughter-in-law, but she cannot do much for the old lady because she is difficult and suspicious. Her living accommodation contains much rubbish and her bedroom is full of old clothes and bedding.*

For many years she has been known in the City dragging sacks and wood from the market. She has always managed well in

spite of her disability but recently she has had two falls. The old lady denies that they were more than accidents of a minor nature. She has been visited with a view to possible removal under Section 47 but it was not considered to be a suitable case as she was able to get about and look after herself in the same way as previously. There remains, however, an element of danger in the home as the rubbish is in a room with a fire and the old lady is almost blind. She refuses to part with any of the rubbish.

5. *The family consists of an old lady who is senile, diabetic and bedridden, her retarded unemployed son who cares for her and also her old friend, who came in the first place to look after the old lady but is now in need of care herself as she is so frail.*

When first visited, the house was filthy and verminous and bedclothes were non-existent.

Disinfestation was arranged and the National Assistance Board helped by providing a bed.

The son was encouraged to clear the place of rubbish and clean up. He always looked after his mother's food and saw she had the right diet but he neglected the house and the conditions had become appalling.

After the new bed had been installed and the room disinfested, an attempt was made to get the son re-instated in his old job, but the firm refused to have him back because of his poor time keeping. An attempt has also been made to help him budget and clear his arrears of rent and a grocer's bill. If he can make a sustained effort in this direction it is hoped a grant may be made by the Personal Service Society to cover the cost of painting the room and making it fit for domestic help.

This case has required intensive casework and the problems are not yet solved, although conditions have improved and this improvement has been sustained.

6. Mrs. X is 55 and is an advanced case of disseminated sclerosis. She gave up her home in the country five years ago and bought a small house in Liverpool to assist one of her children to do a University course at Liverpool University. Her 25-year-old daughter then took a resident post near London. Her other

child has qualified at University and has moved out of the City which means that Mrs. X is left very much to her own devices with neither a relative nor a friend in Liverpool. She has a bed in the downstairs living-room of her four-roomed house and just manages to struggle laboriously to open the front door to callers.

Although Mrs. X spent some months in hospital two years ago she now refuses to return there. The possibility of a private nursing home has been investigated but is beyond her means.

Until recently Mrs. X had a Home Help going in for two hours daily, but she has cancelled this in favour of a neighbour who is going in each day and being paid to do shopping, chores, etc. This would not appear to be a satisfactory arrangement but Mrs. X is very satisfied with it as the neighbour is more inclined to sit and talk to her, rather than do chores, etc. The house is looking very neglected.

One of her children comes home occasionally at weekends but does not appear to do very much and cannot help financially. Her daughter has not been home for a year and does not write very frequently. Letters have been sent to her repeatedly by the National Assistance Board, neighbours, home helps, District Nurses, etc., explaining the plight of her mother, but no replies have been forthcoming.

The District Nurse calls each day to attend to Mrs. X and she is also visited regularly by the Welfare Visitor. It is hoped that eventually it may be possible to admit her to a small home for invalid women, but the waiting list is very long and, meanwhile, Mrs. X's lonely and miserable existence continues. It is not surprising that she suffers from frequent attacks of melancholia and depression.

Such cases where the children are not very helpful are, in the experience of the Welfare Visitors in this City, quite exceptional, but do emphasise the tremendous problems which are then created.

Removal to Suitable Premises of Persons in Need of Care and Attention.

During the year it has been necessary to remove, compulsorily, 8 persons under Section 47 of the National Assistance Act, 1948.

**Action under
Section 47
National
Assistance
Act, 1948**

Three persons were aged, infirm and suffering from grave chronic disease; four were aged, infirm and living in insanitary conditions; one was aged, infirm, suffering from grave chronic disease and also living in insanitary conditions. 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, the period mentioned in each case being for not exceeding three weeks. Seven of the persons were removed to hospital and one to residential accommodation. Five of the patients subsequently died, two were still in hospital at the end of the year, and one was transferred to residential accommodation.

River View Rest Centre for Elderly Persons.

**River View
Rest Centre**

This Centre, which was opened as part of the Coronation Celebrations in 1953, has not only developed local interest, but has become known nationally. Visitors from many parts of the country interested in the social aspects of the aged have visited the Centre during the year and it is of interest that similar projects are now being undertaken elsewhere.

It has been possible, due to a gift of £400 by Alderman Tristram during his year of office as Lord Mayor, to adapt the premises to permit the use of a further two rooms for recreation purposes, including new furnishings.

The number of persons attending is increasing and now averages about 150 daily.

The premises are managed by members of the Women's Voluntary Service and are open daily from 10.30 a.m. to 4 p.m., except Sundays.

Mobile Meals.

Mobile Meals

This service, now familiarly referred to as "Meals on Wheels", has operated on an experimental basis since 3rd December, 1951, in an area within a radius of approximately one mile from Westminster House. Persons deriving benefit from the service are mainly aged people who, on their doctors' recommendation, require a hot meal due to their inability to manage either shopping or cooking. Meals are supplied from Westminster House and the necessary equipment is provided by

the City Council. The personnel manning the service are members of the Women's Voluntary Service and an average of 34 meals are supplied daily.

The question of extending this service to another part of the City is receiving active consideration.

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

At the present time in Liverpool there are 27 homes registered, 16 being administered by voluntary bodies and the remainder by private individuals. The homes are inspected by officers of the Welfare Section at regular intervals to ensure that the standard of accommodation is being maintained in accordance with the City Council's requirements.

**Private Old
Persons'
Homes
Registered
under S.37
National
Assistance
Act, 1948**

Welfare of Handicapped Persons.

The field of welfare work to be covered in respect of handicapped persons is very wide. Much has already been done for certain classes (particularly the blind and deaf) but the problems of many groups still remain unsolved. The guiding principle of this welfare service should be to ensure that all handicapped persons, whatever their disability, should have the maximum opportunity of sharing in and contributing to the life of the community, at the same time being helped to lead as normal a life as possible.

During the year the work of the smaller groups and associations for handicapped persons within the City has been carefully considered and details of their activities are now known. Their first need has been the provision of suitable premises at which their members could meet regularly, and in response to this request, the City Council immediately made available, free of charge, premises at Walton Village which had previously been used as temporary accommodation. The following organisations are now using the premises:—

Merseyside and Wirral Group Invalid Tricycle Association.

The Merseyside Spastic Fellowship.

Infantile Paralysis Fellowship (Merseyside Branch).

The Merseyside Hard of Hearing Club.

War Pensioners' Handicraft Club.

The premises lend themselves well to handicapped persons as the accommodation available is all on the ground floor.

It is hoped that, in conjunction with these organisations and others, together with the Ministry of Labour and National Service Disablement Branch, information will be forthcoming to formulate a complete register of all handicapped persons. When this is complete, the information then available will be invaluable for the further development of the City Council's schemes.

Blind Welfare Statistics

During 1954, 214 applicants for admission to the registers of blind or partially sighted persons were examined by ophthalmic surgeons. Of these, 150 were found to be blind and 39 partially sighted. An observation register is maintained in respect of the partially sighted persons and similar welfare services are made available to these persons.

Particulars of the numbers of registered blind and partially sighted persons in their various age groups are contained in Tables 39 and 40. It is of interest to note that there are more registered blind persons in Liverpool than in any other County Borough in England and Wales.

Table 41 shows a summary of 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

During the year representatives from the various local authorities on Merseyside concerned with the supplementation of blind employees' wages in the Liverpool Workshops for the Blind have met to discuss the position of the Workshops in general, and the increasing financial burden placed upon each local authority due to trading losses. Whilst it is anticipated, after consultations which have taken place with representatives of the Workshops, that a satisfactory solution will be achieved, the question of the future of blind persons, particularly those of school leaving age, is still one of concern. There is little doubt that the trades operated in the Blind Workshops have to face fierce competition with sighted workers. It would seem, therefore, that the future of any employable blind person lies in directions other than his entry into blind workshop employment. It is pleasing to know that,

perhaps for the first time in the history of Liverpool, there are today more blind persons in sighted industry than in the blind workshops. That this trend should increase, if possible, is desirable, and it is felt that when a blind boy or girl is about to leave school, opportunity should be given to a specialist officer such as the blind placement officer to be present at the interview of the child to help assess his prospects. It is important that the young person should enter open industry at an early age as a young blind person is a much easier placement proposition to the average employer of labour than a person who has become blind in later years. There will, of course, still be blind people who are incapable of physically meeting the requirements of open employment, but before they are accepted for training in those special schools concerned with the trades operated in blind workshops, placement in open industry should always be carefully considered.

At 31st December, 1954, the following numbers of blind persons were engaged in the various trades operated in the blind workshops:—

Workshops for the Blind, Cornwallis Street.

Basket Making	13
Brush Making	25
Mat Making	27
Upholstery	10
	<hr/>
	75

**Blind
Workshops**

School for the Blind, Hardman Street.

Basket Making	2
Boot Repairing	1
Machine Knitting	8
Mat Making	2
	<hr/>
	13

Catholic Blind Institute, Brunswick Road.

Basket Making	1
Machine Knitting	2
Mat Making	2
	<hr/>
	5
	<hr/>
Total	93

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

**Sighted
Industry**

Cleaners, packers, porters	...	7	
Factory Operatives	...	48	
Home Teachers	...	4	
Shorthand Typists	...	2	
Music Teachers, etc.	...	3	
Telephone Operators	...	16	
Legal Profession	...	1	
Minister	...	1	
School Teacher	...	1	
Miscellaneous	...	15	
			98

Home Workers

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

Braille Copyist	...	1	
Machine Knitters	...	4	
Musicians and Music Teachers...	2		
Pedlar	...	1	
			8

Sir Robert Jones Workshops

These Workshops, which were founded in 1902, provide sheltered employment for 45 severely disabled persons in the trades of book binding, printing, boot and shoe repairs and Christmas card renovations. For a number of years there have been trading losses, and the Management Committee, faced with the possibility of having to close down, approached the City Council for financial assistance. An investigation into the affairs of the Workshop, both from the financial and administrative aspects, resulted in a grant of £1,000 being made towards the current year's deficit. At the same time, enquiries were made to find out whether facilities were available in the Workshop for the employment of further disabled persons. The premises are large enough to take another twenty employees and, as the Ministry of Labour and National Service is prepared to afford financial assistance to the City Council in the event of handicapped persons from their register being placed in workshops of this nature, a review of the whole position is at present being undertaken.

Deaf and Dumb

The Liverpool Adult Deaf and Dumb Benevolent Society and the Catholic Deaf and Dumb Society of St. Vincent de Paul, act on behalf of the City Council to provide welfare services for these handicapped persons. Both are efficient organisations and in Liverpool the service

is afforded to 580 adult persons. At the present time they receive a per capita grant at the rate of £3 per annum and a recent application for an increase in this grant is receiving consideration.

Adult epileptic persons needing residential care and attention continued to be admitted, at the cost of the local authority, to colonies established for this purpose. Twelve persons were allocated vacancies during the year. **Epileptics**

As stated in previous reports, the majority settle down quite happily, but there are a few, however, who, due to their anti-social outlook, are unable to adapt themselves to communal life. As the facilities in colonies are inadequate to deal with this type of person it was necessary to arrange for their discharge, and six persons left colonies for this reason during the year. A register is being prepared of all epileptics and particular attention is being given to the needs of those who are unsuitable to colony life. It is hoped that arrangements can be made for these to meet together at Walton Village to discuss in general their problems and if possible to form some association which will be for their mutual benefit.

The local voluntary organisation concerned with the welfare of spastics has worked in close co-operation with this Department during the year. The National Spastic Society is opening, in the near future, various types of homes and a number of cases have already been investigated with a view to their possible admission. **Spastics**

As in the case of the aged, the City Council has also the responsibility of providing residential accommodation for handicapped persons who are in need of care and attention. There are 95 persons accommodated in homes managed by voluntary organisations and their incomes are supplemented by the local authority. Details of the various homes are contained in Table 42. **Accommodation (Handicapped Persons)**

Protection of the property of persons admitted to hospitals or residential accommodation.

During the year, 131 cases have been referred to the Welfare Services Section where it has been necessary, due to no other suitable arrangements having been made, to take steps to ensure the safety of persons' **Protection of Property**

property. This function, one in which a great deal of care has to be exercised by the officials concerned, is rapidly increasing in volume. Houses and flats are made secure, inventories of furniture taken, and any cash placed in safe custody with the City Treasurer. In the event of the death of a person, the appropriate steps are taken to administer the affairs of the deceased's estate.

In addition, 78 cases have been dealt with where persons have died and there has been no next of kin. Where the estates of these persons have been solvent the cases have been referred to the Duchy of Lancaster and the instructions of that department acted upon.

The sum of £2,174 19s. 6d. in cash, and securities worth £4,698 6s. 9d. have been recovered from persons effects and placed in safe custody. Also taken into safe-keeping are numerous insurance policies, items of jewellery and documents of a confidential nature, etc.

Civil Defence.

Civil Defence . In the event of war the Welfare Services Section would be concerned with the administration of the Rest Centre Service. Already a large number of premises have been earmarked for this purpose and in view of the possibility of nuclear warfare, attention is being paid to the need for these centres on the periphery of the City and in the contiguous areas.

Training courses have been undertaken for volunteers who have enrolled for this service and in conjunction with the staff of the Civil Defence Headquarters, officials of the Section have collaborated in exercises and competitions which have taken place to stimulate the interest of the members.

SANITARY ADMINISTRATION.

This year has seen a gradual change in the approach to housing repairs. As the year progressed it was found that the work of the district sanitary inspector began to merge with the specialised work of the housing inspector. In a large city a form of specialisation is necessary, but the shortage of qualified staff and the extra duties added throughout the year have necessitated that staff should acquire a general knowledge and therefore the introduction of the Housing Repairs and Rents Act and other new legislation caused a gradual sharing of responsibility.

Merging of
duties

The inspections for Certificates of Disrepair were divided evenly between two sections, the district sanitary inspectors dealing with the outer zone of the City and the housing inspectors dealing with the inner zone. This was to avoid the complications associated with inspections of houses in accordance with the Housing Act procedure, for in the inner zone the slum clearance drive is rapidly gaining impetus and therefore an inspection in this zone must incorporate all the aspects of an inspection carried out in accordance with Section 9 of the Housing Repairs and Rents Act, 1954.

Certificates of
Disrepair

It has been a source of gratification within the section that, although 627 Certificates of Disrepair have been issued, there has been no appeal against the inspectors' requirements and only a small number of informal objections against the items enumerated on the Certificates. The Certificates have necessitated a follow-up process and notices requiring attention to these items of disrepair have been served in accordance with the Public Health Act procedure. There is no doubt that consideration must be given in the near future to the service of notices in accordance with the Housing Act procedure, but the conflicting judgments given in the Courts have caused some confusion with regard to the requirements.

Follow-up
procedure
Certificates of
Disrepair

The inspectors' duties included every type of premises, factories, shops, restaurants, bakehouses, public houses, places of entertainment, and all dwellinghouses from the modern detached type to the sub-standard dwelling. He has to be able to alter his approach according to the duty to be undertaken, being prepared to answer questions

Type of
inspection

Summary of inspections concerning closing hours, or infringements under the Shops Act and then perhaps later advise on increases of rent, or when a tenant is likely to be rehoused.

During the year, 267,091 visits and inspections were carried out and 43,640 notices issued under the various Acts and Byelaws. The district inspectors received 32,297 complaints of nuisances from occupiers of dwellinghouses, 1,373 complaints were made by the public in respect of shops, cafes, public houses, etc., each complaint was investigated and the necessary action taken.

Change in procedure

The procedure has been streamlined throughout the year to assist in the abatement of nuisances promptly. Every week a sub-committee now meets and a resolution is obtained, thereby reducing the time period from approximately three months to one month whereby positive action is taken. At the end of this period the owners are contacted personally and the majority are responding to this informal appeal, but there are a few who are not co-operating. During the year, 162 informations were laid under the Public Health, Shops, Food and Drugs and Local Acts, 51 orders were made and penalties amounted to £164 15s. 0d.

Work in default by owners

In addition a number of works were carried out by the local authority upon default of the owner, particularly in respect of abandoned houses where the owners were without financial means and 16 houses were dealt with in this manner. The money spent is collected through the normal procedure incorporated in the Public Health Act. The amount concerned is also registered against the property in the Local Land Charges Register in accordance with the provisions of the Land Charges Act, 1925. This provides for ultimate collection and therefore there can be no loss to the local authority by this procedure. There is no doubt that the work in default sections do provide a solution with regard to properties, abandoned or owned by persons without financial resources to comply with the local authority's requirements, and in respect of properties where the owners fail to carry out their duties.

Recovery of cost of repairs

In dealing with investigations, the inspector has to exercise patience and tact and the following information indicates the variety of subjects dealt with.

Problem of movable dwellings

There are a number of special problems developing and one of the most troublesome is caravan dwellers, and it is to be regretted that

people are purchasing caravans without being advised that there are no licensed sites in the large cities. During the year, inspectors made 1,078 visits to 16 sites in the City where caravans were being used as dwellings. Daily observations were made on individual caravans over periods of two months to obtain evidence of their occupation, necessary before legal proceedings could be commenced. The majority of the caravans were removed without resource to legal proceedings.

As a result of the co-operation between other departments of the Corporation and the Public Health Department, 13,865 references were received, requiring the attention of the sanitary inspectors and 8,084 references were sent to other departments. Departmental references

The following table shows the number of visits made by sanitary inspectors to houses where infectious disease has occurred and the number of enquiries made regarding contacts of infectious disease:— Infectious Disease enquiries

Number of investigations relating to cases of infectious disease	...	4,459
Number of enquiries regarding contacts of infectious disease	...	833
Number of visits to infected houses	... ..	4,165
Number of enquiries relating to suspected smallpox contacts	...	15

During the year, 2,689 drainage systems were tested, 960 by colour test, of which 392 were positive; 198 by smoke rocket test, 68 were positive; 1,531 by smoke machine test, 728 being positive. Repairs have been carried out in all cases where a positive result was obtained. Drains Testing

The assistance of the City Engineer and Surveyor's Department has been utilised whenever flushing has been required.

39 choked public sewers, requiring urgent attention and 10 defective public sewers were referred to the City Engineer and Surveyor under the provisions of Section 24 of the Public Health Act, 1936.

During the year, two lodging houses have closed and there are now 15 registered lodging houses in the City, 14 providing a total accommodation for 974 males and one providing accommodation for 94 females. Common lodging houses

Applications were received from 15 keepers for renewal of registration as keepers, the applications were granted for a further period of twelve months. Applications for registration as keepers

The sanitary inspectors made 500 visits during the daytime and 30 night inspections. 17 notices were served in respect of byelaw infringements, of 9,632 beds examined 53 were found verminous, and these were cleansed by the local authority. 52 lodgers found to be verminous were cleansed by the local authority.

Seamen's lodging houses

There are 16 seamen's lodging houses on the register, of these, 7 are not licensed under the byelaws as seamen's lodging houses. Accommodation is provided for British, Chinese, Arab, Somalis and Indian Seamen. The total accommodation available for seamen is 950. Sanitary inspectors made 351 day inspections and 20 night inspections, byelaw infringements were dealt with either verbally or by the service of notices. The inspectors examined 7,222 beds, and appropriate action was taken where necessary.

Canal boats

The Docks and Inland Waterways Executive, North-Western Division, are the proprietors of the Leeds and Liverpool Canal, the only canal having direct communication with Liverpool. The length of the waterway within the City (exclusive of the locks communicating with the Dock Estate) is approximately three miles.

Liverpool is one of several registration authorities for boats used as dwellings plying on the Canal. The details of the boats registered by this Authority are indicated in Tables I and II.

Number of boats

TABLE I.

Boats on Register, 1st January, 1954	...	...	...	421
New Boats registered	...	...	...	3
Boats removed from Register	...	...	...	3
Boats on Register, 31st December, 1954	...	...	...	421

Three boats ceased to be used as dwellings during the year and were removed from the Register at the owners' request.

Type of boats

TABLE II.

Motor-propelled boats	...	...	...	...	99
Steam-propelled boats	...	...	...	...	63
Motor-towed boats	...	...	...	...	46
Steam-towed boats	...	...	...	...	124
Horse-drawn boats	...	...	...	...	89
					<hr/> 421 <hr/>

1,338 inspections of canal boats were made during the year and the places of registration of the boats visited were as follows:—

Number of
boats
inspected

TABLE III.

Number of boats visited	...	...	...	...	236
Registered at Liverpool	...	...	...	...	167
Registered at Leeds	...	...	...	...	—
Registered at Runcorn	...	...	...	...	17
Registered at Manchester	...	...	...	...	10
Boats not registered and not used as dwellings	...	...	...	...	42

All the boats examined were “wide” boats, 75 being motor-propelled, 10 steam-propelled, 49 motor-towed, 58 steam-towed, and 44 horse-drawn.

Contraventions of the Act and Regulations were found on 34 boats, of which number 4 were registered by other authorities. The nature of the contraventions is shown in the following Table:—

Contraven-
tions

TABLE IV.

Nature of Contravention.	Reported.	Remedied.
Unregistered boats used as dwellings	2	1
No certificate of registration on board	10	8
Registration lettering and numbering not legible or incorrect	4	3
Leaking Decks	6	5
Defective stoves or stove pipes	6	4
Cabins requiring repainting	7	5
Defective water-cask	2	1
Incorrect marking of boat	3	1
Defective cabin fittings	3	1
General	2	1
TOTAL	45	30

28 written notices with respect to the contraventions were sent to the owners concerned, and 21 notices have been complied with.

No informations were laid during the year against owners or masters for infringements of the Act or Regulations.

Inspections by Port Health Authority The Inspectors of the Port Health Authority made 229 inspections of canal boats in the docks during the year. 33 contraventions were found and 23 of which were subsequently dealt with. These figures are included in the foregoing Table.

Infectious disease No case of infectious sickness was reported as having occurred during the year on any canal boat visiting the district.

The number and sex of persons found in occupation of the 194 canal boats used as dwellings are indicated in the following Table:—

Population of canal boats

TABLE V.

Men	...	...	...	...	...	...	388
Women	...	...	...	...	...	...	nil
Children	...	...	...	...	...	...	nil
TOTAL							388

distributed as under:—

Males over 14 years of age	...	...	...	388
Males over 5 years and under 14	...	...	...	nil
Males under 5 years	...	...	...	nil
Females over 12 years	...	...	...	nil
Females over 5 years and under 12	...	...	...	nil
Females over 5 years	...	...	...	nil

NOTE.—Males on 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 are recorded as such in the Table.

No children of school age were found on canal boats during the year.

The Hydrogen Cyanide (Fumigation) Act, 1937 Official notice has been received in respect of 6 fumigations under the Hydrogen Cyanide (Fumigation) Act, 1937. Sanitary inspectors attended the fumigation of 2 dwellinghouses, 2 warehouses and 2 stores.

Verminous articles Under Section 83 of the Liverpool Corporation Act, 1936, no dealer shall sell or expose for sale any second-hand furniture, mattress, bed linen or similar articles, if these are to his knowledge infested with bugs or if by taking reasonable precautions he could have known them to be infested.

378 visits were made by sanitary inspectors to second-hand shops and no infringements were observed.

Under the terms of licences issued from the Home Office, sanitary inspectors supervised the exhumation and re-interment of 10 bodies during the year, also the remains of 3 persons were shipped abroad, one to America, one to Italy and one to Antwerp. **Removal of Remains**

Public Health Act, 1936, Section 54.

Inspections of trial holes were made on 50 filled up sites to ascertain whether the ground was free from faecal or offensive animal or vegetable matter, and that the site was suitable for building purposes. **Filled up ground**

Public Health Act, 1936, Section 269.

1,078 visits were made to 16 sites where a total of 35 caravans were being occupied as permanent dwellings, the occupiers of caravans on 15 of the sites co-operated with the department and removed the caravans. It was, however, necessary to take legal proceedings against the owner of the remaining site which resulted in the removal of the caravans. **Movable dwellings**
Legal proceedings

Miscellaneous.

To prevent fly infestation, stables and manure depots are systematically visited by the sanitary inspectors, attention being paid to the frequent removal of manure and to general sanitation. 742 inspections were made, 139 stables being occupied. 76 visits were made to 30 marine stores, no nuisances were observed. **Stables**
Marine stores

Bi-weekly visits were made to 7 poultry stores.

Poultry stores

294 visits were made to sanitary conveniences within parks and gardens throughout the City. **Parks**

1,530 visits were made to schools, the high standard of cleanliness continues to be maintained. **Schools**

64 visits were made to the premises of furniture removers, 78 vans were inspected. **Furniture removers**

SLUM CLEARANCE and HOUSING.

Slum clearance and housing The slum clearance drive swept on throughout the year unchecked by the introduction of new legislation, temporary setbacks being overcome by the enthusiasm of the staff. The impetus to slum clearance must be given in this department for the other components of the machine cannot operate without the raw material being provided, and therefore constant representation of unfit houses is necessary at least two years in advance of other sections.

Co-operation with other departments

New duties The new duties connected with legislation were absorbed under the various headings, which included, Certificates of Disrepair, Improvement Grants, Loans on Mortgage and Sub-lettings. Special duties were also added by the introduction of a new points scheme which included investigation of housing conditions having regard to medical factors and subsidiary complications associated with a wide range of housing work.

Housing survey All these duties called for a complete re-organisation of staff during the year and the use of qualified staff to the best advantage. With all these new problems to be absorbed a breakdown in representation of unfit houses might have been expected, but this did not occur, for a complete survey of the city was also accomplished involving 204,486 houses.

There were 2,207 houses surveyed with a view to representation, of which total, 1,831 were dealt with before the end of the year in accordance with the relevant sections of the Housing Act, 1936, and the remainder were represented in the new year.

For the survey all the houses in the City were subjected to a preliminary examination and the areas containing sub-standard houses were plotted on detailed maps. The City was then divided into an inner and outer zone, the inner zone contained the houses subject to the residential plan redevelopment programme.

Total of unfit houses The survey revealed a total of 26,959 unfit houses for demolition, of which 24,587 were situated within the inner zone. In addition there are 61,274 houses requiring major repairs, making a total of 88,233 houses unfit in accordance with Section 9 of the Housing Repairs and Rents

Act, 1954, and Sections 11 and 25 of the Housing Act, 1936. This information, together with further details, is required in accordance with the Ministry of Local Government and Housing Circular 55/54. From this information the local authority must decide on its programme during the next 5 years with regard to demolition and also the houses which are to be subject to deferred demolition.

The survey showed that in addition to the houses already in the demolition machine there are 4,106 houses which should be demolished within 5 years, and 14,441 which, after being made tolerably habitable, would provide reasonable occupation for periods varying from 5 to 15 years. This information concerns mainly clearance areas, but there are also 1,495 individual unfit houses within the inner zone and 1,602 houses which should be demolished in the outer zone. Of this number, however, 2,140 could be made tolerably habitable for 5 to 15 years.

There is a considerable problem associated with 61,274 houses requiring major repairs and unless action is taken immediately these houses will come within the slum clearance programme. The most appropriate action to take is debatable, for there is considerable doubt regarding the operation of Section 9 of the Housing Act, 1936, and its scope is now limited by court procedure. The number of part-successful appeals against the requirements of local authorities, together with a reduction in the items of disrepair enumerated on specifications, has made it extremely difficult to operate this section of the Housing Act, and consequently it may be necessary to apply the appropriate sections of the Public Health Act and increase the amount of work carried out by the local authority upon default of the owner and obtain a tolerable standard of habitation by this method as an alternative to acquisition.

The survey indicated that there were many houses individually unfit, and during the year, 143 were represented. The representation of these individual unfit houses may cause a certain amount of complication at this stage of the housing drive, for at first glance it would appear that the local authority may not get any return with regard to housing land for development. However, when the number was analysed it was found that 75 per cent of these houses are situated in or near areas already made or to be made in the near future. Therefore last year's programme has a percentage for redevelopment, and in the common parlance of official jargon, shows a dividend.

**Houses on
land zoned for
industry**

For some time there has been considerable concern about the representation of unfit houses on land zoned for purposes other than housing. Since the war many houses unfit for human habitation bear the unseen label—this house is for educational purposes or industry or for open space—and every effort has been made to incorporate these planning requirements within the progressive programme of slum clearance, but all the bad sub-standard property in this City is so decayed and aged that the worst houses must be dealt with first, irrespective of its 20-year label.

**Houses
dangerous to
health**

When the structure of a house is dangerous or fractured, action is taken immediately and therefore when the house is so bad that it is having a serious effect on the health of the occupants, then action also must be taken at once, and it is suggested that planning requirements must be made elastic to absorb and conform with this aspect of the slum clearance programme.

**Certificates of
disrepair**

Side by side with the housing drive, applications were received for certificates of disrepair. A total of 628 applications was made and 627 certificates issued. 532 houses have been subjected to notice of increase, and 95 houses were in respect of applications made in accordance with Section 2 of the Rent and Mortgage Interest (Restrictions) Act, 1920, now incorporated in the Housing Repairs and Rents Act, 1954.

**Loans for
purchase**

A number of houses were inspected by sanitary inspectors for determination as to whether a loan should be granted for prospective house purchasers, and this number increased steadily from the operation of the appropriate legislation. A total number of 62 applications over a period of 3 months was received and the premises were inspected relative to their fitness and suitability for mortgage purposes.

**Housing
problems**

The problems associated with obsolescent, congested and abandoned property, gross overcrowding and tuberculosis cases gradually increased during the year and new systems were introduced or old systems streamlined so that the extra work could be undertaken by the staff without increasing the number of personnel, for it is now impossible to obtain specialist staff for this work and students have to be trained within the department.

**Statistics of
representation**

With all these problems 20 areas were represented for clearance involving a total of 1,676 houses (7,185 persons) and 579 houses were

demolished. There were 39 compulsory purchase orders confirmed involving 844 houses and no houses were subject to modification when the orders were confirmed by the Ministry.

The constant repetition of inspections, housing surveys, investigations for infection and overcrowding has developed not only statistical records within the department but intimate knowledge of housing problems and habits of families concerned and many are known familiarly by inspectors doing housing work. This pool of knowledge is now being dipped into by all engaged on the future development of the City. Enquiries are constantly pouring in from other departments, estate agents and prospective purchasers of houses relative to the future concerning all houses in the City. This information is freely given as there is now a report on every house, mainly concerned with the fabric and also in respect of the majority of the houses regarding the families, for the first time in the history of the department. It is possible to protect people in lowly circumstances purchasing houses which may be subject to demolition orders in the near future, and to advise on future action when final decisions have been made by the appropriate committees concerning the reports which are being submitted.

Knowledge of
housing

Information
for house
purchasers

This gradual accumulation of knowledge has also indicated a vast array of problems to be tackled, associated with sub-standard houses. On the credit side, although there are 61,274 houses requiring major repairs, there have been 41,506 notices served this year in respect of many of the nuisance items. 90 per cent of the owners are co-operating in carrying out these repairs and would co-operate further, therefore it is only in respect of a small minority where rapid deterioration is likely to take place. With encouragement it is assumed that many owners would co-operate in carrying out improvements to retard the slow decay of the fabric caused by lack of maintenance. This credit balance is an important factor in formulating policy to solve the problem. There is no doubt that large scale acquisition seems in theory the most advantageous method of providing tolerable habitability in houses to remain standing for the next 20 years, but when it is envisaged that a vast army of workmen will be required under the direction of the local authority, together with the trebling of administrative staffs, and even the absorption of the estate agents, administering this property, within the local

Co-operation
of owners

Dangers of
acquisition

authority's orbit, this plan becomes frightening in its adoption. Therefore, although there are 26,955 unfit houses which will have to be demolished, these are houses which have been erected for more than 80 years and deterioration commenced long before the slow process evolved by successive public health acts began to prevent decay.

**Prevention of
house decay**

It is found that constant attention to nuisances although not improving the premises is a preventative, and concentration on this in special areas of the City may provide a solution for a breathing space to review the problem at the end of the next five years when the demolition machine will have consumed a large helping of the representations.

However, a study of the following statistics will perhaps prove more interesting to the analytical mind than the general appraisal incorporated in the previous comments.

Rent and Mortgage Interest (Restrictions) Act, 1920.

**Rent and
Mortgage
Interest
(Restrictions)
Act, 1920**

Up to the 29th August, 1954, 54 certificates were issued in respect of dwellinghouses which were not in a reasonable state of repair; 9 applications were received from owners for reports that the premises were deemed to be in a reasonable state of repair; all the applications were granted.

Housing Repairs and Rents Act, 1954.

**Housing
Repairs and
Rents Act,
1954**

**Statistics
Certificates of
Disrepair**

This Act came into operation on the 30th August, 1954, one of its objects being to secure the maintenance of houses. An owner is entitled to a repairs increase provided he satisfied the expenditure test and the house is in good repair and reasonably suitable for occupation. Where a notification of increase has been served a tenant may apply to the local authority for a certificate of disrepair and if granted the owner is not entitled to the increase until a revocation certificate is issued.

The Act incorporates the provisions of sub-section (1) of Section 2 of the Rent and Mortgage Interest (Restrictions) Act, 1920. This provides for the issue of certificates of disrepair in respect of houses subject to the 15 per cent and 25 per cent increase permitted under the above mentioned section.

The following table shows the number of applications for certificates of disrepair, the number issued and the number of revocations issued.

Housing Repairs and Rents Act, 1954, Section 26.

Number of applications for certificates of disrepair...	...	...	...	533
Number of certificates of disrepair issued ...	...	...	...	532
Number of applications refused ...	...	...	...	1
Number of revocations granted ...	...	...	...	34

Housing Repairs and Rents Act, 1954, Section 27.

Rent and Mortgage Interest (Restrictions) Act, 1920, Section 2.

Number of applications for certificates of disrepair ...	...	...	...	95
Number of certificates issued ...	...	...	...	95
Number of applications refused ...	...	...	...	—
Number of revocations granted ...	...	...	...	4

Housing Repairs and Rents Act, 1954.

This Act came into force on the 30th August, 1954. It is primarily designed to implement the current national housing policy by making further provision for the clearance and redevelopment of areas of unfit housing accommodation, and for securing and promoting the reconditioning and maintenance of houses; and otherwise to amend the enactments relating to housing and rent control. **Housing Repairs and Rents Act, 1954**

A comprehensive plan, on a national basis, has now been prepared as seen in this Act for the repair, maintenance, improvement and demolition of all types and conditions of house. Generally the houses have been divided into four classes:—

- (1) The best—the great mass of essentially sound houses, many of which are in good condition, and all of which the landlords could be expected to keep in good condition given a reasonable rent.
- (2) The worst—the slum houses which ought to be demolished as soon as circumstances permit. Only a proportion can be pulled down and replaced in the next five years. Since the rest must of necessity remain in use they should at least be patched up in order to make life more tolerable for their occupants.

- (3) An intermediate class—the dilapidated houses, some of which may be brought into the first class by their owners, others of which the local authorities may have to get repaired in all essentials by greater use of their statutory powers.
- (4) Houses which could give years of good service if they were improved, that is to say, provided with bathrooms, hot water, up-to-date cooking arrangements, and other necessary amenities; also houses too big for present-day needs which could be converted into good comfortable flats, thus increasing housing accommodation.

The Proposals for Dealing with Slums.

**The proposals
for dealing
with slums**

Under the provisions of the Housing Repairs and Rents Act, 1954, the local authorities are required to submit for the Minister's approval within twelve months, proposals for dealing in one way or another with the houses in their area which appear to them to be unfit for human habitation and liable for demolition. These proposals are to be submitted in such form as the Minister may require.

The requisite form has been set out in Circular 55/54 asking for an estimate of the total number of unfit houses in the Council's area, the period the Council think they will need to secure the demolition of all these houses, together with the Council's programme of action in relation to these houses during the next five years.

A survey of the City has been carried out in accordance with the Minister's requirements. Out of the 204,486 houses surveyed, 88,233 were found to be unfit for human habitation, comprising 61,274 houses which are in need of major repair and 26,959 houses which are so bad as to require demolition under the provisions of the Housing Acts, 1936/54.

In this figure of 26,959 are included 4,827 houses already dealt with, leaving a residue of 22,132 unfit houses to be dealt with in the coming years, by demolition or deferred demolition.

Small Dwellings Acquisition Act, 1899.

**Small Dwell-
ings
Acquisition
Act, 1899**

This year was marked by a spate of new legislation and, besides the Housing Repairs and Rents Act, 1954, local authorities were encouraged

to operate the provisions of the Small Dwellings Act, 1899 and the Housing Act, 1949. The Small Dwelling Acquisition Act gave power to local authorities to advance money to a prospective purchaser of a house in the form of a mortgage.

The Housing Act, 1949 amended the Housing Act, 1936 so as to promote the improvement of housing accommodation by authorising the making of contributions out of the Exchequer and grants by local authorities. It amended also the Housing (Financial and Miscellaneous Provisions) Act, 1946 with respect to the amounts of contributions payable thereunder out of the Exchequer. Certain other enactments relating to the making of contributions out of the Exchequer in respect of the provisions of housing accommodation were also amended.

Shelter Welfare.

The present strength of this section is 22, comprising 9 trained volunteers, 10 untrained and 3 volunteers who will be given an opportunity of attending a general course in Civil Defence and Welfare Work, which includes lectures on shelter welfare.

During the year all the untrained volunteers were contacted by letter and a series of lectures were given by a specialist inspector. The talks were held at Civil Defence Headquarters, and involved Shelter Hygiene, Shelter Welfare and Shelter Control.

In addition, similar talks in relation to their duties were given to Rest Centre Personnel.

Cellar Dwellings.

In view of the shortage of housing accommodation there is a tendency for families to occupy basements of large houses for living and sleeping purposes in contravention of Section 469 of the Liverpool Corporation Act, 1921.

The inspectors made 142 visits and in 38 instances found families using these basements as separate dwellings. 38 notices were issued to the owners and occupiers of the premises and reports submitted to the Housing Department for rehousing purposes.

Allocation of Houses—Points Scheme.

Allocation of houses— Points Scheme

The allocation of houses is accomplished under a points scheme and applicants are recommended for priority in accordance with environmental conditions, overcrowding of families and tuberculosis. These priority cases are visited by the sanitary inspector who makes enquiries as to the size of family, occupation, income, type and size of house, the permitted number, extent of overcrowding, verminous conditions, cleanliness and disrepair of the premises. These reports are considered, and 626 recommendations for rehousing were forwarded to the City Architect and Director of Housing.

When an applicant resides outside the City boundary contact is made with the local authority concerned and a report and number of points allocated requested.

When an applicant lives in this City and applies for a house elsewhere, an inspection is made of the premises and a report, together with the number of points allotted, forwarded to the authority concerned.

In addition to the scheme for the allocation of points for tuberculosis, there is a special scheme relative to overcrowding factors. This scheme is supplementary to the tuberculosis register and a separate record of all the families is now being compiled within the department. Where there is a case of gross overcrowding a report is forwarded to the City Architect and Director of Housing, and where there are medical factors involved, the report is given careful consideration and extra points, in certain circumstances, allotted.

Clearance Areas.

Clearance areas

The following summary refers to dwellinghouses represented by the Medical Officer of Health during the year as being unfit for human habitation within the meaning of Section 25 of the Housing Acts, 1936/54.

Number of dwelling-houses represented during the year 1954 ...	...	1,676
Number of persons occupying the dwelling-houses ...	...	7,185
Number of Clearance Areas officially represented ...	...	20
Number of Areas declared to be Compulsory Purchase Orders...	...	3
Number of Areas declared to be Clearance Orders ...	...	1
Number of Areas in abeyance ...	...	36

Progressive Summary of Slum Clearance.

Year.	No. of C.O.'s.	No. of C.P.O.'s.	No. of Declara- tion of Unfitness Orders.	No. of Dwelling Houses.	No. of Persons to be Displaced.	No. of Houses Demolished.	No. of Persons Displaced.
1930	—	16	—	398	3,430	—	—
1934	60	42	—	2,757	13,093	—	709
1935	47	60	—	2,793	14,302	278	1,285
1936	55	59	—	3,511	17,923	695	3,263
1937	60	27	—	1,867	9,979	872	4,637
1938	38	5	—	2,583	11,923	1,412	6,654
1939	18	4	—	814	3,895	1,076	4,995
1940	—	—	—	—	—	631	3,214
1941	—	—	—	—	—	653	3,707
1942	—	—	—	—	—	916	4,223
1943	—	—	—	—	—	654	3,387
1944	—	—	—	—	—	423	2,115
1945	—	—	—	—	—	190	920
1946	—	—	—	—	—	374	1,396
1947	—	—	1	35	156	485	2,540
1948	—	—	3	65	215	260	1,299
1949	4	16	—	373	1,362	161	678
1950	—	2	1	32	143	327	1,536
1951	—	—	—	207	—	207	943
1952	—	10	—	524	2,350	408	2,099
1953	—	17	—	1,766	8,089	518	2,828
1954	1	3	—	1,676	7,185	579	2,702
TOTALS	283	261	5	19,194	94,045	11,119	55,130

During the year under review 6 Public Inquiries and 1 Hearing were held in connection with 26 Areas, further details of which are set out in the following table:—

No. of C.P.O.'s	No. of Clearance Areas	No. of dwelling-houses	No. of Persons Displaced
25	1	749	3,580

During the year, 39 Confirmation Orders were received in connection with 844 dwelling-houses and these orders confirmed the inclusion of 100 per cent dwelling-houses in the areas.

Compulsory Purchase Orders Confirmed—1954.

Area	Date of Representation	Houses	Population
Prince William Street No. 2	18.9.52	12	49
Skirving Street No. 2	18.12.52	154	726
Penrhyn Street No. 2	22.1.53	9	45
Northumberland Street No. 2 ...	22.1.53	5	31
Northumberland Street No. 3 ...	22.1.53	8	39
Beaufort Street No. 5	22.1.53	14	104
Upper High Street	19.2.53	26	160
Lancaster Street No. 2	19.3.53	83	371
Paddington No. 3	16.7.53	8	29
Wellington Road	19.2.53	5	16
Greaves Street	19.2.53	3	10
Robsart Street	19.2.53	6	39
Opie Street	19.2.53	4	26
Netherfield Road North No. 3 ...	19.2.53	4	12
Longville Street.....	16.4.53	129	598
Parliament Street	19.3.53	2	14
Beaufort Street No. 6	19.3.53	3	9
Mill Street No. 10	16.4.53	8	40
East Prescott Road No. 5	16.4.53	9	39
Everton Terrace Nos. 2, 3 & 4 ...	18.6.53	61	299
Cornwallis Street No. 2	18.6.53	18	102
Northumberland Buildings	18.6.53	25	56
Prophet Street	19.11.53	6	28
Springfield No. 1	16.7.53	16	91
Kirkdale Road No. 1	16.7.53	4	20
Wrexham Street No. 1	16.7.53	2	14
Park Street No. 1	17.9.53	10	75
Bidder Street No. 2	17.9.53	14	45
Roscommon Street No. 1.....	17.9.53	9	34
Roscommon Street No. 2.....	17.9.53	24	72
Portland Place No. 1	17.9.53	2	13
Seiont Terrace	22.10.53	43	213
Bala Terrace	22.10.53	29	120
Langsdale Street No. 1	17.12.53	5	24
Langsdale Street No. 2	17.12.53	41	174
Totals		801	3,737

Clearance Orders Confirmed—1954.

Area	Date of Representation	Houses	Population
Springfield Square.....	19.3.53	31	110
Bolton Street No. 2	22.10.53	12	41
Totals		43	151

The following is a list of Clearance Areas which were represented during the year for which Compulsory Purchase Orders were made:—

Compulsory Purchase Orders.

Area	Houses	Population
Great Orford Street No. 2	3	12
Furlong Street	24	123
Torr Street	17	98
Totals	44	233

Clearance Areas in Abeyance.

Area	Houses	Population
Commercial Road	3	20
Paddington No. 2	239	1,115
Canterbury Street No. 1	339	1,555
Goring Street	188	895
Mill Street No. 11	6	38
Northumberland Street No. 4	4	10
Bembridge Street	114	391
Newsham Street	8	43
Windsor Street No. 3	23	173
Windsor Street No. 4	20	120
Chester Street No. 2	38	284
St. James Street No. 3	5	25
Mann Street	16	58
Beaufort Street No. 7	2	8
Grafton Street No. 2	22	92
Frank Street	38	169
Smithy Lane, Walton	9	22
Swan Street	38	146
Great Orford Street No. 1	164	871
Great Orford Street No. 2	3	12
Salisbury Street	549	2,330
Stitt Street	164	669
Furlong Street	24	123
Garibaldi Street	127	528
Christopher Street	79	305
Torr Street No. 3	17	98
Ennerdale Street No. 1	5	17
Wellington Terrace No. 1	13	49
Holborn Street No. 1	105	485
Holborn Street No. 2	6	18
Holborn Street No. 3	7	10
Sessions Road No. 1	66	286
Sessions Road No. 2	4	11
Ashfield Cottages	131	406
Reading Street No. 1	162	789
Stanhope Street No. 1	3	10
Totals	2,741	12,181

Demolition Orders.

During the year, 143 individual houses were represented as being unfit for human habitation within the meaning of Section 11 of the Housing Acts, 1936/54, which were dealt with as follows:—

Demolition Orders made	...	...	...	...	...	...	96
Undertakings given not to use for human habitation	...	...	...	...	...	...	1
Undertakings given to render houses fit for human habitation in accordance with approved schemes	...	...	...	...	...	...	3
Undertakings cancelled after houses have been rendered fit	...	...	...	...	...	...	1
Number adjourned	...	...	...	...	...	...	1
Number deferred and later represented under Section 25	...	...	...	...	...	...	nil
Number of representations still to be considered	...	...	...	...	...	...	64
Number of properties acquired by local authority	...	...	...	...	...	...	nil
Number of houses demolished by owner	...	...	...	...	...	...	84
Number of houses demolished prior to Demolition Orders being made	...	...	...	...	...	...	6
Closing Orders made under Section 10, Local Government (Miscellaneous Provisions) Act, 1953	...	...	...	...	...	...	35

(These figures include houses represented in the previous year).

Closing Orders.

Proceedings under Section 12 of the Housing Acts, 1936-54.

Number of Representations	...	...	...	...	...	...	12
Number of separate tenements or underground rooms in respect of which Closing Orders were made	...	...	...	...	...	...	9
Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	...	...	...	...	...	...	nil
Number of Representations still to be considered	...	...	...	...	...	...	6

Proceedings under Sections 9, 10 & 16 of the Housing Acts 1936/54.

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	...	...	...	...	...	...	nil
(2) Number of dwelling-houses which were rendered fit after service of formal notices :							
(a) by owners	...	...	...	...	...	...	9
(b) by local authority in default of owners	...	...	...	...	...	...	nil

Housing Repairs and Rents Act, 1954, Section 6.

Three applications were received for the renewal of licences for the temporary re-occupation of houses included in confirmed Clearance Orders.

Housing Act, 1936, Part IV.—Overcrowding.

75,922 visits were made to houses in connection with the overcrowding provisions of the Housing Act, 439 houses were found to be overcrowded, and grossly overcrowded families were recommended for re-housing under the provisions of Section 85 of the Housing Act, 1936.

Sections 4 and 62, Housing Acts, 1936/49.

In 15 cases the name and address of the Medical Officer of Health was not inscribed in the rent books, while in 11 cases the necessary summary of Sections 58, 59 and 61 of the Housing Act, 1936, was not inserted in the rent book. The numbers of persons permitted to occupy the houses were not inserted in 11 rent books. Informal Notices were served in respect of these infringements and the rent books were corrected.

Rentals.

The weekly rentals of flats (including rates), range from 5s. 2d. for a bed/living-room flat to 13s. 9d. for a five-bedroom flat. The inclusive weekly rental of houses vary between 11s. 9d. for the non-parlour type, and 61s. 0d. per week for houses with four bedrooms and garage, and for Aged Persons' Dwellings 4s. 6d. and 7s. 0d. per week. New three-storey flats range from 11s. 8d. for one-bedroom to 41s. 5d. for a four-bedroomed flat.

Housing Statistics.

Article 31 of the Housing Consolidated Regulations, 1925.

1. Inspection of dwelling-houses during the year—	Housing statistics
(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	71,311
(b) Number of inspections made for the purpose	104,850
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Amendment Regulations, 1932	2,839
(b) Number of inspections made for the purpose	5,522
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	1,819
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	30,260

2. Remedy of defects during the year without service of formal notices—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	13,265
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3.—Action under Statutory Powers during the year—

(a) Proceedings under Sections 9, 10 and 16 of the Housing Acts, 1936/49.

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	—
(2) Number of dwelling-houses which were rendered fit after service of formal notices—	
(a) by owners	9
(b) by local authority in default of owners	—

(b) Proceedings under Public Health Acts.

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	30,260
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—	
(a) by owners	16,593
(b) by local authority in default of owners	17

(c) Proceedings under Section 11 of the Housing Acts, 1936/49.

(1) Number of dwelling-houses in respect of which Demolition Orders were made	96
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	84

(d) Proceedings under Section 12 of the Housing Acts, 1936/49.

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	9
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	—

Houses Owned by the Local Authority.

Houses owned by the local authority	Total number of houses and flats owned by the Local Authority at 31st December, 1954 (excluding 19 houses built under the Housing Acts and subsequently sold, and 3,500 temporary bungalows) including 191 houses and flats under the control of the County Borough of Bootle	58,4
	Number of houses built in the last three years under the Housing Act, 1936, Part V	8,3

The Local Government (Miscellaneous Provisions) Act, 1953.

Sections 8, 10 and 11 of the above Act, which came into operation in August last year, are of direct interest to sanitary authorities. These sections seek to remedy what have been imperfections in the existing legislation as interpreted by the Courts.

**The local
Government
(Miscel-
laneous
Provisions)
Act, 1953**

Section 8 is an attempt to solve the dustbin problem, and Section 10 is concerned with the making of Closing Orders in respect of certain buildings as distinct from parts of buildings.

Section 75 of the Public Health Act, 1936, was to place responsibility for the provision of a dustbin on either the owner or the occupier, and also to enable a local authority, if it is so desired, to provide and maintain dustbins throughout the whole or any part of the district. Under this Act the person who receives the notice may appeal to the Court and the Court may make such order as it thinks fit with respect to the compliance with the notice, either by the owner or occupier, but the Court is not compelled to order the provision of a dustbin.

Section 10 empowers a local authority to make a Closing Order in respect of a house, where it considers it inexpedient to make a Demolition Order under Section 11 of the Housing Acts, 1936/49. The section makes applicable to a Closing Order all the relevant sections under the Housing Act, 1936, as applied to Closing Orders under Section 12 of the Act.

Section 11 enacts provisions relating to certain outstanding Demolition Orders.

INSPECTION OF FACTORIES.

Inspection of Factories

Factories are visited by sanitary inspectors appointed under the Act for the purpose of securing compliance with those provisions of the Factories Act, 1937, which are the responsibility of district councils under Part I (Health) and Part VIII (Outwork). Particulars of the administration of the Act are set down in the table on Form 575 (revised) issued by the Ministry of Labour and National Service.

Factories Acts, 1937 and 1948.

Part I of the Act.

1. INSPECTIONS for purposes of provisions as to health (including inspections made by sanitary inspectors).

Premises. (1)	M/c. Line No. (2)	Number on Register (3)	Number of			M/c. Line No. (7)
			Inspec- tions. (4)	Written Notices. (5)	Occupiers prosecuted. (6)	
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	1	1,473	918	81	—	1
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	2	3,762	3,833	230	—	2
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises) ...	3	82	101	10	—	3
TOTAL ...		5,317	4,852	321	—	

2. Cases in which DEFECTS were found.

(If defects are discovered at the premises on two, three or more separate occasions they should be reckoned as two, three or more "cases".)

Particulars. (1)	M/c. Line No. (2)	Number of Cases in which Defects were found.				Number of Cases in which Prosecu- tions were instituted. (7)	M/c. Line No. (8)
		Found. (3)	Remedied. (4)	To H.M. Inspector. (5)	Referred By H.M. Inspector. (6)		
Want of cleanliness (S.1)	4	60	60	6	14	—	4
Overcrowding (S.2) ...	5	1	1	—	—	—	5
Unreasonable tempera- ture (S.3)	6	15	15	1	2	—	6
Inadequate ventilation (S.4)	7	4	4	—	2	—	7
Ineffective drainage of floors (S.6)	8	—	—	—	—	—	8
Sanitary Conveniences (S.7)—							
(a) Insufficient ...	9	79	79	—	1	—	9
(b) Unsuitable or defective ...	10	274	274	—	32	—	10
(c) Not separate for sexes	11	6	6	—	2	—	11
Other offences against the Act (not including offences relating to outwork)	12	20	20	8	—	—	12
TOTAL ...	60	459	459	15	53	—	60

Part VIII of the Act.
Outwork.

(Sections 110 and 111.)

Nature of Work.	M/c. Line No.	Section 110		No. of prosecu- tions for failure to supply lists.	Section 111		Prosecu- tions.	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 instances of work in unwhole- some premises.	Notices served.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Working apparel— making, etc.	13	218	—	—	—	—	—	13
TOTAL	70	218	—	—	—	—	—	70

Outworkers

In accordance with the provisions of the Act, outworkers' returns are received twice yearly, and the premises referred to in the returns are visited to ascertain whether work is carried on in any place which is, in the opinion of the local authority, injurious or dangerous to the health of persons employed therein.

The 377 returns which were received during the year indicated that outworkers were employed during the whole of the year at 249 premises. These were visited and found to be satisfactory.

17 outworkers whose names were included in the returns were employed in districts outside the City and these were referred to the authorities concerned.

Offensive Trades

No applications were received during the year for consent to establish new offensive trades.

700 visits were made to the 74 trades on the register, and 25 notices were served in respect of defects found in this class of premises.

Offices and Workplaces Administration

Commerce plays such a prominent part in the life of this City that the health and welfare of the large number of persons employed in commercial and other non-industrial buildings is a matter of some importance. Although protective legislation is provided in the case of shop and factory workers there is a regrettable lack of similar enforcement powers so far as office employees are concerned.

Many complaints are received with regard to lack of washing facilities, hot water, poor lighting and inadequate heating in offices, particularly in the winter months and notwithstanding the absence of statutory powers the sanitary inspectors have frequently had these conditions improved by recourse to persuasion.

The experience of inspectors confirms the view that there is an urgent need for the implementation of the recommendations made by the Gowers Committee in their report published in 1949 on the health, welfare and safety of persons in non-industrial employment.

During the year, 5,091 visits were made to 4,828 offices and workplaces and 437 defects were reported.

A surprising fact noted during routine visits is the number of offices and rooms in buildings of the commercial and warehouse type, which present a dull and dreary appearance and are poorly lighted, which results in a loss of efficiency and possibly eye strain. **Lighting in Offices**

Satisfactory natural lighting is not always possible in the older type of building but the rooms can invariably be improved by attention to decoration and furnishing.

Recommended standards of lighting on working surfaces have been made by several bodies and authorities and are used by the inspectors as a guide in advising occupiers on this matter.

A general improvement has often been affected by redecoration of walls and woodwork in light and pleasant colours. Large safes and similar equipment which are invariably finished in dark green colour have been transformed by being repainted in cream or light green, which gives a higher reflection value and in certain cases, light and brightly coloured floor coverings have been laid.

A point which is always stressed in advocating better lighting is the maintenance and frequent cleansing of electric light fittings and reflectors which is demonstrated by the inspectors by means of a light meter, which provides undeniable proof that this action is not only a hygienic advantage, but is of value as an economic factor in office management.

These premises are controlled by byelaws made under the Liverpool Corporation Act, 1927, and visits were made from time to time to ascertain that the requirements of the byelaws are being carried out. There were 30 licensed employment agencies on the register at the end of the year. **Employment Agencies**

Rag Flock and Other Filling Materials Act, 1951.

The administration of the above enactment is carried out by certain authorised sanitary inspectors.

The Act provides for the registration of premises in which specified filling materials are used in the manufacture of new bedding and upholstery, toys and baby carriages and for the annual licensing of manufacturers and storers of rag flock.

Sampling of Filling Materials

Powers are given to take samples of filling materials for the purpose of testing by a prescribed analyst and regulations have been laid down which govern the standard of cleanliness to which the materials must conform.

At the end of the year the number of premises licensed and registered was :—

Number licensed to manufacture Rag Flock ...	...	1
Number licensed to store Rag Flock ...	...	8
Number registered in which filling materials are used		84

Samples taken 50 samples of filling materials were taken during the year, as follows :—

Rag Flock ...	...	23
Woollen Mixture Felt ...	...	9
Coir Fibre ...	...	11
Feathers ...	...	1
Cotton Felt ...	...	2
Cotton Mill puffs ...	...	1
Kapok ...	...	1
Woollen Flock ...	...	2

Infringements

The results of the analytical tests showed that one sample of woollen mixture felt did not conform to the prescribed standard of cleanliness. The sample was taken from a consignment of filling material being used in the manufacture of upholstery and contained 14 parts of chlorine expressed as soluble chlorides per 100,000 parts of the material in excess of the maximum permitted under the Act. A cautionary letter was sent in this case to the user of the material.

Administration of the Shops Act, 1950, and Young Persons' (Employment) Act, 1938, Part I.

Administration and Enforcement.

The provisions of the Shops Act, 1950, and the Young Persons' (Employment) Act, 1938, primarily intended as welfare measures, are enforced by a small group of sanitary inspectors together with their duties under the Public Health Act, 1936, Food and Drugs Act, 1938, the Liverpool Food Byelaws, The Prevention of Damage by Pests Act, 1949, and the Pet Animals Act, 1951.

Administratively with respect to Shops Act work it is more advantageous for one section of inspectors to be responsible for the enforcement of special aspects of the various enactments affecting a particular section of the community. Members of the public, and in particular, business people, are quick to notice if there is an excessive number of officials visiting their premises and the frequency of those visits. For this reason, and because of the peculiar and intricate provisions contained in the Shops Act, it is considered necessary to allocate all the special duties of enforcement to what may be termed a specialist group of sanitary inspectors.

Specialised
Duties

The essential affinity with public health legislation makes it imperative that this work is included in the duties of sanitary inspectors, and the necessity of this practice does not arise only from the intricacies of the law and its emphasis on the health of the shopworker, but because of the importance of the inspectors' understanding of the problems and difficulties which beset most shopkeepers. This understanding can only be gained by the combination of extensive experience and skill in handling all the complex situations arising in all circumstances.

The success is measured by the absence of complaints against the inspectors who are enforcing an enactment which in many respects is contentious in its requirements (particularly in respect to closing hours), and complicated because of its lack of uniformity.

It is gratifying to record that the efficient enforcement of this legislation is in great measure due to the co-operation of the vast majority of shopkeepers with this department, and the good relationship which exists between them and the inspectors.

Co-operation
of
Shopkeepers

Closing Hours.

In spite of the co-operation of so many shopkeepers, a certain minority tend to create ill-feeling among their competitors by trading after permitted hours, and complaints are received from time to time which call for special attention and usually discreet observation. Such observations are made in a manner not to give rise to the allegation of "snooping", which unfortunately is becoming a popular form of criticism against inspectors doing a difficult task to enforce Orders agreed to by traders.

Trading after
hours of
closing

"Snooping"

Agents and other forms of inducement are not, under any circumstances, used for the purpose of procuring sales contraventions and subsequent prosecutions, and such methods, even if they are the only way of dealing with persistent offenders are not approved by this department.

Inspectors' visits after closing hours

In order to give a measure of protection to law abiding shopkeepers against unlimited unfair trading, shops inspectors have made 19,879 routine visits to shops on the weekly half-holiday, 24,618 evening visits and 7,840 visits on Sundays, and comparatively few infringements of the closing provisions are found.

"Late" night closing

It is of interest to note that the "Late" night idea which started experimentally before Christmas 1953, appears to have become established in an increasing number of shops. However, it has not become general, and the indications are that the public appear to be satisfied with the present general arrangements.

Employment of Assistants and Young Persons.

Employment on "Late" night

Shops keeping open later on one night each week has not caused the assistants to complain officially. This, of course, may be due to the fact that the shopkeeper is entitled to keep his shop open and the assistants are prepared to co-operate at the moment. In most cases, if not all, the assistants receive extra pay, and this may be sufficient inducement to overcome any prejudice they may feel about working longer hours.

The standard of working conditions in shops may be considered reasonably satisfactory. Few, if any, assistants are deprived of their weekly half-holiday and prescribed meal intervals, and where this occurs it is usually with the agreement of the employee who receives some other form of compensation.

Employment on Half-Holiday and Sunday

Shops inspectors during their routine visits to shops on the weekly half-holiday, at night, and on Sundays give attention to the employment of assistants and young persons, and the contraventions found have been those associated with keeping of records and notices. These matters, where necessary, were dealt with by a warning letter which achieved the appropriate result.

Welfare Arrangements.

The welfare provisions of the Shops Act are now accepted by most **General** employers as commonsense requirements rather than legal obligations. In fact many employers make provision beyond the standard set by the Act. It is therefore only minor infringements which usually call for the attention of the inspector, but these are important, and are dealt with appropriately either by notice or warning letter.

Heating of shops during inclement weather is a problem in certain **Heating of Shops** classes of trade. Many shopkeepers adhere to the practice of keeping the shop door open during business hours as they consider a closed door to be detrimental to business. A few shops still possess open fronts, which causes considerable discomfort to the assistants. These shops are usually wet-fish establishments and it seems that the occupiers are slow to change from the traditional trading methods.

There can be no justifiable reason for the continuance of this outmoded and unhygienic practice. Modern refrigeration equipment can provide adequate protection against the deterioration of foodstuffs, and therefore reasonable temperatures can be maintained in such shops so as to provide comfortable working conditions for the employees.

Places of Entertainment.

The standard of cleanliness, the provision of sanitary conveniences **Inspection** and their maintenance, heating and ventilation in places of entertainment and the working conditions of employees in these establishments have received the careful attention of inspectors in accordance with the arrangement with the Licensing Justices.

These inspections both during the day and at night, although comparatively frequent, are appreciated by the managements and a happy and co-operative association exists, and any unsatisfactory conditions found and brought to their notice were attended to without undue delay.

Inspectors have also given attention to the sale of ice cream, sweets **Sale of Ice cream and Sweets** and chocolates in these premises, and have ensured that the provisions of the Food and Drugs Act, 1938, and the Food Byelaws are properly adhered to.

During the year, 743 evening visits were made in addition to day time inspections and 8 defects were found and remedied satisfactorily.

Pet Animals Act, 1951.

Premises Licensed

There were 78 licences issued under this enactment during the year and the premises involved have been visited to ensure that the provisions of the Act have been complied with. The requirements of the Act do not appear to present any difficulties to the shopkeepers and it has not been necessary, so far, to take any particular action for non-compliance with its provisions.

Fire Precautions

The Liverpool Fire Service deal with the fire prevention clause and have only reported minor infringements for the attention of the licensees.

During the year, 161 visits and 78 supplementary visits were made to these establishments by shops inspectors to deal with applications for licences and to advise the shopkeepers where necessary.

Rodent Control.

Prevention of Damage by Pests Act, 1949.

Duties of Local Authorities.

Duties of local authorities

The Prevention of Damage by Pests Act, 1949, requires every local authority to take such steps as may be necessary to secure, as far as practicable, that their district is kept free from rats and mice. Active measures, therefore, have been taken for many years in Liverpool to ensure the destruction of rats and mice and to bring to the notice of the public that a rodent population in the City would be a high potential danger to their health and well-being.

The damage and contamination which could easily be caused by rats and mice to our bulk food supplies in warehouses and during transit to retail shops would be almost unbelievable if it were not kept down to reasonable limits by routine survey and concerted action both by local authorities and occupiers of food premises, who immediately notify the presence of rats or mice to the local authority, this being a requirement of the Act.

PRECAUTIONS TAKEN AGAINST THE SPREAD OF DISEASE.

General Rodent Control Precautions.

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 in the City are sent to the City Bacteriologist for examination. It is satisfactory to report that all rodents submitted during the year were found to be free from plague.

Action
against
plague

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 go down the sewers, where he may become infected by this disease, specimens of rats caught in buildings and sewers were submitted for examination. Therefore, although poison is the chief agent used for rat destruction in sewers in the City, spot trapping has been employed in advance of poison treatments to obtain specimens for examination as a further precaution against the spread of infection.

Precautions
against
Weil's disease

During the year 38 rats from sewers and buildings were submitted, and 8 rats (7 from sewers and 1 from a building) (21 per cent), were found to be positive carriers of the organism. Immediate action was taken, and the buildings, lands and sewers in the districts concerned were surveyed. The vertical block control system was applied to remedy infestations found, which means that the destruction of rodents in the buildings, lands and sewers by approved treatment was carried out at one and the same time, in order to destroy all the rats in the affected areas.

Systematic Survey.

During the year, 91,428 sites were examined in connection with systematic survey and investigation of complaints. A further 71,764 visits were made entailing operational work and re-examination of buildings and lands.

Systematic
inspections

Sanitary inspectors also made, in conjunction with other matters, 91,092 inspections under the Act.

Complaints relating to rats and mice to the total of 4,257 were received and promptly investigated, all premises concerned being visited as soon as possible in order to take appropriate action with the minimum of delay where infestations were found to exist.

When the systematic survey was first commenced in 1944, 3,277 rat infestations were found in 120 blocks in dockside wards as compared with 639 rat infestations in the same blocks during 1954. This represents an improvement of just over five times, and clearly indicates the progress made in abating the rat nuisance in the dockside wards during these ten years.

This regular and vigorous survey work, which has been continually applied throughout the vulnerable areas of the City, has been one of the major reasons for Liverpool being in the forefront of rodent control.

Rodent Infestation.

Infestations—Buildings and Lands.

Details of infested dwellings

During the year, 21,428 buildings and lands were examined, of which 4,683 were subject to infestation. Of this total 1,967 were rat infested, 150 rat and mouse infested, and 2,566 were mouse infested only. Reinfestations occurred in 167 premises. Of these, 46 were by rats, 14 by rats and mice, and 123 mice only.

The principal sites affected were within the dockside wards, whilst the central area continues to show a marked decrease in rodent infestation.

The middle belt of the City has been subject to infestations of a minor degree, these being for the most part due to rats escaping from the sewers via defects in the drainage systems, while infestations in the outer belt of the City have been mainly due to rats harbouring in their natural surroundings such as banks of rivers, ditches and watercourses, and being attracted to adjacent dwelling-houses in search of food and warmth, the food often being supplied, quite unintentionally, by the occupiers of these dwellings when they throw bread on the lawns for birds. Another source of infestation in this area was found to exist in the vicinity of gardens where poultry was kept.

This type of infestation was quickly dealt with due to the prompt action of occupiers reporting the presence of rodents to the department, thus enabling the experts to take the necessary action before the infestation was allowed to develop to serious proportions.

Rodent Disinfestation.

Disinfestation of buildings and lands.

The aim in the Rodent Control Section has been to destroy all rats and mice within an area of infestation within the shortest possible time, preferably within three or four weeks from the commencement of the treatment. By these methods the danger of infestation being maintained by the invasion of rodents from adjoining buildings or lands and the natural increase of rodents by breeding has been reduced to a minimum.

Methods of
disinfestation

The treatment to remedy infestations was prescribed and applied by the Rodent Control staff in accordance with the approved methods now recommended. During the year, 4,754 buildings and lands were disinfested.

Dwelling-houses.

The practice of providing free assistance to occupiers of private dwellings has been continued during the year.

Business Premises.

Owners or occupiers of premises or land other than private dwellings who desire the department's assistance for the destruction of rats or mice are required to reimburse the local authority for the expenditure incurred. The demand for such assistance is still increasing and 1,704 requests were received during the year.

Many occupiers, in addition, requested the department to visit monthly in order to maintain constant and expert supervision of their premises, so that on the slightest indication of any rodent activity it can be speedily and skilfully dealt with.

The responsibility, however, rests entirely with the owner and occupier of any building or land to report to the local authority the presence of rats or mice resorting to their premises in substantial numbers.

Methods of Destruction.

Buildings and Lands—Poisoning.

Modern science has produced for the use of the rodent exterminator a slow acting poison known as "Warfarin". This was discovered during experiments to produce a drug for the treatment of human thrombosis. Warfarin, when ingested regularly in small doses over a period of days,

Method of
destruction

causes fatal haemorrhage in rats or mice, the major advantage of this slow acting poison being that it can be safely used in dwelling-houses and schools without any danger to young children.

Of the 3,935 sites disinfested during the year, 3,856 were cleared by the use of poisons, those used being Zinc Phosphide, Arsenious Oxide, Red Squill, Alpha Naphthyl Thiourea (commonly known as "Antu") and Warfarin. The use of these poisons requires certain precautions to be taken, and, where it would be dangerous to leave the poison unprotected, containers only accessible to rodents are used as a safety measure.

The remaining 819 sites were disinfested either by the occupiers using various poisons under the supervision of the Rodent Control Inspectors or by the drainage systems being repaired under the supervision of the District Sanitary Inspectors.

Trapping.

Trapping is generally used for very slight infestations or as secondary treatment to deal with a residual population or two or three rats or mice which have survived poisoning treatment. Break-back traps of the treadle type and sticky trays, where conditions are favourable, are frequently used for this method of destruction.

Calculated Kill of Rats.

Estimated
number of
rats killed

It is estimated, using the appropriate formula for calculating the kill, that at least 24,975 rats in buildings and on lands were destroyed as a result of poisoning treatment, and 1,686 rats were collected during operations.

492 rats were caught in traps in buildings and on lands. Thus the total number of rats destroyed during operations in surface infestations was estimated to be 25,467. The species of rat collected were 1,643 *Rattus Norvegicus* ("brown" or common rat) and 738 *Rattus Rattus* ("black" or "ship" rat).

A percentage of the rodents collected, 348 rats and 23 mice, were sent to the City Bacteriologist and the remainder burnt.

Destruction of Mice.

Destruction of
mice

With regard to the destruction of mice, 2,021 were collected as a result of poisoning and trapping operations. Although there is no formula available for calculating the kill by the use of poison in relation to

mice, there can be no doubt that the number destroyed by this method is appreciable when taking into consideration the amount of poison bait consumed by mice, namely, 7,285 ounces.

Rat Destruction in Sewers.

In order to obtain a high standard of rodent control it has been necessary to maintain a constant watch on the breeding and migration of rats through the sewers and drains of our large City. Rats can use the sewers as means of traverse from one building to another via defects in the drainage systems.

With a view to eliminating infestations of buildings and lands having **Sewer treatment** their source from the sewers, maintenance treatments have therefore been carried out in the dockside and central wards during the year with remarkable results as indicated in the tables.

In order to observe the strictest economy in the work without impairing adequate rat destruction, revisits were not made to manholes after treatment had been completed for the purpose of recording the poison takes to estimate the kill.

The following summary of treatments carried out during the year clearly shows the reduced rat population in the City sewers when compared with the initial treatment which was carried out in 1953 by this department.

Treatment.

Treatment	Initial Treatment 1953	Second Treatment 1954	Third Treatment 1954
Total number of manholes pre-baited ...	16,378	15,756	13,326
Number of manholes showing pre-bait takes ...	9,329	9,178	6,222
Number of manholes showing complete pre-bait takes on one or both days ...	8,662	7,531	5,264
Number of manholes poison baited ...	11,141	10,946	7,655

Test Baiting.

Test Baiting Divisions.	Initial Treatment 1953	1st Annual Treatment 1954
Total number of manholes	6,337	8,753
Number of manholes tested	797	902
Number of manholes showing takes ...	68	75

It will be seen from the above tables that whereas the manholes treated reduce in number, the number of manholes test baited increase, thereby indicating that the rat population in the sewers has been greatly reduced.

In the outer belt of the City, where the sewers had been comparatively free from rat infestation, an annual test baiting has been carried out in order to discover if there has been any change or migration of the rat population into these areas. Where evidence of rats was found during test baiting, maintenance treatment was carried out on all manholes in the infested area.

Preventative Measures.

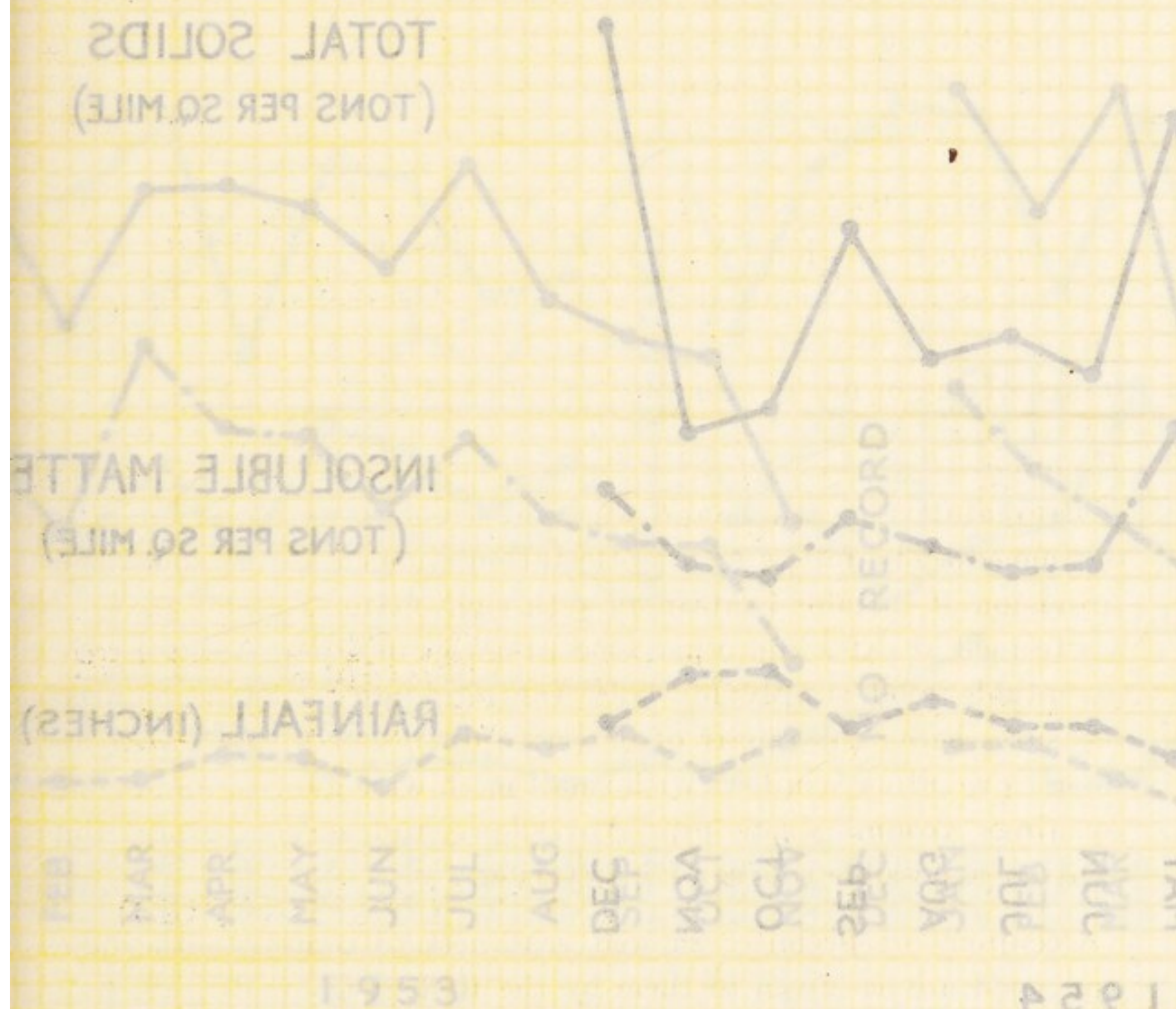
Sanitary
inspectors
preventative
measures

Co-ordinated action by Sanitary Inspectors and Rodent Control staff was taken where required in relation to preventative measures. Conditions likely to contribute to infestation were at once brought to the notice of the owner or occupier of any building or land.

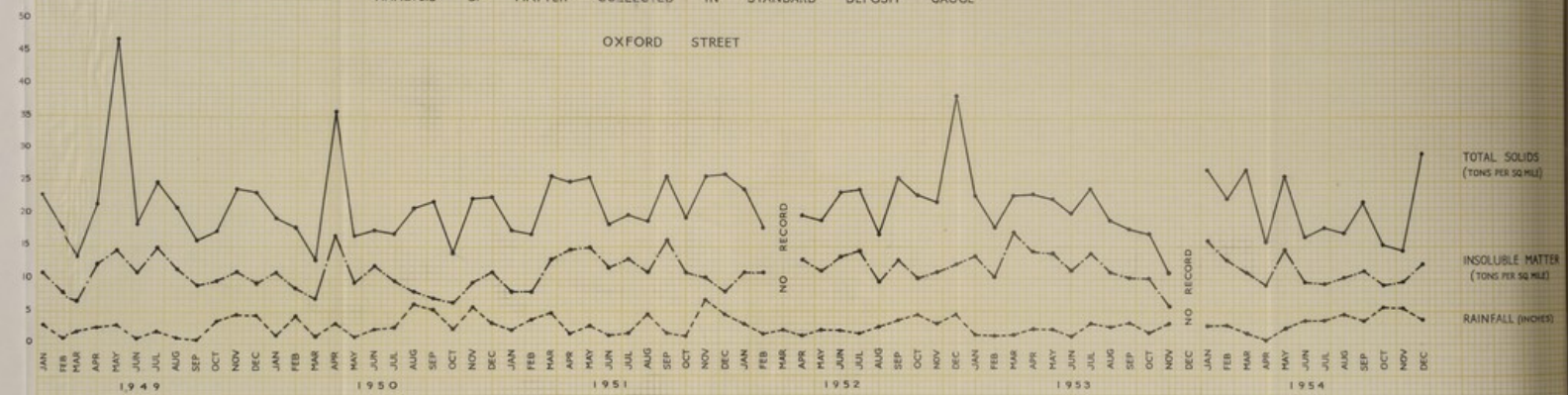
Proofing.

Preventative measures and works of proofing were carried out during or immediately following disinfection, immediate proofing being the provision of suitable containers with tight-fitting lids for the storage of waste food at cafes and other food premises in order to remove a readily acceptable food supply for both rats and mice, and more permanent measures being the repair of defective drains, fixing of metal plates to doors, providing windows with small mesh wire guards, and bricking up openings around waste pipes, overflows and service pipes, thus preventing a possible source of infestation.

Occupiers of premises showed readiness to comply with suggestions and good advice given to them by the Rodent Control Staff, but where they fail to co-operate then statutory action has been taken by the sanitary inspectors.



ANALYSIS OF MATTER COLLECTED IN STANDARD DEPOSIT GAUGE
OXFORD STREET



ATMOSPHERIC POLLUTION.

For many years past Liverpool has been regarded as a City with one of the highest atmospheric pollution records in the country, and undoubtedly the results shown by pollution recording in the City have substantiated this. **Atmospheric pollution research**

Measurement of pollution in Liverpool in the past has been based on a number of standard deposit gauges which record the amount of deposited impurities or "soot fall" in tons per square mile, and prior to the war, four such gauges were in operation. Owing to war damage, however, this number was reduced for post-war recordings to three gauges and it is on the strength of this limited investigation that the standard of pollution for the City has been calculated. **Standard deposit gauges**

In 1939 the average deposited pollution recorded for the City was 535 tons per square mile and in the immediately preceding years had exceeded 600 tons per square mile, in fact during 1935 it exceeded 700 tons per square mile. War damage to industrial and domestic property and subsequent reconstruction of fuel using appliances on modern lines brought about some improvement and the amount of pollution was reduced by some 50 per cent.

Since 1948 the department has carried out reorganised and concerted smoke abatement action and this has been carefully related to the results of the three gauges in operation, and the average for the City has been progressively, if somewhat slowly, improved each year, until during 1954 it stood at 263.96 tons per square mile. Monthly deposit figures taken over the past five years are shown in the accompanying graph, representing the deposit gauge at Oxford Street.

Unfortunately these three gauges, although situated as they are in the most representative areas, are insufficient to give a true picture of the average pollution deposited over the 45 square miles of this City, and it is estimated that at least twelve recording stations, carefully sited, are necessary to give a reliable indication of the degree of pollution in Liverpool, or to make investigation worth while.

**Co-operation
with the
British
Electricity
Authority**

However, through the courtesy and kind co-operation of the Divisional Controller of the North West Division of the British Electricity Authority, figures have been made available to the department of results as shown by eight other standard deposit gauges, operated by the authority, independent of this department, in a network throughout a portion of the City, mainly the heavily industrialised area to the west of the City and north of the City centre.

**Owen smoke
filter**

Suspended solid impurities in the atmosphere are measured by means of a single Owen Smoke Filter which aspirates two litres of air each hour, day and night, and filters out the solid impurities, the intensity of which is then measured in milligrammes per hundred cubic metres.

Investigation of atmospheric pollution by one such instrument alone is very restricted and measurement can only be taken at one site at one time, any comparison between the sites must therefore be for different periods. Nevertheless, some very useful information has been obtained by this instrument which has operated at five different sites during the past five years and is now operating again at the first of these sites namely Belmont Road.

The comparative results for Belmont Road in 1949/50 and the first six months of the 1954/55 period are shown on the accompanying graph in the standard units, and as a comparison with records taken at the other sites may be compared with the curves of results from 1948 to 1954.

**Department
of Scientific
and Industrial
Research**

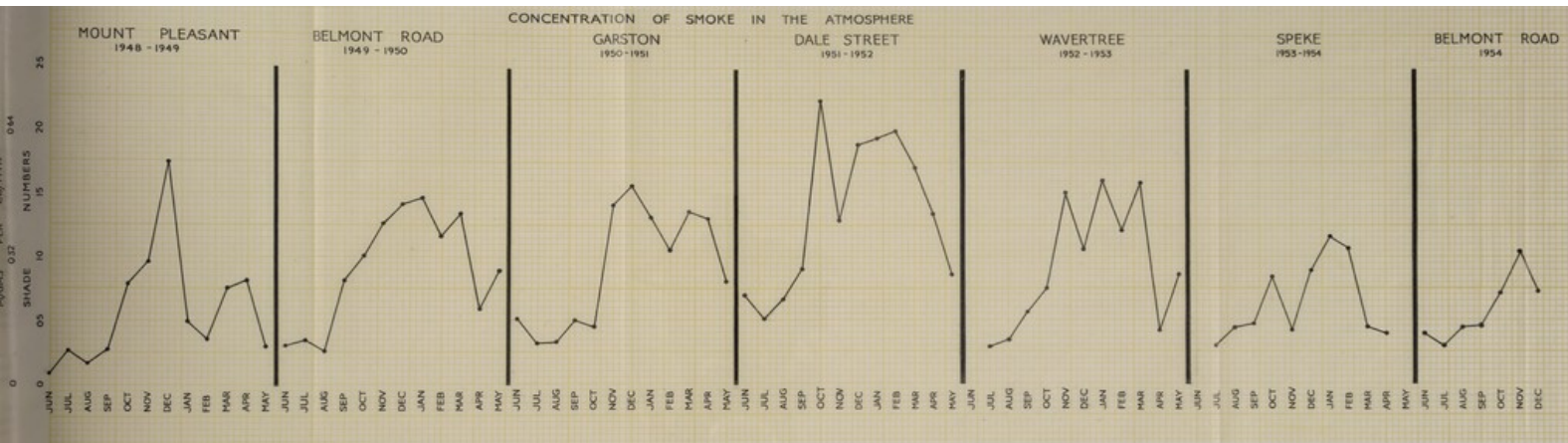
Co-operation with the Department of Scientific and Industrial Research in atmospheric pollution recording has continued throughout the year and results of measurements taken by the above methods have been forwarded by them each month.

**Sulphur gas
pollution**

There is no investigation carried out by the department into the amount of pollution caused by the presence of sulphur oxide gases in the atmosphere, although this would be possible if the necessary apparatus was available.

**British
Empire
Cancer
Campaign
Research**

The department is co-operating with the British Empire Cancer Campaign in the research into the possibility of smoke pollution being a contributive factor in the incidence of carcinoma of the lung, and



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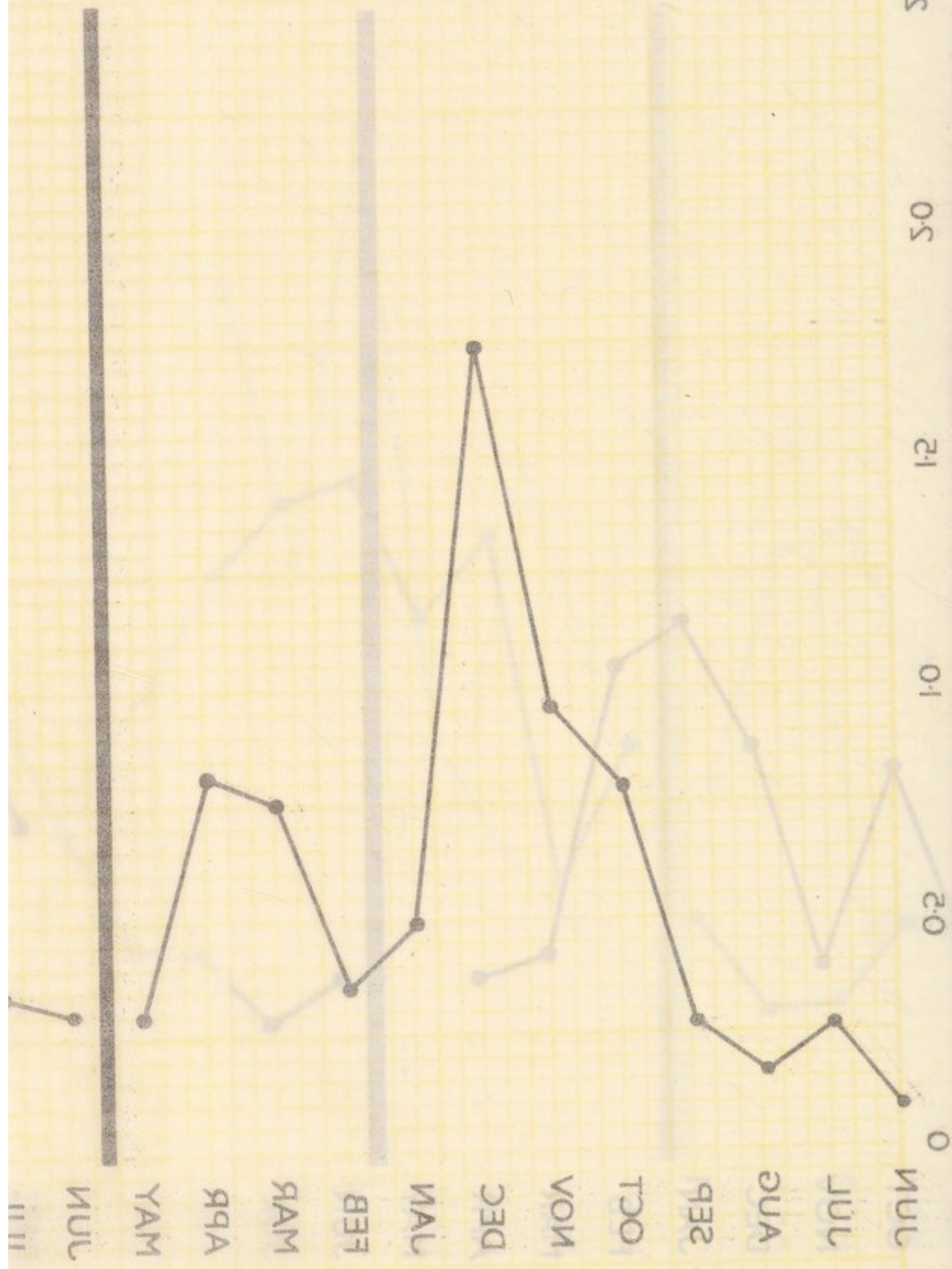
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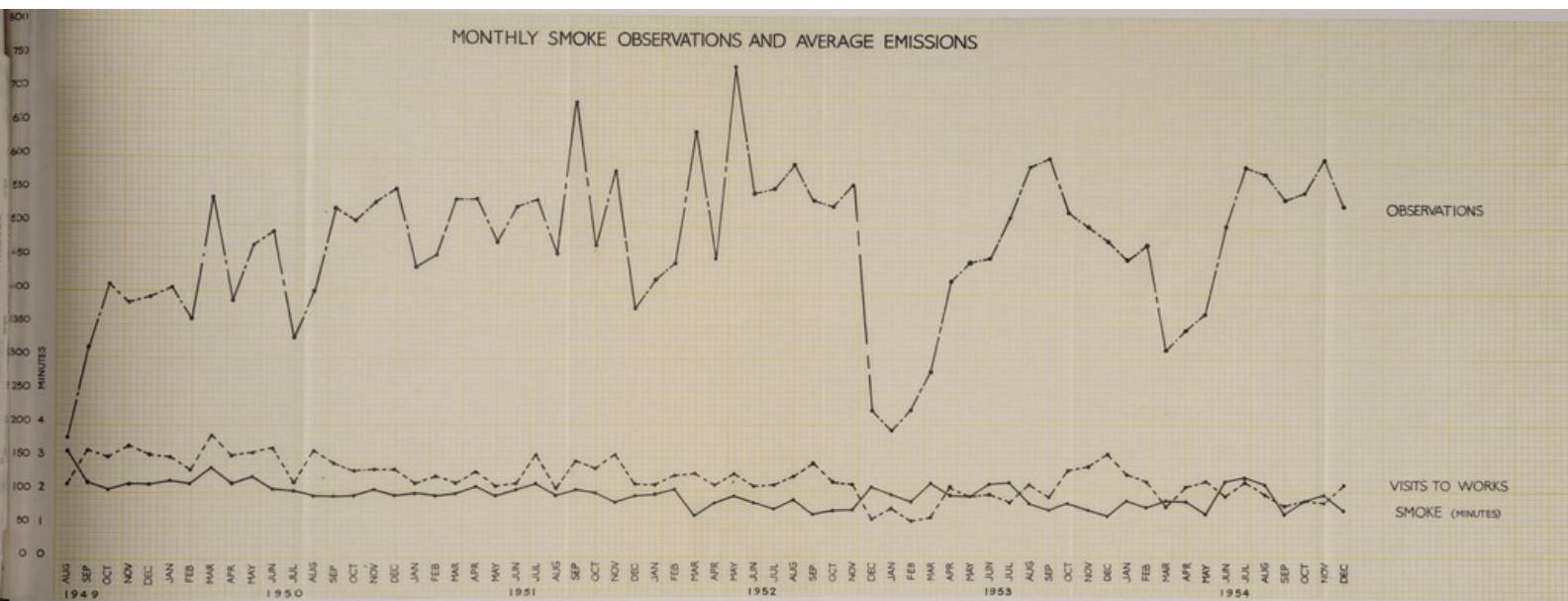
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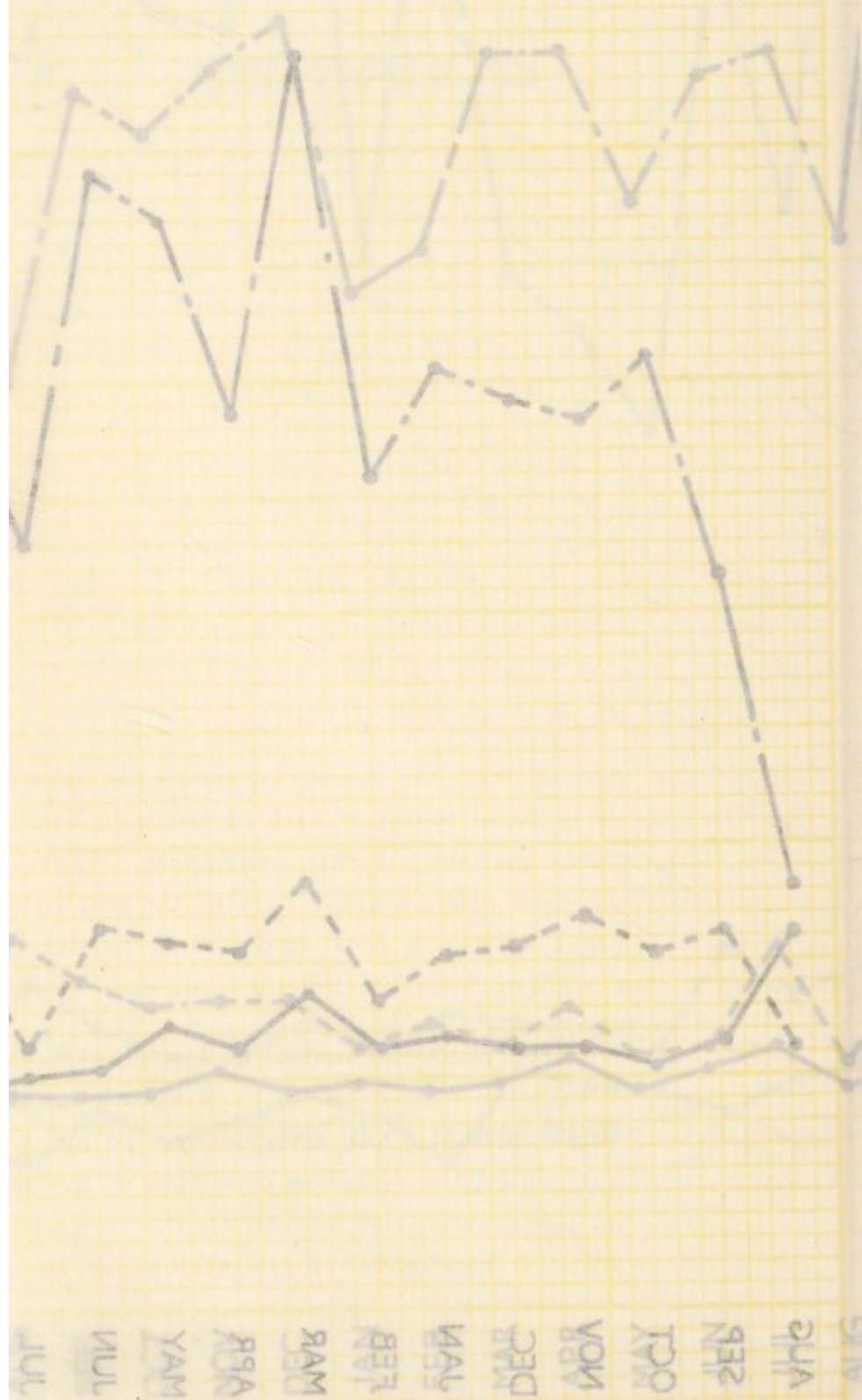
NUMBER 3

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MONTHLY SMOKE OBSERVATIONS AND AVERAGE EMISSIONS





during the year an air filter was installed at Princes Road and brought into operation. Samples of smoke pollution obtained are despatched weekly to the department of Scientific and Industrial Research for analysis.

Smoke Abatement.

The increased concern shown by the general public in the prevention of atmospheric pollution has been stimulated during the year by the publication of the Interim and Final Reports of the Beaver Committee on Air Pollution, and the number of complaints of smoke nuisances received by the department has again exceeded previous year's figures.

**Smoke
abatement
complaints**

Routine smoke observations and inspections have resulted in a slightly increased average smoke emission for the year, due in part to more concentration on the worst offenders, and it is considered that there is still a long way to go before industrial smoke emission may be regarded as satisfactorily under control.

**Routine
inspection**

Advisory visits by the smoke inspectors to factories and commercial premises, and to ships whenever possible, have been kept up in accordance with the generally accepted principle of carrying out smoke abatement work on the basis of co-operation between the department and fuel users, and again a large number of improvements has been secured, together with the promise of many proposed major improvements which will be developed within the next year or two.

**Advisory
visits**

In the majority of cases of excessive industrial smoke the causes were found to be carelessness in hand firing or lack of scientific knowledge of the correct and efficient methods of fuel utilisation. There is no doubt that the human element plays a great part in the production of smoke and the consequent waste of fuel, and owing to the labour situation to-day it is a problem which is difficult to answer.

Other causes were obsolete and overloaded boiler plant, inferior grades of fuel coupled with the operators' lack of knowledge of the science needed to burn fuels efficiently and smokelessly. In many cases wrong fuel was the cause, whilst the defective condition of mechanical stokers and draught equipment and also neglect in the control of oil burning equipment were also responsible for contributing to smoke pollution in the City.

Smoke abatement methods

The department has continued to try to overcome these causes of excessive smoke by individual teaching, technical advice and instruction to owners, engineers and firemen, and it would appear that by continually following up the observed excessive smoke emissions with the object improvements can be secured, and it has also been realised that failure to keep up this constant supervision results, in many cases, in a drop in the standards of efficient operation with corresponding increases in smoke emissions.

The application of full legal powers to take action in cases of smoke nuisances has not been practised generally; existing penalties are negligible and of little value in securing the prevention of smoke so long as the difficulty in obtaining efficient and conscientious labour prevails. It is realised that the methods in use will secure better and lasting results, but there have been a few cases in which service of statutory notices has been necessary to secure co-operation, whilst in many cases such co-operation has only been forthcoming after written requests have been addressed to the firms.

Smoke from river and docks

The major problem in this section of the department's work still remains the smoke from shipping within the Port of Liverpool; the river and docks requiring constant daily supervision if reasonable improvement is to be secured. This is confirmed by the figures of average smoke emission per chimney observed, that for shipping being two and half times the average for industrial chimneys.

It has been found impossible to carry out satisfactory and efficient smoke inspection in the vast area of the river and docks with the staff available, and as a result, the Port area outside the City boundary can only be visited on the occasions of complaints, and as experience shows once a visit has been made to a factory or ship, it must be continually followed up to secure good results.

Difficulties in connection with shipping

Owners of vessels have been interviewed in connection with excessive smoke emissions from their vessels and have declared having done all they possibly could to co-operate with the department but have failed owing to difficulties in securing reliable personnel and have admitted having to take the consequences. They have also admitted that much more notice is taken of personal visits by the smoke inspectors to the

boiler room, and as prosecutions and penalties are not considered as being the answer, such visits alone can secure any worth while improvement. Under present conditions, however, it is impossible to make this a regular daily practice throughout the Port area, it would require the services of one or even two inspectors on every day in the week.

Observations of vessels emitting excessive smoke whilst moving in the river cannot always be followed up by personal visits, but in many cases where such visits have been made and advice or instruction has been given, some improvement has been observed, if only temporary, and if constant daily supervision within the Port were possible and moving vessels could be met on berthing, lasting improvements could be achieved.

Close attention to vessels of two of the largest dredging fleets has brought about some improvement, and the owners of one of these fleets have proposals in hand for the installation of smoke eliminator fire-doors which are to be fitted to one vessel as soon as convenient, as an experiment, on which will be based future policy. During the year two of their oldest and worst smoke making vessels were taken out of service and replaced by one diesel-driven vessel.

Smoke from factories in the Port area on both sides of the river has been dealt with, but satisfactory control by close attention to and daily inspection is the only guarantee of a satisfactory abatement of the smoke. **Factories within the Port area**

The average locomotive is constructed to consume and prevent the emission of smoke and therefore when a smoke nuisance arises it is due to the temporary carelessness of the person stoking the furnaces. The firemen in the British Railways are fully trained in the handling of all appliances and apparatus and the nuisance should be reduced to the minimum. However, when the railways have been modernised and diesel electric propulsion is more widely adopted, there should be no need to complain concerning nuisances from railways. It has been found by experience that there is a certain amount of smoke emission from marshalling yards and terminal stations and every co-operation is given when official action is taken relative to complaints concerning smoke nuisance. **Railway smoke**

SUPERVISION OF FOOD SUPPLY.

TABLE I.

NUMBER OF VISITS PAID TO PREMISES BY FOOD INSPECTORS.

Slaughter-houses (Private).	Butchers' shops.	Fruit shops.	Fish shops.	Food factories.	Provision premises.	Ice Cream premises.	Knackers' yards.	Dairies, Milk shops.	Piggeries.	Food hawkers.	Total visits.
177	7,686	9,847	9,188	1,492	1,182	1,355	57	3,710	386	678	35,758

Private Slaughter-houses.

Slaughter-houses

There are three private slaughter-houses in the City at which during the year, 2,176 pigs were slaughtered. The carcasses were subsequently sold, after inspection, in the Stanley Meat Market.

The City Abattoir.

City Abattoir

559,853 animals were slaughtered for human food, details of which are given in the following table. This total is an increase of 93,023 animals on the figure for the previous year.

TABLE II.

NUMBER OF ANIMALS SLAUGHTERED IN LIVERPOOL FOR HUMAN FOOD
AT THE CITY ABATTOIR.

Bulls.	Bullocks.	Cows.	Heifers.	Calves.	Sheep and Lambs.	Swine.	Horses.	Goats.
997	39,869	40,624	7,002	32,745	287,148	151,452	13	3

Animals Slaughtered

The increase in the number of animals slaughtered represents an increase in the killing of all types of animals, for example, in 1951 the number of pigs slaughtered was 22,360, this year the number is 151,452.

The efficient inspection of over half a million carcasses and offals has Staff called for a most intensive and sustained effort on the part of the staff (Chief, Deputy, and seven Inspectors).

In July, 1954, private enterprise took over the supply of meat which Meat Inspection. for the previous 15 years had been in the hands of the Ministry of Decontrol of Food. At once it was evident that difficult problems lay ahead as Meat record numbers of animals were sent in for slaughter, causing the lairage accommodation to be grossly overtaxed.

Immediately following the opening of the free meat market, Sunday Sunday Slaughtering slaughtering was started. During the past fifteen years the Ministry of Food had refused to slaughter on Sundays except on special occasions, but, however, from 4th July, 1954 until 13th February, 1955, Sundays became the day when the heaviest kill of the week took place.

The average number of animals slaughtered on a Sunday was between Meat Inspection (Sunday Slaughtering) 2,000 and 3,000, with one exception on August 22nd, when 878 pigs, 30 calves, 2,043 sheep, 418 cattle—a total of 3,369 animals—were slaughtered. The slaughtering schedule for this particular week, August 22nd to August 28th inclusive, was:—

					Pigs.	Calves.	Sheep.	Cattle.	Total.
Sun.	Aug. 22nd	...	...	...	878	30	2,043	418	3,369
Mon.	„ 23rd	...	...	...	339	—	1,309	347	1,995
Tues.	„ 24th	...	...	...	331	315	1,213	312	2,171
Wed.	„ 25th	...	...	...	717	333	1,925	281	3,256
Thur.	„ 26th	...	...	...	247	58	955	120	1,380
Fri.	„ 27th	...	...	...	90	42	291	384	807
Sat.	„ 28th	...	...	...	1	—	20	1	22
Total animals slaughtered in seven days ...									13,000

Considerable strain fell upon the meat inspection staff (Chief, Deputy, and seven Inspectors) who had to continue inspecting meat on every day of the week and arrangements were made for them to receive honoraria for this extra work, following a report on the conditions by the Medical Officer of Health.

Appended to this report are the daily killing figures at Stanley Abattoir for every day, including Sundays and Bank Holidays, from 1st July to 31st August. The total kill for the 62 days was as follows:—13,772 pigs, 5,704 calves, 71,113 sheep, 15,919 cattle—a total of 106,508.

City Abattoir *Special note*:—Subsequent to the writing of this report, the City Council in February, 1955, resolved that Sunday slaughtering at Stanley Abattoir would cease as from Sunday, 13th February, except on special occasions which the whole Markets' Committee approved.

TABLE III.
CARCASSES INSPECTED AND CONDEMNED.

	Cattle excluding Cows.	Cows.	Calves.	Sheep and Lambs.	Pigs.	Goats.	H.
Number killed (559,853)	47,868	40,624	32,745	287,148	151,452	13	
Number inspected (559,853)	47,868	40,624	32,745	287,148	151,452	13	
All Diseases except Tuberculosis.							
Whole carcasses condemned	7	85	279	320	201	—	
Carcasses of which some part or organ was condemned	10,192	14,430	738	40,448	18,537	—	
Percentage of the number inspected affected with disease other than tuberculosis	21·31%	35·73%	3·11%	14·20%	12·37%	—	
Tuberculosis only.							
Whole carcasses condemned	86	710	19	—	125	—	
Carcasses of which some part or organ was condemned	1,740	5,268	2	—	2,580	—	
Percentage of the number inspected affected with tuberculosis	3·81%	14·71%	0·64%	—	1·79%	—	

Diseased Conditions.

Diseased Meat The carcasses of 95,767 animals, approximately 17 per cent. of the
Condem- 559,853 animals slaughtered, showed abnormal conditions, and a detailed
nation examination was made in each case. 1,832 carcasses were totally rejected

as unfit for human food, together with portions of 8,554 other diseased carcasses. The weight of this meat was 392 tons. See Table VI.

In addition to the carcasses totally or partially condemned, because diseased conditions made them unfit for human food, organs which showed diseased conditions were also condemned; the amount during the year was 896 tons. See Table VI.

Slaughter of Animals Acts, 1933-1954.

Two slaughtermen were convicted and fined £5 each by the Stipendiary Magistrate, Mr. A. McFarland, for slaughtering sheep which had not been rendered insensible to pain by the use of a mechanically operated instrument.

TABLE IV.

CARCASSES AND QUARTERS OF HOME-KILLED MEAT BROUGHT INTO THE CITY MEAT MARKET FROM OTHER DISTRICTS.

Beef.	Beef.	Veal	Mutton	Lamb.	Pork.
(quarters) 59,133	(pieces) 672	7,014	6,924	48,516	39,884

14,159 boxes or packages of offal sent from Ireland were also dealt with in the meat market. Much of this offal arrived in an unsatisfactory condition. Stanley Meat Market

TABLE V.

CARCASSES OF IMPORTED MEAT DEALT WITH AT THE CITY MEAT MARKET.

Beef.	Beef.	Veal.	Mutton.	Lamb.	Pork.
(quarters) 41,325	(pieces) 1,130	57	117,994	341,346	11,967

In addition to the above, 68,768 boxes and packages of imported meat and offal were dealt with in the meat market. In general, this meat and offal was free from pathological conditions but showed Imported Meat and Offals

evidence of decomposition which necessitated reconditioning in many cases.

The following amount of imported meat and offal was destroyed by reason of bone taint, mould, brine damage or decomposition:—Beef 16,308 lb., Mutton 272 lb., Pork 2,313 lb.

Special Examination of Foodstuffs.

Special Examination of Foodstuffs

In addition to the routine inspections of meat, fruit, vegetables and fish at the Abattoir or the wholesale markets, special examination is given to the fish prepared by contractors for hospitals, schools and canteens in the City.

Council Food Contracts

Regular visits are made to day nurseries and other Corporation premises, for example, children's homes, aged persons' hostels, and school canteen kitchens, to examine meat, fish, vegetables and groceries supplied by contractors to the Council, to ensure that only the quality of foodstuffs specified is being delivered.

During the year, one contractor was prosecuted and convicted, being fined £20 0s. 0d., for supplying frozen cod fillets instead of fresh cod fillets as specified in the contract, to canteen kitchens of the Liverpool Education Committee.

Poultry.

Poultry Inspection

All poultry is examined on arrival at the markets before sale, and in addition, during the year, 881 boxes of sub-standard poultry from Northern Ireland were subject to a special detailed examination. This resulted in 3,180 head of poultry being rejected for reasons set out as follows:—

Arthritis	...	...	...	...	67
Decomposition	...	...	...	...	443
Emaciation	...	...	...	...	1,680
Epithelioma	...	...	...	...	31
Fibroma	...	...	...	...	246
Ill Bleeding	...	...	...	...	71
Injury	...	...	...	...	118
Lymphadenoma	...	...	...	...	18
Oedematous Oviducts	...	...	...	...	506
					<hr/> 3,180 <hr/>

It has been noted that as a result of this special attention paid to the examination of sub-standard grade poultry, the average quality of this grade has materially improved in the past three years.

In addition, 2,652 head of high grade poultry were rejected mainly for decomposition.

Fish Inspection.

The Wholesale Fish Market supplies an extensive area on both banks of the River Mersey. In the year 1953/1954, 809,348 packages, 13,658 tons of fish were handled in addition to some 30,567 packages of rabbits, poultry and game, including venison.

The inspection of this fish and game, poultry and rabbits resulted in the condemnation of some 87 tons as unfit for human consumption. See Table VI.

**Fish
Inspection**

It is interesting to record that 7 plaice, 3 hake, 2 flounders, 2 cod, and 1 dab were found affected with sarcoma, carcinoma, or melanotic sarcoma lesions or growths. The routine bacteriological examination of various types of shellfish was carried out during the year and the results were satisfactory. It was not necessary on any occasion to condemn shellfish for pollution.

Under the Salmon and Freshwater Fisheries Act, 1923, the under-mentioned Freshwater Fish were surrendered. (Close Season 14th March, 1954, to 16th June, 1954.)

March 17th, 1954—8½ lb. Bream and Pike.

March 22nd, 1954—98 lb. Bream and Pike.

Fruit and Vegetables.

The inspection of fruit and vegetables at the North Market, Queen Square, and the various wholesale storage warehouses has been maintained during the year. Samples of citrus fruits have been examined for the presence of diphenyl from being wrapped in paper treated with this preservative. None of the samples contained excessive amounts of diphenyl. The total amount of fruit and vegetables rejected during the year was some 213 tons.

**Fruit and
Vegetable
Inspection**

Disposal of Condemned Food.

Disposal of Unsound Food

Whenever possible unsound foodstuffs are utilised, after sterilisation, for animal feeding. The bulk of fruit, vegetables, and flour are thus used. Canned goods present a problem as they have to be disposed of at the Corporation tip at Sefton Meadows because pig feeders will not be troubled to either open cans, or dispose of the empty tins. Meat and offals are rendered for bones, tallow, and fertiliser products, much of this disposal is completed in a special plant built at Stanley Abattoir for the purpose. Some carcase meat is also sold under contract to firms processing dog food. All condemned diseased meat and offal is distinctively green-stained before removal from the Abattoir.

TABLE VI.

QUANTITY OF FOOD CONDEMNED FOR DISEASE OR FOUND UNFIT FOR
HUMAN CONSUMPTION

	Tons	Cwts.	Qrs.	lbs.
Beef, Veal, Mutton, Pork	392	6	1	12
Offal	896	6	3	2
Fish (Wet)	63	12	2	—
Fish (Dry)	8	17	—	22
Shellfish	2	3	1	25
Poultry	10	17	3	26
Game	—	—	1	6
Rabbits and hares	1	19	—	7
Fruit	52	18	—	21
Vegetables	159	16	1	1
Nuts	3	—	3	9
Dried fruits	3	7	—	—
Canned foods	51	7	3	16
Sundries (Sausages, liquid egg, cereals, etc.) ...	9	9	—	8
Total quantity of food condemned	1,656	2	3	15

Trichinosis.

Trichinosis

Routine samples of pork snippets are submitted for examination every week to the City Bacteriologist who has developed a special technique for this purpose. In the 1,825 specimens examined no trichinella have been found.

Precautions Against Contamination of Food.

Visits to Food Preparing Premises

During the year 35,758 visits of inspection were made by the Food Inspectors to premises where food was prepared. Details of these visits are given in Table 1. The number of premises registered under Section 14 of the Food and Drugs Act, 1938, for the manufacture or preparation of sausages, potted, pressed, pickled or preserved food is 582.

During the year, 98 complaints from members of the public were received, these complaints varied from the presence of beetles in a tin of beans packed in South Africa to a loaf of bread containing a nail (see legal proceedings). In every case a thorough investigation was made.

The provisions of Section 13 of the Food and Drugs Act, 1938, have been fairly enforced, 100 notices were served in regard to contraventions which were not remedied on verbal notification. Under the Clean Food byelaws (Section 15 of the Food and Drugs Act) 34 notices were served for infringements of the provisions.

Retail Fish Market.

The continued existence of the Retail Fish Market as carried on at present is unsatisfactory from a public health viewpoint and it is now a matter for the City Council to determine its future.

St. John's Market has been the subject of report and recommendations from the Health and Markets Committees, and it is hoped that the proposals already accepted will result in further hygienic improvement particularly in the provision of drainage, water supply and toilet amenities.

Rose Street, Roe Street, Queen Square, Great Charlotte Street.

In the reports for 1952 and 1953 it was stated that "special agreement had been made (with the City Engineer and Water Engineer) for the regular washing of the streets especially during the summer months." This provision has been continued and it is hoped that improvements in the hygienic conditions will result.

Fertilisers and Feeding Stuffs Act, 1926.

During 1954, 58 samples of fertilisers and feeding stuffs were submitted for analysis. It was not necessary to take any legal proceedings. All samples with minor exceptions were found on analysis to conform with the manufacturers' statutory statement.

Pharmacy and Poisons Act, 1933.

The Pharmacy and Poisons Act, 1933, regulates the sale of poisons. It is the duty of the Local Authority to carry out Part II of the Act, which deals with the registration of persons selling poisons mentioned in the Poisons List. The number of names entered in the register is 718. It was not necessary to institute any legal proceedings.

FOOD HYGIENE.

Enforcement The past year has been a period in which the food trade has been given an opportunity of putting its house in order so far as hygienic conditions are concerned without recourse to the drastic action of instituting legal proceedings. There is every reason to believe that the trade as a whole has appreciated this gesture as there is undoubtedly a general improvement in the day-to-day cleanliness of food premises and sufficient evidence to show that proprietors have a genuine desire to comply with legislative requirements and to act on the advice and recommendations of the sanitary inspectors who are responsible for supervising this aspect of the department's work. The knowledge that summary action can and will be taken in the event of flagrant infringements or disregard of the rules of hygiene, has achieved a salutary effect on certain food traders who were not disposed to believe that clean and safe food is a matter of considerable importance and is a factor which cannot be overlooked when considering effective measures for securing a satisfactory standard of food hygiene. Every effort is being made by the department to impress the proprietors of food businesses that this improvement must be maintained and that constant vigilance is essential.

**Personal
Hygiene**

More and more stress is being laid on personal cleanliness as a factor of significance in relation to outbreaks of food poisoning and proprietors and supervisors of food handlers have a great responsibility in seeing that employees under their control observe the simple rules of personal hygiene at all times and that special attention should be given to the training of new entrants into the industry.

**Environmental
Hygiene**

Experience has shown that environmental conditions frequently have a bearing on the standard of cleanliness of workers. Inadequate lighting, poor ventilation, indifferent washing facilities and deteriorating structural work has an adverse effect on employees working in such conditions; the task of daily cleaning becomes more difficult; the result of labour less apparent and incentive to maintain a clean and attractive personal appearance is reduced.

An important factor in the maintenance of a hygienic environment in food premises is the design and finish of equipment and fittings, and although there has been a noticeable advance in this field during the past few years there is still a need for improvement so far as certain equipment normally used in bakeries and catering establishments. Many machines used for food preparation are constructed with awkward internal angles, hollow bases, narrow apertures, overlapping joints and unnecessary embellishments where dirt can lodge and insects may find harbourage.

**Design and
siting of
equipment in
Bakehouses
and Catering
Establish-
ments**

Equipment is frequently sited in positions which prevent workers reaching all parts with ease, and the difficulty of maintaining a good standard of cleanliness in such circumstances can be appreciated and is often referred to by employees on occasions when inspectors have found it necessary to draw attention to unsatisfactory conditions.

**Siting of
Equipment**

Much publicity was given during the year to the view expressed in many quarters that the law governing the conditions under which food is prepared and handled was not sufficiently effective to secure a satisfactory standard and that legislation should be strengthened to enable local authorities to deal more firmly with those persons in the food trade who were not disposed to regard the provision of clean and safe food as an important aspect of public health.

**Proposed
Legislation**

The Food and Drugs (Amendment) Act, 1954, which received the Royal Assent on the 25th November, 1954, contains certain provisions which may eventually achieve this object but the appointed day on which the Act will come into operation has not yet been declared.

This publicity had a marked effect on many local proprietors of food businesses who reasoned that stringent and far-reaching legislative changes were inevitable and in consequence decided to measure up to what they considered would be future requirements by reviewing and improving their methods of production and service and inviting advice and suggestions from the department on matters relating to environmental conditions and personal hygiene.

**Cafes,
Restaurants
and Snack
Bars
Inspection**

Food hygiene has been kept to the forefront of the department's many important duties, and the City's 285 cafes, restaurants and snack bars have been visited periodically during the year in order to improve the standard of hygiene.

**General
Improvement**

The publicity arising from the Court proceedings of 1953 has resulted in a greater comprehension by food workers and managements of the essential principles and practices of food hygiene. Inspectors, during their routine inspections, have observed a marked awareness of what is meant by cleanliness, and the greatly improved standard of day-to-day cleansing.

There is, however, no cause for complacency or self-satisfaction, as the need for continued improvement is as urgent as it has ever been. Inspectors are using each opportunity to impress every aspect of the problem upon the minds of food handlers. This is undoubtedly appreciated, even by the most lowly employee, who gives every indication of the desire to co-operate.

**Effect of
Human and
Time Factors**

Probably the greatest hazard to safe hygienic food preparation and handling, apart from the usual bad personal habits of the workers is that of the time factor, particularly during rush periods. The impatience of customers, probably due to limited time, goes back through the managers, supervisors and waitresses to the kitchen staff in an increasing wave of agitation causing loss of orderliness and care. Such an undesirable factor seems impossible to overcome, and only by the thorough training of the staff until their every action and each part of their job becomes so disciplined that its functions are automatic in spite of adverse stresses, can the danger be minimised.

**Co-operation
of Proprietors**

The experience and knowledge gained by inspectors during the past few years in dealing with food premises, has become an asset not only in the administration and enforcement of the Food and Drugs Act and Byelaws, but also as a source of information and advice to proprietors of food establishments and architects.

It is gratifying to record that many requests are now made to the department for recommendations in connection with the opening of new businesses and the improvement and extension of existing businesses. In this way, newcomers to the food trade are able to assess their

resources before becoming involved in a considerable financial outlay, with the result that undesirable or unsatisfactory food trading is obviated, and businesses established which are not only a credit to the proprietor but an improvement to the amenities of the locality.

In addition to many enquiries from existing traders for advice, some 29 newcomers to the food trade have sought the recommendations of this department and a comprehensive schedule of works has been supplied to each applicant. The majority of these persons have opened new businesses, and the works suggested fully carried out. **New Food Businesses**

Catering and the sale of food in open-air exhibitions and shows is a matter of special concern, for there are problems which do not arise with the preparation and sale of food in permanent or semi-permanent buildings. **Open Air Exhibitions and Shows**

The factors which create these difficulties are mainly connected with the limited duration of the show. The period of time varies, of course, but is usually very short, and in the case of the Annual Liverpool Show, for only three days. **Problems**

It is necessary, therefore, for reasons of economy and expediency, to erect marquees and tents in which to house the various services, including catering. Although much has been done towards a satisfactory solution of protecting foodstuff from the risk of contamination there remains a number of important aspects requiring careful and urgent consideration.

These matters are concerned with covering the ground in the food preparation tent with a properly designed sectional timber floor, covered with a good quality linoleum; the provision of more satisfactory facilities for dish washing and washing of hands; the provision of tables in good repair, with tops covered with a jointless, easily cleansed material, thoroughly cleansed after transit and before use, and kept thoroughly clean whilst being used; the use of equipment in reasonably good condition; satisfactory means for the storage of food; the covering of the pathway between the kitchen tent and the dining marquee; and the provision of adequate metal bins for the storage of food waste and refuse. **Matters for Special Consideration**

Caterers' Difficulties

Caterers who specialise in this form of catering are faced with the difficulty of transporting their extensive equipment, often with one contract following immediately upon another and probably with a considerable distance between each venue. The caterer is therefore faced with the dual problem of time factor and costs in addition to having to employ casual labour.

It is appreciated that these factors are of vital importance, but the prevention of the risk of contamination of food is even greater, and there is evidence to show that improved organisation is necessary in some sections of this industry.

Bakehouses

1,099 visits were made to bakehouses during the year and although a number of notices were served, these referred in the main to matters of a minor structural nature and to redecorating.

More bakers are taking advantage of the advice and assistance which is freely given by the sanitary inspectors on questions concerning suitable materials for use in the construction and finish of walls and floors in bakeries which will enable the employees to maintain hygienic conditions with a minimum of effort and labour.

There has been a marked improvement in the sanitary circumstances of bakehouses in recent months and it is to be hoped that this progress will continue.

Food Shops

The standard of hygiene in food shops has also been given careful attention, and it can be recorded that conditions in these establishments are, in the main, very satisfactory. A great deal has been done by shopkeepers during the past years to make their shops hygienically attractive.

Nevertheless, inspectors still find cause for complaint in some shops and appropriate action has in all cases resulted in the necessary improvements being carried out without delay.

Sanitary inspectors have made 6,405 visits to 6,063 food shops and have reported 1,501 infringements of Section 13 of the Food and Drugs Act, 1938, and 314 contraventions of the Food Byelaws. All these matters were dealt with by notice or warning letter and it has not been considered necessary to take Court proceedings in any instance.

Special reference was made in a previous report to the noticeable advance in the standard of hygiene in this type of business and it is pleasing to record that this has been maintained during the past year.

**Fried Fish
Shops**

Healthy competition between members of the trade has undoubtedly been an incentive, as a clean, bright looking shop is considered an important factor in attracting new custom in this class of catering where the customer can see the food being prepared. 860 visits were made to 421 fried fish shops and several premises were examined at the request of persons who desired to establish new businesses.

The observance of a satisfactory standard of hygiene in licensed premises where only drink and snacks are served is a relatively simple matter when compared to care that must be taken against possible sources of contamination in other classes of catering establishments.

**Licensed
Premises**

**Hygiene in
Public Houses**

When beer is delivered to the place where it is sold it is in a near sterile condition and providing that the pipe lines which convey the liquor to the bar are constructed in suitable material, and are regularly cleansed, the risk of contamination is negligible up to the point when it is discharged into the customer's drinking vessel. The measures taken by the trade to cleanse drinking vessels include the installation of automatic glass washing appliances, the use of certain bactericidal detergents recommended by the Institute of Brewing when the vessels are washed in the bar sinks and the manual rinsing of glasses under running water.

The demands of the "rush hours" present certain difficulties which are appreciated, but the serving of clean glasses is important at all times and the steps that are necessary to accomplish this is the responsibility of licensees or the employing companies, who should not find this problem insoluble now that adequate supplies of drinking glasses are available.

The risk of beer being contaminated with lead has been practically eliminated in this City, now that the lead and tinned lined lead pipe lines which were used to convey the liquor from the casks to the beer engines have been replaced in every case by other materials, such as plastic, stainless steel, glass or monel metal.

Beer pipes

The experiment of using plastic pipes, which has been tried by one or two firms, has been encouraging. This type of pipe is easy to clean and manipulate and resists the action of the class of detergents normally used for cleansing purposes in licensed premises.

Environmental and sanitary circumstances

The lifting of the restrictions on building and building materials has given the brewery companies an opportunity to press forward with their programmes of reconditioning and redecorations, which have been helped up or retarded since 1939. There has also been some progress in the reconstruction and modernisation of sanitary accommodation and separate conveniences have been built for the use of female customers in a number of houses which were lacking in this facility. A great deal remains to be done, however, in this respect, and it is to be hoped that progress in this work will be expedited during the coming year.

Industrial Canteens

Notwithstanding the removal of rationing restrictions and the increases in commodities in retail shops, industrial canteens appear to be well supported by workers and have become an established part of factory life.

The problem of maintaining hygienic conditions in canteens is relatively simple when compared with cafes and restaurants open to the public, as the number and class of meals is limited and times of service as a general rule, restricted to certain hours and this arrangement permits canteen workers adequate time for cleaning operations. An outbreak of food poisoning which has its source in an industrial canteen may affect many employees and have serious consequences so far as production is concerned, and the inspectors often refer to this possibility when advocating careful supervision and training of those persons engaged in preparing and handling the food in such premises.

School Canteens

On the 15th January, 1954, a Ministry of Education circular was addressed to all Education Authorities on the subject of food poisoning in school canteens, advising them to co-operate in this matter with the local Medical Officer of Health and other officers. In response to this directive the department was invited by the Director of Education to examine the school kitchens and feeding centres under his control and this work has been proceeding during the year.

81 kitchens and 13 dining centres have been visited and reports submitted to the Director on conditions obtaining in each case, together with recommendations for bringing the structure, equipment and methods of preparation and storage up to the standard which is considered necessary to reduce the risk of contamination of food to a minimum.

The suggestion made by the Minister of Health in his circular to Hospital Management Committees in 1953, that the assistance of the local Medical Officer of Health and his staff be enlisted in securing a high standard of hygiene in hospital catering, has been fully implemented so far this City is concerned.

The catering facilities in the 25 City hospitals have now been surveyed by the sanitary inspectors, and recommendations for improving the conditions under which food is prepared and stored and reducing the risk of contamination to a minimum, have been submitted to the secretaries of the respective hospitals.

There has been close collaboration between the hospital authorities and this department on this matter. Many improvements have been effected and a number of extensive schemes of reconstruction and reconditioning are in progress as a direct result of this co-operation.

The inspectors have met representatives of the hospitals on 65 occasions during the year, and have given advice and demonstrations on many aspects of clean catering, ranging from hygienic kitchen construction to the effective use of detergents, and this instruction has been appreciated and acted upon in all cases.

Types of Food Premises.

The food premises visited by sanitary inspectors for the purpose of securing compliance with the requirements of Section 13 of the Food and Drugs Act, 1938 and the Byelaws made under Section 15 of the Act are as follows:—

Bakehouses	...	...	...	...	...	219
Licensed premises	...	...	...	...	...	1,159
Fish frying establishments	...	...	...	...	...	421
Industrial canteens	...	...	...	...	...	180
School kitchens, etc.	...	...	...	...	...	238
Hospital Kitchens	...	...	...	...	...	25

FOOD FACTORIES.

Brewing and beer and mineral water bottling	...	...	...	...	...	47
Spice manufacturers	...	...	...	...	...	4
Bacon curing	...	...	...	...	...	11
Miscellaneous Food Products	...	...	...	...	...	20
Biscuit manufacturers	...	...	...	...	...	5
Jam manufacturers	...	...	...	...	...	4
Fruit (cleaning and packing)	...	...	...	...	...	10
Custard and meal powder manufacturers	...	...	...	...	...	4
Millers (Flour, Rice, etc.)	...	...	...	...	...	21
Pickles	...	...	...	...	...	3
Sweet confectioners	...	...	...	...	...	16
Coffee and tea (packing, etc.)	...	...	...	...	...	20
Sugar manufacturers	...	...	...	...	...	11
Tripe dressers	...	...	...	...	...	8
Edible fat manufacturers	...	...	...	...	...	2

Total 2,428

Retail Food Shops.

Bread and Confectionery	...	...	459
Butchers	...	...	624
Cafes, Snack bars, etc.	...	...	285
Cooked meats	...	...	53
Dairies	...	...	205
Farm produce	...	...	7
Fishmongers and poulterers	...	...	235
General	...	...	1,264
Greengrocers	...	...	795
Grocery and provisions	...	...	861
Herbalists	...	...	21
Off-licensed premises	...	...	94
Sweets and minerals	...	...	1,155
Tea merchants	...	...	2
Tripe dealers	...	...	3

Total 6,063

THE CLEANLINESS OF MILK.

During the year, the standard of cleanliness of milk has been very satisfactory. Regular routine samples were taken from the herds of producers within the City, and also from the milk brought into Liverpool daily by road and rail from the County areas of Lancashire, Cheshire, Denbighshire and Shropshire.

The total number of milk samples submitted to the City Bacteriologist for examination was 2,848, comprised as follows:—176 Tuberculin-tested milks; 242 Accredited milks; and 2,430 heat-treated milks. The sale of accredited milk ceased on 1st October, 1954, the City being designated a specified area in which only tuberculin-tested milk or heat-treated milk could be sold.

The Tuberculin-tested and Accredited milks were examined by the methylene blue reduction test, and subjected to guinea pig inoculation for the detection of tubercle bacilli. Heat-treated milk was tested by the phosphatase, methylene blue, or turbidity tests.

TABLE VII.

EXAMINATION OF MILK—METHYLENE BLUE REDUCTION TEST.

Designation	Number of samples	Satisfactory	Unsatisfactory
Tuberculin tested	176	157 (89.1%)	19 (10.9%)
Accredited	242	218 (90.0%)	24 (10.0%)

TABLE VIII.

EXAMINATION OF MILK—TUBERCLE BACILLI.

Designation	Number of samples	Tubercle bacilli present	Percentage Tuberculous
Tuberculin Tested and Accredited }	269	1	0.4%
Raw Milk	97	5	5.1%

Milk and Dairies Regulations, 1949.

Provisions with regard to Infection of Milk.

Tuberculous Milk

During the year, 5 cases of milk infected with *Mycobacterium tuberculosis* were found as a result of the routine inoculation of milk samples taken from dairy herds in the City. It was not found necessary to serve any notices under Article 20 of the Regulations requiring heat treatment of this milk before sale, because in each instance the

Tuberculous Milk (Slaughter of Infected Cows)

Veterinary Officers of the Ministry of Agriculture and Fisheries detected the cows giving tuberculous milk within 24 hours of notification by the Medical Officer of Health. The cows were subsequently slaughtered at Stanley Abattoir.

Registration of Dairies.

TABLE IX.

(*Food and Drugs Acts, 1938-1950.*)

(*Milk and Dairies Regulations, 1949.*)

Number of registered dairies at the end of 1953.	New applications for registration.	Registration refused.	Dairies removed from the register.	Number of registered dairies at the end of 1954.
419	25	—	13	431

(30 dairies were transferred from one person to another.)

Inspection of Dairies and Milk Shops.

Dairies and Milk Shops

3,710 visits of inspection were paid during the year. In 57 instances infringements of the Milk and Dairies Regulations, 1949, were found. In every case where a notice of requirements was issued it was complied with at once.

Milk Distributors

The number of registered distributors of milk is 454. Of this number, 18 have their premises outside the City boundary but bring supplies into the City daily. 5 of these distributors have no premises of their own but are registered at the place where they obtain their supplies and store their utensils. In addition there are 1,194 persons, mainly shopkeepers, who are registered as vendors of bottled sterilised milk.

Daily Supply of Milk to Liverpool.

TABLE X.

DAILY CONSUMPTION OF MILK DURING 1954.

Grade of Milk.	Quantity in Gallons.
Tuberculin-tested (Farm Bottled)...	595
Tuberculin-tested ...	255
Tuberculin-tested (Pasteurised under licence) ...	27,257
Pasteurised under licence ...	48,746
Sterilized ...	13,322
TOTAL ...	90,175

Orange Drinks. All the large dairy concerns in the City are now producing and bottling orange drinks. Separate plant, bottles and preparation rooms are devoted to this new feature of the dairying trade, and some idea of its growth during the last two years can be formed by a realisation that approximately 340,000 bottles of orange drink are filled daily in the three large wholesale dairies of the City. At two dairies, additional mixing and storage tanks have been installed to cope with the increasing output of this commodity. Bacteriological and chemical examinations are carried out as a routine by the Department, and the results prove that the product (consisting of orange juice, water and sugar) is safe and palatable.

Heat Treatment of Milk.

Milk Pasteurisation.

There are now 14 pasteurising plants operating in the City, 6 of which are fitted with High Temperature Short Time plant, and 8 with Batch or Holder type plant. The capacity of the plants vary from 75 gallons per hour to 2,500 gallons per hour. 131 visits were made during the year to check the heating temperatures and general efficiency of the plant. Two Holder type plants have ceased to operate during the year.

The quantity of milk pasteurised daily has increased to approximately 120,000 gallons per day on account of extension of business to districts outside the City boundary.

*Milk Sterilisation.***Sterilised
Milk**

Three establishments are equipped with large scale sterilisation plant. The daily amount of milk sterilised is approximately 100,000 pints. It is of interest to record that one firm in the City processes and exports sterilised milk in bottles to West Africa.

TABLE XI.

EXAMINATION OF HEAT TREATED MILK FROM PLANTS IN THE CITY.

Class of Milk.	Number Tested.	Appropriate Test.	Number of Samples.	
			Passed.	Failed.
Pasteurised... ..	1,227	Phosphatase ... Methylene Blue	1,218 1,209	9 18
Sterilised	251	Turbidity ...	251	0
Tuberculin Tested (Pasteurised)...	952	Phosphatase ... Methylene Blue	943 950	9 2
TOTAL	2,430	Phosphatase ... Methylene Blue Turbidity ...	2,161 2,159 251	18 20 0

The efficiency of heat-treatment plants in the City (which are amongst the most up-to-date in the country) is being maintained at a high level and reflects credit on the firms concerned, who have co-operated with the Health Department by accepting suggestions and criticisms, in achieving most satisfactory results.

*Milk Supply to Hospitals and Aged Persons' Hostels.***Hospital
Milk**

The milk supplied by contractors is regularly sampled at time of delivery. 252 samples tested chemically and bacteriologically proved satisfactory.

*Milk Supply to Schools, Day Nurseries, School Canteens.***School
Milk**

Routine sampling is carried out at these premises covering all the suppliers. None of the 183 milks was found to be tuberculous, and all complied with the legal standards of quality.

*Ice Cream.***Ice Cream**

During the year, 1,355 visits of inspection were made by the Food Inspectors to premises where ice cream was manufactured or sold. The

number of registered manufacturers is 138 and there are 1,811 premises registered for the storage and sale of ice cream.

Of 122 samples examined bacteriologically, 87 samples were Grade 1; Examination of Ice Cream
21 Grade 2; 11 Grade 3; and 3 Grade 4.

Chemical analysis of 15 ice creams showed the ingredients to comply with the provisions of the Food Standards (Ice Cream) Order, 1953, in every instance.

Ice Lollies.

The sale of ice lollies amongst children in the City, and indeed **Ice Lollies** throughout the country as a whole, has been a feature of post-war years. It has been observed that many children consume three or four ice lollies daily.

An investigation into the question of lead in these products was reported in 1953, and since that time great improvement has taken place. **Lead Contamination**
Full co-operation by the trade has been forthcoming in an effort to reduce the lead content of ice lollies, and in only 9 samples out of a total of 76 examined was lead found, the amount varying from 1.5 parts per million to 5 parts per million. 3 samples were found to contain small amounts of copper.

THE ADULTERATION OF FOOD AND DRUGS.

The importance of a pure food supply cannot be over-estimated, and low quality or adulterated foods cannot be tolerated.

Food and Drugs Sampling

The Medical Officer of Health is, of course, responsible for ensuring that the foodstuffs offered for sale for human consumption in his area are pure and wholesome. This entails the constant vigilance of the Food and Drugs Inspectors who purchase samples of foodstuffs of every description, and after analysis by the Public Analyst (whose duty is to test for adulteration), appropriate action is taken. In some cases, legal proceedings are instituted; in others, advice is given to the vendor—particularly in regard to milk which proves to be of abnormal composition although genuine—and in other instances the packer or manufacturer is advised of the irregularity or technical offence. The laying of informations, service of summonses and the preparation of evidence is carried out by the Food Inspection Staff.

Adulterated Food Samples

It is satisfactory to note that during the year 1954, out of a total number of 3,945 samples taken or purchased, only 3·8 per cent. were found to be not genuine or otherwise giving rise to irregularity. This comparatively low figure is a tribute to food suppliers and shopkeepers as well as to constant inspection and sampling.

Of the total number of 3,945 samples, 691 were formal and 3,254 informal. An "informal" sample is one purchased without intimation to the vendor that it is to be analysed. Valuable information as to irregularities is obtained in this way. Prosecution for adulteration cannot be undertaken, however, until a "formal" sample has been taken subsequently, in accordance with the procedure described in the Food and Drugs Act, 1938. 38 formal samples and 113 informal samples were reported as not being genuine or otherwise giving rise to irregularity. Legal proceedings were instituted in 12 cases where formal samples were found not to be genuine, and in the remaining instances appropriate action was taken.

Legal Proceedings.

TABLE XII.

OFFENCES UNDER THE FOOD AND DRUGS ACTS, 1938-50.

Number of Informations laid.	Nature of Sample.	Nature of Offence.	Result of Legal Proceedings.		
			Number of convictions.	Fines.	Costs.
6	Milk	Contained added water ...	6	£ s. d. 18 0 0	£ s. d. 7 7 0
3	Milk	Deprived of milk fat ...	3	9 0 0	3 3 0
1	Caraway Seeds	Contained mice excreta ...	1	5 0 0	3 3 0
1	Fish	Frozen cod fillets supplied instead of fresh cod fillets as specified in contract.	1	20 0 0	—
1	Butter	Contained 1·15% excess of Water.	—	Warranty proved.	
1	Butter	Giving a false warranty in writing in respect of butter (see above).	1	5 0 0	1 15 0
1	Loaf of bread ...	Contained quantity of string.	1	5 0 0	—
1	Loaf of Bread...	Contained a nail	1	5 0 0	1 1 0
15			14	67 0 0	16 9 0
				£83 9 0	

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 include a senior male welfare visitor and a female welfare visitor. In addition, the services of the welfare visitor attached to the Royal Infirmary V.D. Clinic are available to deal with female defaulters from that clinic.

The work has continued to be the interviewing of patients, the tracing of contacts, and persuading them to attend for examination, writing and visiting defaulters from treatment and assisting patients to attend in the light of the knowledge of the circumstances of the individual patient. Close co-operation with the medical officers of the various treatment centres has been maintained, and patients referred to clinics by hospitals for investigation or treatment having failed to report, have been followed-up, in most cases, successfully.

The figures for 1954 have shown a continued reduction in the case of syphilis, but a rise in the number of male and female cases of gonorrhoea. The figures do compare very favourably with both the pre- and post-war years, particularly in respect of the incidence of syphilis.

ACUTE GONORRHOEA

	1938	1946	1952	1953	1954
Males	1,422	3,112	1,026	710	816
Females	141	422	133	128	148

EARLY SYPHILIS

	1938	1946	1952	1953	1954
Males	147	655	80	65	38
Females	34	331	18	13	6

CONTACT TRACING.

The practice of carefully following up contact cases notified from all areas has continued and has produced the following results:—

	Male	Female	Total
No. of notifications received	—	62	62
No. of cases traced and interviewed	—	15	15
No. of cases not yet interviewed	—	4	4
No. of cases who reported for investigation	—	15	15
No. of cases in which information was passed on to other Authorities	—	—	—
No. of cases already in the Register of a Liverpool Clinic	—	4	4
No. of cases untraced, due mainly to insufficient information... ..	—	43	43
No. of cases who refused to attend for investigation	—	—	—

The issue of "contact slips" to patients for the use of their potentially infected partners brought under observation 23 males and 37 females.

FOLLOW-UP OF DEFAULTERS.

The follow-up of defaulters has been carefully carried out during the year and the results are summarised in Tables No. 45 and No. 46 in Appendix.

DISINFECTION AND DISINFESTATION AND MISCELLANEOUS SERVICES.

The varied duties which this section of the department is called upon to undertake are growing, and in comparison, the duties connected with disinfection and disinfestation are beginning to take on a somewhat minor role.

The functions of the section and a brief summary of the duties performed during the year are listed below:—

1. Inspection of premises for verminous condition.
2. Disinfestation treatment of verminous premises.
3. Disinfestation treatment of verminous furniture, etc.
4. Disinfestation and disinfection stations.
5. Disinfection of infectious premises.
6. Fly prevention.
7. City Mortuary.
8. Burial service.
9. Storage, distribution and collection of Home Nursing equipment.
10. Mobile meals service.
11. Food and general store.
12. Welfare Foods service.
13. Miscellaneous services.

Inspection of Premises for Verminous Condition.

These inspections of dwelling-houses, Canteens, Cafe kitchens, Locker Rooms and various factory premises have originated from a number of sources, and may be divided into the following categories:—

- (a) The majority of inspections of dwelling-houses have been made on behalf of the Housing Department where information is required regarding the verminous condition of furniture and effects belonging to those families who are recommended for re-housing.
- (b) A number of requests have been received from the owners or occupiers of dwelling-houses who suspect that the premises are vermin infested.

- (c) Inspection of staff canteens has been a regular feature of this branch of the service, as these premises often become infested with steam-flies or cockroaches.
- (d) Some manufacturing processes require absolute cleanliness and freedom from vermin and the services of this section have been requested when the manufacturer had reason to believe that minor infestations were occurring in his premises.

The number of inspections during the year in all these connections was 6,807, of which 2,374 were found to be vermin infested.

Unusual incidents have occurred during the course of administering this service, and it may be of interest to recall one which happened during the year:—

The owner/occupier of a house in West Derby, while carrying out certain alterations to his garden last summer, disturbed a nest of wild bees, which penetrated into the house, causing the members of the family to retreat indoors and close all doors and windows, thus making them virtual prisoners on a fine summer evening. The occupant of the house telephoned the Police asking if they could be of assistance. The Police in turn contacted this department with a view to some means being adopted to destroy the bees. The necessary action was then taken by this staff.

In cases of this nature every effort is made to capture the bees and transfer them to a hive, a list of volunteer apiarists being kept for this purpose. In this instance the only remedy was to destroy the bees.

As a result of the inspections detailed in the previous paragraphs, disinfestation treatment was carried out in the following cases:—

**Disinfestation
treatment of
Verminous
Premises**

- (a) 752 dwelling-houses treated at the request of the Housing Department.
 - (b) 315 dwelling-houses treated at the request of owners or occupiers.
 - (c) 134 treatments of staff canteens, factory premises, etc.,
- a total of 1,201 treatments.

**Disinfestation
treatment of
Verminous
Furniture,
etc.**

In conjunction with the treatment of dwelling-houses, it has been necessary, in the majority of cases, for furniture, bedding and personal effects to be subjected to treatment. Furniture, bedsteads, pictures, etc., have been treated on the premises, but mattresses, bedding, etc., have been removed to a disinfestation station for adequate treatment. The latter process is carried out with the minimum amount of inconvenience to the tenants.

**Disinfestation
and Disin-
fection
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 was:—

8,037 verminous articles disinfested.

17,323 infectious articles disinfected.

889 infectious library books disinfected and returned to circulation.

28,927 articles disinfected as a precautionary chargeable measure.

1,836 tons of miscellaneous goods, the outer wrappers of which are disinfected as a precautionary chargeable measure.

**Disinfection
of In-
fectious
Premises**

In the event of infectious disease occurring in any premises, the necessary disinfection has been carried out by staff from this section, and infectious bedding and personal effects removed for treatment at the disinfection stations.

In this connection 1,920 infectious premises were disinfected during the year.

Applications have frequently been made for disinfection 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 occupier of the premises.

The principal target for this service has been the breeding ground of flies, and for this purpose, regular periodic treatment of manure dumps, middensteads, etc., was carried out from early spring until autumn. This service has proved its worth in a considerable abatement of the fly menace during the summer months, and has also been instrumental in obtaining the helpful co-operation of the owners of stables and shippens. **Fly Prevention**

The number of treatments during the year was 1,620.

The provision and maintenance 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. **City Mortuary**

During the year, 407 bodies were received and at the instruction of the City Coroner, 374 post-mortem examinations were held.

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. Among the cases notified in this category are quite a number in which the person has died alone, and information is furnished to this department by landladies or neighbours. **Burial Service**

During the year, this service arranged for the burial or cremation of 110 adults, 2 children and 7 stillborn babies.

As an auxiliary to this service, the Health Department has an arrangement with local Hospital Management Committees for the transfer of bodies between hospitals. Under this arrangement, 247 bodies were transferred during 1954.

There has been a considerable increase in the calls on this service since its introduction, and the quantity of equipment now in use is seven to eight times greater than when the scheme was first introduced. **Home Nursing Equipment**

This section of the Health Department is responsible for the storage, distribution, collection and maintenance of the various types of equipment now in use, and this service necessitated 1,860 visits during the year.

Mobile Meals Service This service continues to function in one area of the City, and the necessary transport is provided by this section. During the year, 5,301 visits in this connection were made by vans from this department.

Food and General Store This store, which is situated at Gascoyne Street Depot, continues to function in a satisfactory manner and the annual turnover shows an increase of approximately 25 per cent over the previous year. Food, chandlery and general stores are supplied to 152 establishments, mainly those under the control of the Health Department but including 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.

14 Day Nurseries.

69 Domiciliary Midwives.

9 Aged Persons Hostels.

5 Mental Health Establishments.

9 Children's Department Establishments.

Police Training College.

21 Other establishments.

Welfare Foods Service On 28th June, 1954 the Ministry of Food ceased to operate the Welfare Foods Service and it then became the duty of the Local Authority to take over its administration.

The functions of this service are to arrange for the distribution to the general public of National Dried Milk, Cod Liver Oil, Vitamin Tablets and Orange Juice, and for this purpose a considerable number of distribution centres require to be maintained throughout the City. At the time of the take over from the Ministry of Food, a number of adjustments were made in the placing of distribution centres and during the 6 months that the service has been controlled by the Health Department, the service has worked very smoothly.

To provide Welfare Foods to those areas which are not adequately served by a fixed distribution centre, a van has been obtained for the

purpose of acting as a mobile centre. It is placed at certain points in the City at regular times and has proved extremely useful in maintaining the efficiency of the service. This vehicle also helps in maintaining supplies to the fixed distribution centres.

The number of centres in use is:—

20 full-time.

15 part-time.

8 mobile points.

and the staff of 33 consists of 2 Supervisors and 31 Distributors, 24 of whom are on a full-time basis and 7 as part-time employees.

The following figures of the turnover during the six months of the service may be of interest:—

367,227 tins National Dried Milk.

46,875 bottles Cod Liver Oil.

16,599 packets Vitamin Tablets.

200,296 bottles Orange Juice.

Thirteen motor vehicles are in continual daily use and during the year have covered 92,242 miles and consumed 7,590 gallons of petrol. The complete maintenance of these vehicles is carried out by the staff at Gascoyne Street Depot.

**Vehicles and
Maintenance**

Miscellaneous services include—

- (a) The collection and removal of furniture and equipment to and from Aged Persons Hostels.
- (b) Collection, repair and delivery of Day Nursery equipment and furniture.
- (c) Transport of equipment on behalf of the Mental Health Service.
- (d) Various transport duties on behalf of the Children's Department.
- (e) Two new duties which have recently been undertaken for the Midwifery Service, are the delivery to patients houses of gas and air machines and the transport required from home to hospital of milk required for the feeding of babies who are patients in hospital.
- (f) A variety of other transport duties necessary for establishments under the control of the Health Department. These include various occasional duties, such as the delivery of gift Christmas parcels from the United States of America to the homes of aged and needy persons.

**Miscellaneous
Services**

HEALTH EDUCATION.

Film Strips During the year a film strip projector and portable screen were purchased, together with a selection of film strips dealing with public health subjects. A film strip to illustrate many aspects of the work of the Liverpool Public Health Department particularly was specially prepared and has proved useful on many occasions to provide an interesting background to lectures given by members of the staff to groups of nurses, trade and social organisations as well as to public health students.

Posters The Department has maintained its policy of displaying suitable posters in clinics and various public places such as post offices, calling the attention of the public to the various services provided. Perhaps the most successful appeal during the year was in connection with the Whooping Cough Vaccine Trial, an account of which appears elsewhere in the report.

General Health Education has continued to be carried out on an individual basis, by field workers such as doctors, health visitors, welfare visitors, district nurses, midwives and sanitary inspectors in the normal course of their daily duty.

Classes or Lectures for Food Traders or their Employees.

Clean Food Campaign Classes have been held for meat trade and food factory principals and employees to improve their knowledge of hygiene of the food industry. Subjects covered in the course included the effects of dirty refrigerators, dirty personal habits, dirty premises and equipment. Special stress has been made of the essential cleanliness of plant, more particularly sausage machines, and of the need of prevention of contamination of foodstuffs used in prepared foods, such as sausage, brawn, pressed meat and meat mixtures.

Every opportunity has been taken in markets, food shops, food factories or food distribution premises to impress upon employers and employees the importance of clean handling of food.

The effect and importance of publicity and other forms of propaganda has already been referred to, and it is significant of the interest and concern of a vast number of people not only connected with the food

trade, but as consumers, that a number of requests for talks on various aspects of hygiene in food establishments have been made to the department.

The educational work undertaken by senior sanitary inspectors during the year included the following lectures:—

1. Lectures on food hygiene to staffs of large departmental stores with cafes and canteens situated within the premises. Films on food hygiene were shown.
2. Lectures on food hygiene to church organisations.
3. Lecture on food hygiene to members of a women's association.
4. Lecture on food hygiene to student nurses at a general hospital.
5. Lecture on food hygiene and welfare requirements of the Shops Act, 1950, to a shopkeepers' association.
6. Lectures on hygiene as applied to hotels and licensed premises as part of the lecture course for licensees and bartenders, organised by the National Trade Defence Association. During the course, films "Another Case of Food Poisoning", "Behind the Menu" and "House Proud" were shown.

General Health Education.

Numerous talks and lectures have been given during the year by the doctors and senior members of the department staff to groups and associations on all subjects connected with the work of the health department. Every request for a lecturer on these subjects has been met during the year.

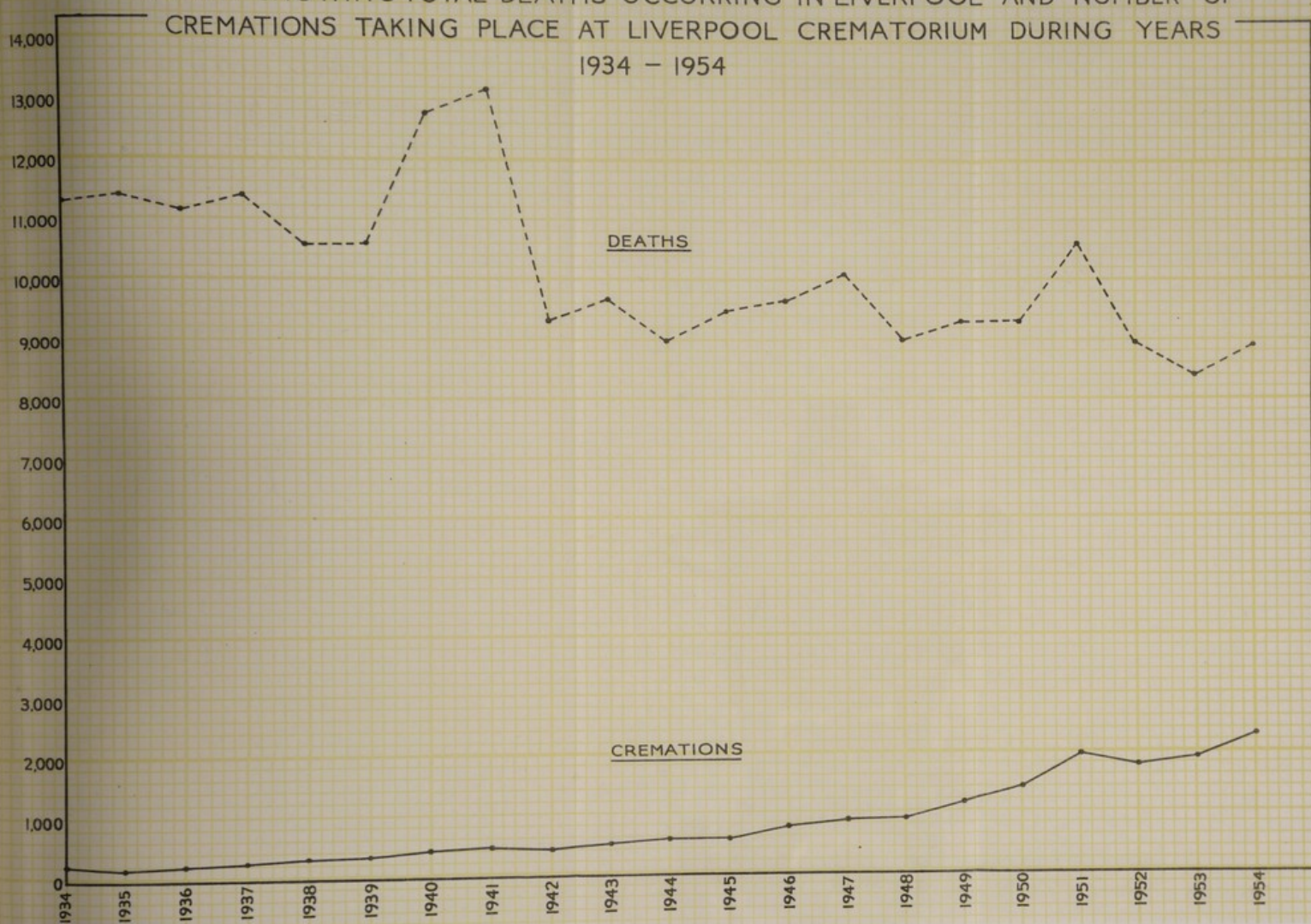
CREMATION.

Cremation The Medical Officer of Health is appointed by the Home Office to be Medical Referee to the Liverpool Crematorium, and there are two deputies. The statutory documents connected with cremations are scrutinised at the Central Offices of the Health Department before authority to cremate is given, and there is close liaison with the Crematorium.

Cremation as a means of disposal is growing steadily amongst all classes of the community, and in recent years notable improvements have been effected at the Crematorium itself. The number of cremations both locally and nationally increases year by year. So far as Liverpool is concerned, since 1940 for example, when there were 482 cremations, the number has now grown to 2,300 per annum, despite the opening of new crematoria in adjacent areas.

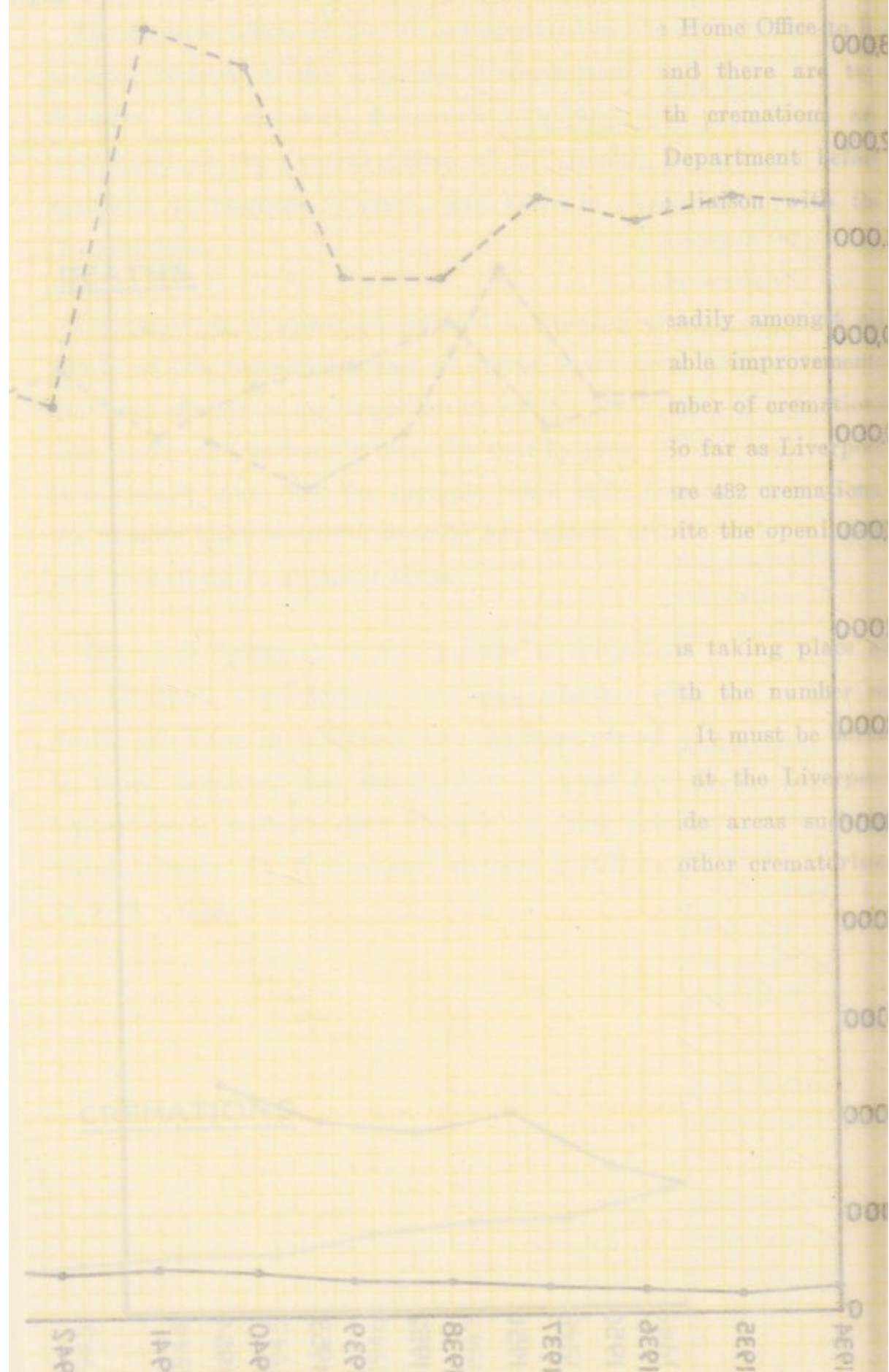
The graph facing shows the increase in cremations taking place at the Liverpool Crematorium since 1934, together with the number of deaths occurring in Liverpool over the same period. It must be borne in mind, however, that the number of cremations at the Liverpool Crematorium includes cases brought in from outside areas such as Bootle, Crosby, St. Helens, etc., as there is still no other crematorium in S.W. Lancashire.

GRAPH SHOWING TOTAL DEATHS OCCURRING IN LIVERPOOL AND NUMBER OF
CREMATIONS TAKING PLACE AT LIVERPOOL CREMATORIUM DURING YEARS
1934 - 1954



GRAPH SHOWING TOTAL DEATHS CREMATIONS TAKING PLACE

1934 - 1954



WATER SUPPLY.

The water supply in the area during 1954 was satisfactory both in quality and quantity.

Bacteriological examinations of the waters were made regularly by the City Bacteriologist, samples for these routine examinations being taken both in the City and at the local Reservoirs, Prescott.

The supplies from both Rivington and Lake Vyrnwy are treated by slow sand filtration and chlorination, and by lime in order to raise the pH value: further chlorination is carried out at Prescott Storage Reservoirs.

There are no parts of the area dependent upon stand-pipes for a supply.

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STATISTICAL APPENDIX.

TABLE 1.
BIRTH STATISTICS.

	LIVE BIRTHS.			STILLBIRTHS.		
	Males.	Females.	Total.	Males.	Females.	Total.
Legitimate ...	7,686	7,209	14,895	197	184	381
Illegitimate ...	440	407	847	13	6	19
	8,126	7,616	15,742	210	190	400

Year	Births	Birth Rate	Illegitimate Births	% of Births
1938	16,175	18·7	771	4·8
1942	13,729	20·5	871	6·3
1943	14,432	21·8	1,030	7·1
1944	15,412	23·1	1,274	8·3
1945	14,784	21·7	1,582	10·7
1946	18,528	25·2	1,351	7·3
1947	19,904	26·4	1,151	5·8
1948	17,695	22·3	1,009	5·7
1949	16,551	20·7	943	5·7
1950	16,110	20·1	968	6·0
1951	15,593	19·9	859	5·5
1952	15,839	20·0	876	5·5
1953	16,022	20·3	873	5·4
1954	15,742	20·5	847	5·4

Year	Registered Live Births.	Registered Stillbirths.	Total Births.	Still-births per 1,000 Live and Stillbirths.
1935.....	17,347	749	18,096	41·4
1936.....	17,403	708	18,111	39·1
1937.....	16,728	618	17,346	35·6
1938.....	16,175	639	16,814	38·0
1939.....	15,614	631	16,245	38·9
1940.....	15,016	519	15,535	33·4
1941.....	13,291	508	13,799	36·8
1942.....	13,729	552	14,281	38·6
1943.....	14,432	485	14,917	32·5
1944.....	15,412	492	15,904	30·9
1945.....	14,784	431	15,215	28·3
1946.....	18,528	539	19,067	28·3
1947.....	19,904	514	20,418	25·2
1948.....	17,695	479	18,174	26·3
1949.....	16,551	358	16,909	21·2
1950.....	16,110	375	16,485	22·7
1951.....	15,593	396	15,989	24·8
1952.....	15,839	400	16,239	24·6
1953.....	16,022	394	16,416	24·0
1954.....	15,742	400	16,142	24·8

TABLE 2.
Analysis of causes of Infant Mortality in successive quinquennia 1896-1950,
and the years 1951, 1952, 1953 and 1954.

(A).—Recorded Deaths.

Yr.	1 Total Births.	2 Total Deaths Under 1 Year of Age.	3 General Diseases (excluding Tubercu- losis).	4 Tubercular Diseases.	5 Nervous Diseases	6 Respira- tory Diseases	7 Digestive Diseases (including Diarrhoea.)	8 Malforma- tions Premature Birth, Maras- mus &c.	9 External Causes.
1900	111,700	21,160	1,508	698	2,476	3,575	6,376	5,698	819
1905	118,801	20,353	1,546	644	2,516	3,484	5,187	5,732	565
1910	118,313	17,739	1,613	465	2,052	3,146	3,902	5,520	539
1915	111,872	15,458	1,309	345	1,432	2,916	3,635	4,953	426
1920	99,451	11,510	1,116	202	1,083	2,821	1,872	4,107	179
1925	104,217	10,497	1,066	200	573	2,776	1,786	3,764	120
1930	95,701	9,002	978	109	401	2,553	1,670	2,981	81
1935	88,644	7,904	902	82	368	2,050	1,184	3,125	67
1940	80,936	6,226	573	74	519	1,457	698	2,691	84
1945	71,648	5,512	341	71	403	1,704	548	2,193	131
1950	88,788	5,034	311	47	213	1,109	963	2,226	111
51	15,593	548	21	3	5	118	33	351	8
52	15,839	562	25	2	5	97	30	380	13
53	16,022	569	11	2	8	118	33	377	14
54	15,742	485	15	3	4	79	13	349	16

(B).—Death Rates per 1,000 Births.

1900	*33.4	189	12.7	6.2	22.1	32.0	57.1	51.0	7.3
1905	33.4	172	13.0	5.5	21.2	29.3	43.7	48.1	4.7
1910	32.2	149	13.6	3.9	17.4	26.6	33.0	46.7	4.6
1915	29.3	137	11.6	3.1	12.8	26.1	32.5	43.1	3.8
1920	24.9	116	11.1	2.0	10.9	28.4	18.8	42.0	1.8
1925	25.1	100	10.2	1.9	5.5	26.6	17.1	36.1	1.2
1930	22.1	94	10.2	1.1	4.2	26.7	17.4	31.1	0.8
1935	20.5	89	10.1	0.9	4.2	23.1	13.4	35.3	0.8
1940	19.4	77	7.0	0.9	6.4	17.9	8.8	32.9	1.0
1945	21.3	78	4.8	1.0	5.6	24.1	7.7	30.7	1.8
1950	22.9	56	3.4	0.5	2.3	12.3	10.5	25.1	1.2
51	19.9	35	1.3	0.2	0.3	7.6	2.1	22.5	0.5
52	20.0	35	1.6	0.1	0.3	6.1	1.9	24.0	0.8
53	20.3	35	0.7	0.1	0.5	7.4	2.1	23.5	0.8
54	20.5	31	0.9	0.2	0.2	5.0	0.8	22.1	1.0

*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.

1900	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1905	100.0	91.0	102.3	89.3	95.9	91.5	76.5	94.0	65.7
1910	93.0	78.6	107.1	62.9	78.6	83.1	57.8	91.0	63.0
1915	87.0	72.5	91.9	50.0	57.9	81.5	56.9	84.0	52.1
1920	76.0	61.4	87.4	32.2	49.3	88.7	32.7	82.0	25.5
1925	75.1	54.9	80.3	30.6	24.9	84.7	29.9	70.8	16.4
1930	66.2	49.7	80.3	17.7	18.9	83.5	30.4	60.9	11.0
1935	61.4	47.2	79.5	14.8	18.9	72.2	23.4	69.2	10.4
1940	58.1	40.7	55.1	14.5	29.0	55.9	15.4	64.5	13.7
1945	63.8	41.3	37.8	16.1	25.3	75.3	13.5	62.0	24.6
1950	68.7	29.4	26.9	8.0	10.6	38.5	18.3	48.8	15.9
51	59.6	18.5	10.2	3.2	1.3	23.7	3.7	44.1	6.8
52	59.9	18.5	12.6	1.6	1.3	19.0	3.3	47.1	11.0
53	60.8	18.5	5.5	1.6	2.3	23.1	3.7	46.1	11.0
54	61.4	16.4	7.1	3.2	0.9	15.6	1.4	43.3	13.7

TABLE 3

ANALYSIS OF CAUSES OF MORTALITY.

Deaths from certain Groups of Diseases in each decade from 1871 to 1950, and during the years 1951, 1952, 1953 and 1954.

Years.	(a) Infective diseases (less Diarrhoea and Influenza).	(b) Tubercular diseases.	(c) Respiratory diseases (including Influenza).	(d) Digestive diseases (including Diarrhoea).	Total Deaths from (a), (b), (c) & (d)	(e) Cancer.	Total Deaths from all causes.
1871-1880	27,205	19,869	29,763	14,747	91,584	2,015	147,005
1881-1890	19,748	17,870	32,507	13,186	86,311	2,820	146,195
1891-1900	13,515	16,714	35,819	18,491	84,539	4,223	145,522
1901-1910	13,967	16,054	32,995	18,163	81,179	6,480	150,962
1911-1920	10,417	14,946	36,480	12,282	74,125	7,603	137,223
1921-1930	7,831	12,664	29,447	8,184	58,126	9,852	117,756
1931-1940	6,473	9,413	18,196	5,987	40,069	12,619	115,632
1941-1950	2,645	6,987	15,728	4,328	29,723	13,265	98,347
1941-1950	2,645	6,987	15,728	4,328	29,723	13,265	98,347
1951	111	449	2,339	310	3,209	1,559	10,648
1952	91	305	1,229	292	1,917	1,591	8,994
1953	69	284	1,142	271	1,766	1,553	8,422
1954	66	244	1,251	275	1,836	1,582	8,946

Deaths expressed as a percentage of total deaths from all causes (Proportionate Mortality).						
1871-1880	19.2	13.5	20.2	10.0	62.9	1.4
1881-1890	14.1	12.7	23.2	9.4	59.4	2.0
1891-1900	9.3	10.8	24.6	12.7	57.4	2.9
1901-1910	8.6	10.6	21.8	12.0	53.0	4.3
1911-1920	7.9	10.9	27.3	8.9	55.0	5.5
1921-1930	6.6	10.7	25.0	6.9	49.4	8.4
1931-1940	5.6	8.1	15.7	5.2	34.7	10.9
1951	1.0	4.2	22.0	2.9	30.1	14.6
1952	1.0	3.4	13.7	3.2	21.3	17.7
1953	0.8	3.4	13.6	3.2	21.0	18.4
1954	0.7	2.7	14.0	3.1	20.5	17.7

TABLE 4.
DISTRICT WORK OF THE HEALTH VISITORS.

Visits to expectant mothers	...	...	...	...	6,204
Visits to infants following notification of birth	...	...	...	...	15,908
Total visits to infants during the 1st year of life...	...	...	...	...	87,708
Total visits to infants aged 1 to 5 years	...	...	...	...	126,321
Visits to children discharged from hospitals	...	...	...	...	2,413
Visits to special cases (Trichinosis Enquiry follow-up)	...	...	...	...	164
Visits to cases of infantile diarrhoea	...	...	...	...	279
Sonne Dysentery special investigations	...	...	...	...	266
Visits to cases of measles of all ages	...	...	...	...	9,190
Visits to other cases	...	...	...	...	4,048
Visits to Aged Persons	...	...	...	...	507

TABLE 5.
ANTE-NATAL CARE OF THE 303 MOTHERS OF 318 INFANTS DYING WITHIN 28 DAYS OF BIRTH.

RESPONSIBILITY	RHESUS TESTS.					
	Rhesus Positive.	Rhesus Negative.	No Trace.	Total.	Rhesus Positive with Antibody.	Rhesus Negative with Antibody.
Hospital	35	14	6	55	1	4
Hospital & General Practitioner	85	13	6	104	0	4
Hospital & Local Authority	16	2	0	18	0	0
Hospital & Liverpool Maternity						
Hospital District	1	0	0	1	0	0
Hospital, General Practitioner & Local Authority	3	2	0	5	0	0
Hospital, General Practitioner & L.M.H. District	0	0	0	0	0	0
Total	140	31	12	183	1	8
General Practitioners	31	9	31	71	0	0
General Practitioners & Local Authority	3	1	2	6	0	0
General Practitioners & L.M.H. District	2	0	1	3	0	0
Total	36	10	34	80	0	0
Local Authority Domiciliary Midwives	12	4	2	18	0	0
Liverpool Maternity Hospital Domiciliary Midwives	1	1	0	2	0	0
No Ante-Natal Care	0	0	20	20	0	0
TOTALS	189	46	68	303	1	8

(Excluding 8 Inward Transfers).

TABLE 6.

NEO-NATAL DEATHS.

Total ... 326 (including 8 Inward Transfers).

Total full-time births ... 120

Total associated with prematurity ... 206

326

Other Diseases of Early Infancy ... Total 158

Cause of Death.	Total.	Associated with Prematurity.	Full-time.
1. Prematurity ...	121	121	0
2. Atelectasis ...	17	7	10
3. Haemolytic disease of newborn ...	12	4	8
4. Asphyxia ...	4	1	3
5. Kernicterus ...	1	0	1
6. Haemorrhagic disease of newborn ...	1	0	1
7. Bilateral polycystic kidneys ...	1	1	0
8. Cardiac failure ...	1	0	1
Total ...	158	134	24

TABLE 7.

Malformations ... Total 67.

Cause of Death.	Total.	Associated with Prematurity.	Full-time.
1. Congenital heart disease ...	20	4	16
2. Hydrocephalus ...	4	1	3
3. Hydrocephalus with spina bifida and meningo-myelocele ...	1	1	0
4. Hydrocephalus and spina bifida ...	2	1	1
5. Microcephalic ...	1	0	1
6. Anencephalic ...	4	4	0
7. Micrognathia with bronchitis ...	1	0	1
8. Meningo-myelocele ...	3	2	1
9. Meningo-myelocele with meningitis ...	2	0	2
10. Meningo-myelocele with Klippel-Feil syndrome ...	1	1	0
11. Meningo-myelocele and spina bifida ...	3	0	3
12. Meningocele with atelectasis ...	1	1	0
13. Spina bifida with broncho pneumonia ...	1	0	1
14. Encephalocele ...	2	1	1
15. Exomphalos ...	1	1	0
16. Epidermolysis bullosa letalis ...	1	0	1
17. Teratoma ...	1	0	1
18. Renal aplasia with congenital agenesis ...	1	1	0
19. Arnold Chiare deformity ...	1	1	0
20. Hypertrophic pyloric stenosis ...	1	0	1
21. Malformation bile ducts ...	1	1	0
22. Duodenal atresia ...	2	1	1
23. Oesophageal atresia ...	1	0	1
24. Multiple congenital defects ...	11	4	7
Totals ...	67	25	42

TABLE 8.

Injury at Birth ... Total 52.			
Cause of Death.	Total.	Associated with Prematurity.	Full-time.
1. Cerebral haemorrhage	31	18	13
2. Cerebral injury	5	3	2
3. Asphyxia (breech delivery)	2	0	2
4. Asphyxia (maternal eclampsia)	1	0	1
5. Cerebral asphyxia	2	0	2
6. Asphyxia due to inhalation amniotic fluid and blood (precipitate labour)	1	0	1
7. Asphyxia — ante - partum haemorrhage (Caesarean operation)	2	1	1
8. Asphyxia—umbilical cord round child's neck... ..	2	0	2
9. Aspiration of liquor (Caesarean operation)	1	0	1
10. Ante-partum haemorrhage	2	2	0
11. Maternal toxæmia	1	1	0
12. Suprarena lhaemorrhage (Caesarean operation)	1	0	1
13. Breech delivery	1	1	0
Total	52	26	26

TABLE 9.

Infections of Newborn ... Total 41.			
Cause of Death.	Total.	Associated with Prematurity.	Full-time.
1. Respiratory infection	32	15	17
2. Septicaemia	1	1	0
3. Septicaemia and meningitis	1	0	1
4. Septicaemia and pneumonia	2	1	1
5. Septicaemia and umbilical infection	1	1	0
6. Generalised infection with cerebral congestion	1	0	1
7. Sepsis of skin	1	1	0
8. Peritonitis	1	0	1
9. Pyelonephritis	1	0	1
Total	41	19	22

Meningitis ... Total 1.

Cause of Death.	Total.	Associated with Prematurity
Meningitis	1	1

TABLE 10.

Other Causes ... Total 7.

Cause of Death.	Total.	Associated with Prematurity.	Full-time.
1. Renal hypoplasia	1	0	1
2. Diaphragmatic hernia	1	0	1
3. Asphyxia due to strangulation (Infanticide) ...	1	0	1
4. Asphyxia due to being left under bed clothes at birth (Misadventure)	1	0	1
5. Asphyxia due to aspiration vomitus	1	0	1
6. Asphyxia due to inhalation amniotic and other fluids due to want of attention at birth ...	1	0	1
7. Acute otitis media (mastoid)	1	1	0
Acute bronchitis	1	1	0
Total	7	1	6

TABLE 11.

ANTE-NATAL CLINICS.

	1954	1953
Total number of centres at which ante-natal clinics were held ...	24	23
Number of clinic sessions held per week	38	38
Number of new cases attending ante-natal clinics	4,534	5,744
Total attendances at ante-natal clinics	22,890	31,008
Total attendances at post-natal clinics	840	947
CHILD WELFARE CLINICS.		
Total number of centres at which child welfare clinics were held	24	23
Number of clinic sessions held per week	47	44
Number of new cases : Under 1 year of age	8,317	8,617
Aged 1-5 years	314	378
Total attendances : Under 1 year of age	75,216	74,349
Aged 1-2 years	6,971	8,657
Aged 2-5 years	6,424	6,747

TABLE 12.

MIDWIVES ENGAGED IN BOTH DOMICILIARY AND INSTITUTIONAL PRACTICE AT THE
END OF THE YEAR.

	Domiciliary Midwives.	Midwives in Institutions	Total
Midwives employed by the Authority	54+1 part time.	—	54+1 part time.
Midwives employed by Hospital Management Committees or 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	12	193	205
Midwives in private practice (including midwives employed in nursing homes)	13	12	25
Totals	80	205	285

TABLE 13.

ANALYSIS OF CONFINEMENTS.

	Domiciliary Cases.				Totals.	Cases in Institutions.
	Doctor not booked.		Doctor booked.			
	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.		
Midwives employed by Hospital Management Committees or Boards of Governors under the National Health Service Act.	8	463	23	549	1,043	12,752
Midwives in private practice (including midwives employed in nursing homes)	—	2	16	1	19	330
Midwives employed by the Local Authority. Year 1953 ...	48	1,761	356	1,804	3,969	
Year 1954 ...	24	1,017	357	2,412	3,810	

TABLE 14.

LIVERPOOL MATERNITY HOSPITAL DISTRICT HOMES (SIX).

19 Huskisson Street, Liverpool 8.

21 Upper Parliament Street, Liverpool 8.

Home District L.M.H. Oxford Street, Liverpool 7.

41 Norwood Grove, Liverpool 6.

68 Eastbourne Street, Liverpool 6.

241 Boundary Street, Liverpool 5.

Deliveries.	Doctors not booked		Doctors booked.		Totals.
	Doctor present at time of delivery.	Doctor not present at time of delivery.	Doctor present at time of delivery.	Doctor not present at time of delivery.	
Year 1953	13	667	21	396	1,097
Year 1954	8	463	23	549	1,043

Gas/Air Administered.	Doctor present at delivery.	Doctor not present at delivery.	Totals.
Year 1953	18	778	796
Year 1954	18	840	858

PETHIDINE GIVEN.	Doctor present at delivery.	Doctor not present at delivery.	Totals.
Year 1953	18	596	614
Year 1954	13	532	545

TABLE 15—ANALGESIA.

Analgesia.	Year.	Doctor present at delivery.	Doctor not present at delivery.	Total.
Gas/Air	1953	344	2,430	2,774
	1954	322	2,511	2,833
Pethidine	1953	233	1,455	1,688
	1954	218	1,688	1,906

TABLE 16.
MATERNAL MORTALITY.

Year.	BIRTHS REGISTERED.			MATERNAL MORTALITY.	
	Live Births.	Stillbirths.	Total Births.	Deaths.	Rate per 1,000 Total Births.
1930	18,881	774	19,655	75	3.81
1931	18,626	722	19,348	55	2.84
1932	18,149	827	18,976	51	2.69
1933	16,929	680	17,609	60	3.41
1934	17,593	685	18,278	51	2.79
1935	17,347	749	18,096	59	3.26
1936	17,403	708	18,111	64	3.52
1937	16,728	618	17,346	40	2.31
1938	16,175	639	16,814	33	1.96
1939	15,614	631	16,245	29	1.86
1940	15,016	519	15,535	31	2.01
1941	13,291	508	13,799	32	2.42
1942	13,729	552	14,281	34	2.38
1943	14,432	485	14,917	34	2.27
1944	15,412	492	15,904	31	1.95
1945	14,784	431	15,215	23	1.51
1946	18,528	539	19,067	19	0.99
1947	19,904	514	20,418	17	0.83
1948	17,695	479	18,174	14	0.77
1949	16,551	358	16,909	9	0.53
1950	16,110	375	16,485	7	0.42
1951	15,593	396	15,989	10	0.62
1952	15,839	400	16,289	7	0.43
1953	16,022	394	16,416	5	0.30
1954	15,742	400	16,142	8	0.49

TABLE 17.
DEATHS DUE TO PREGNANCY AND CHILD BEARING.

Cause of Death	Age.	Social Class (R.G.).	Ante-Natal Care.				Child.	Died		Lab. in hrs.	Parity.	Gestation (weeks).	Delivered.	Death post-partum.	Period of pregnancy on booking (weeks).	
			RMP.	Hosp.	Mid-wife.	LAC.		Hosp.	Home.						Home.	Hospital.
Septicaemia ...	39	IV	Nil				Abort.	x		—	8	10/12	Abortion	7 days	Not booked	
Obstetric shock	25	III		x		x	S.B.	x		19½	3	39	N.D.	3 hrs.	10 weeks	
Haemorrhage	42	V		x		x	Alive 8lbs.	x		—	11	36	L.U.S.C.S.	5½ hrs.	27 weeks.	
Haemorrhage	31	V	x	x			S.B.	x		4	2	36	Induced ARM. ND.	10 min.	32 weeks.	
Syncope during induction of labour ...	20	III	x	x			Undelivered.	x		—	1	34	—	5½ hrs.		12 weeks.
Toxaemia ...	34	V		x			Alive 6lb. 14ozs.	x		13½	3	40	F.D.	5¼ hrs.	23 weeks.	
Obstetric—Acute yellow atrophy ...	23	IV	x	x			S.B. Twins.	x		Under 9	2	37	Associated twin del.	4 days.	23 weeks.	
Pulmonary embolism—Thrombo-phlebitis	39	III	x				Alive 6lb. 9ozs.		x	3½	3	42	Induced N.D.	19 days.	20 weeks. Nursing Home.	

TABLE 18.
DEATHS DUE TO ASSOCIATED CONDITIONS.

Cause of Death.	Age.	Social Class (R.G.).	Ante-Natal Care.			Child.	Died		Lab. in hrs.	Parity.	Gestation (weeks).	Delivered.	Death Post-Partum.	Period of Pregnancy on Booking (weeks).	
			RMP.	Hosp.	Mid-wife.		Hosp.	Home.						Home.	Hospital.
CARDIOVASCULAR. Cerebral ischaemia due to severe Anaemia	34	V	x			Twins 6lb. 9ozs. 6lb. 7ozs.	x		48	5	38	N.D. (Br.)	13 weeks.	12 weeks.	
	37	III	x	x		Alive 6lb. 15 ozs. Undelivered		x	4	2	40	F.D.	39 days		19 weeks.
	24	III	x	x		Undelivered		x	—	1	25	—	—		18 weeks.
	34	V		x		Alive 6lb. 3ozs.	x		7½	5	42	N.D.	9 days		16 weeks.
OTHER CAUSES. Acute ulcerative colitis ...	33	II	x			Undelivered	x		—	2	18	—	—	—	
Pheochromocytoma of adrenal gland. Pulmonary collapse	32	V	x		x	Alive 4lb. 13ozs.	x		—	6	37	LSCS.	4½ hrs.	28 weeks.	
Myasthenia gravis. Parturition ...	26	V		x		Prem. foetal malformation. Lived 2 hrs.	x		9	4	35	N.D.	14 hrs.		24 weeks.

TABLE 19.
STILLBIRTHS—PARITY.

PARITY OF MOTHER	No.	Per cent. of the Total.
Primigravida	136	33·83
2nd pregnancy	64	15·92
3rd „	61	15·17
4th „	47	11·69
5th „	26	6·46
6th „	25	6·21
7th „	16	3·98
8th „	5	25 6·21
9th „	5	
10th „	6	
11th „	4	
12th „	1	
13th „	1	0·49
14th „	3	
No record	2	
TOTAL	402	

TABLE 20.
STILLBIRTHS—DELIVERY OF CASES.

	No.	Per cent. of the Total.
Walton Hospital	42	10·4
Sefton General Hospital	77	19·15
Mill Road Maternity Hospital	104	26·11
Liverpool Maternity Hospital	59	14·47
Broadgreen Hospital	51	12·7
TOTALS	333	82·83
Own home	63	15·69
Nursing home	4	0·99
Ambulance	2	0·49
TOTALS	69	17·17
COMBINED TOTALS	402	100

TABLE 21.

STILLBIRTHS—ANTE-NATAL CARE.

	Hospital, Nursing Home & Ambulance Deliveries—339	Domiciliary Deliveries— 63	Total—402	
Hospital & General Practitioner ...	148	2	150	37.3%
Hospital, Clinic & General Practitioner.	14	—	14	3.5%
Hospital	71	—	71	17.6%
Hospital & Clinic	27	—	27	6.7%
Consultant & General Practitioner ...	5	—	5	1.2%
Hospital & Midwife	6	5	11	2.7%
Hospital, & Midwife & General Practitioner	2	2	4	0.99%
General Practitioner	28	—	28	6.9%
General Practitioner & Midwife ...	14	27	41	10.2%
General Practitioner, Clinic & Midwife.	1	3	4	0.99%
Clinic	12	—	12	2.9%
Clinic & General Practitioner ...	3	—	3	0.74%
Clinic & Midwife	3	21	24	5.9%
Nil	3	3	6	1.5%
No data	2	—	2	0.49%

TABLE 22.

STILLBIRTHS—RHESUS FACTOR.

	Domiciliary Deliveries—63		Hospital, Nursing Homes & Ambulance Deliveries—339		Total—402	
Rhesus positive	25	39.7%	232	68.1%	257	63.9%
Rhesus negative	7	11.1%	55	16.2%	62	15.4%
Rhesus negative with antibodies	2	3.17%	20	5.9%	22	5.2%
Not taken ...	27	42.8%	—	—	27	6.7%
No data	2	3.17%	32	9.7%	34	8.4%

TABLE 23.

PERIOD OF PREGNANCY AT WHICH STILLBIRTH OCCURRED.

28-30 weeks ...	55	11.16%
31-35 „ ...	83	20.64%
36-40 „ ...	247	61.44%
Over 40 „ ...	17	4.22%

TABLE 24.
HOSPITAL DELIVERIES—333.

Emergency admissions	...	87	...	26.1%
Booked cases	...	243	...	73%
No data	...	3	...	0.89%
<hr/>				
333				

STAGE OF PREGNANCY WHEN BOOKING FOR HOSPITAL.

Before 20th week	...	137	...	56.3%
20-24th week	...	42	...	17.2%
24-28th "	...	26	...	10.7%
28-32nd "	...	20	...	8.6%
32-36th "	...	14	...	5.7%
36-40th "	...	4	...	1.6%
<hr/>				
243				

TABLE 25.

DOMICILIARY DELIVERIES

Emergency for midwife—no arrangements made for delivery...	3
Emergency for midwife—hospital booked	3
Booked midwife—born before arrival	8
Hospital delivery advised by—	
(a) General practitioners, but refused	3
(b) Obstetricians, but refused	2

TABLE 26.

CAUSES OF STILLBIRTHS.

	Hospital Deliveries.	Domiciliary Deliveries.	Total.
Pre-eclamptic toxæmia	24	2	26 = 6.4%
Essential hypertension	8	—	8 = 1.9%
<i>Ante-partum Haemorrhage.</i>			
Toxic A.P.H.	29	—	29 = 7.4%
Non-toxic A.P.H.	40	3	43 = 10.7%
Placenta prævia	6	—	6 = 1.5%
<i>Foetal Malformation.</i>			
Anencephaly	34	6	40 = 9.9%
Multiple malformation	26	3	29 = 7.4%
Hydrocephaly	11	—	11 = 2.7%
Meningocele	1	—	1 = 0.25%
<i>Conditions Associated with Cord and Placenta</i>			
Prolapsed cord	11	2	13 = 3.2%
Cord round neck (asphyxia)	13	5	18 = 4.5%
Abnormalities of cord	1	3	4 = 0.99%
Abnormalities of placenta	2	—	2 = 0.49%
Placental insufficiency	5	—	5 = 1.2%

TABLE 26 (continued)

	Hospital Deliveries	Domiciliary Deliveries	Total
Malpresentation	9	6	15 = 3.7%
Obstructed labour	6	4	10 = 2.4%
Precipitate labour	1	—	1 = 0.25%
Cranial haemorrhage	2	1	3 = 0.89%
Post maturity	9	—	9 = 2.2%
Craniotomy	2	—	2 = 0.49%
Atelectasis	1	—	1 = 0.25%
Died during labour, no reason	5	—	5 = 1.2%
Prematurity	7	—	7 = 1.7%
Intra uterine death, cause unknown	52	21	73 = 18.1%
Intra uterine death, 1st twin	1	—	1 = 0.25%
2nd triplet	1	—	1 = 0.25%
Intra uterine death, 2nd twin Papyraceous	1	—	1 = 0.25%
Intra uterine death, 2nd twin	1	—	1 = 0.25%
Rhesus incompatibility	20	2	22 = 5.2%
Inattention at birth B.B.A.	0	5	5 = 1.2%
<i>Maternal Causes</i>			
Mitral stenosis	1 (Maternal Death)	—	1 = 0.25%
Acute yellow atrophy	1 (Maternal Death)	—	1 = 0.25%
Peripheral circulatory failure	1 (Maternal Death)	—	1 = 0.25%
Diabetes	2	—	2 = 0.5%
No record	3	—	3 = 0.89%

TABLE 27.

ASSOCIATED MATERNAL CONDITIONS NOT DIRECT CAUSE OF STILLBIRTH

Pulmonary tuberculosis	8
Pyelitis	6
Anaemia	28
Poor mentality	1
Debility	4
Thrombophlebitis	2
Nervous breakdown	1
Rheumatoid arthritis	1
Asthma	2
Mitral stenosis	2
" Cardiac " non specified	2
Epilepsy	1
Nephritis	1
Infective hepatitis	1
Bicornuate uterus	1
Fibroids	1
TOTAL	62 = 15.4%

TABLE 28.

NUMBER OF CASES OF CERTAIN INFECTIOUS DISEASES REPORTED DURING 1954.

	January	February	March	April	May	June	July	August	September	October	November	December	TOTALS
Scarlet Fever ...	77	88	99	68	72	77	62	39	51	63	82	82	860
Measles and German Measles ...	127	158	402	490	548	906	1119	914	644	852	1276	1193	8,625
Diphtheria ...	3	—	—	—	—	—	—	—	—	—	—	3	
Cerebro-spinal Fever	3	2	7	5	11	5	3	8	4	5	3	2	5
Poliomyelitis													
Paralytic ...	1	—	—	—	1	2	3	2	4	3	6	4	2
Non-paralytic ...	—	—	—	—	—	—	1	6	—	2	—	—	
Pneumonia & Influenzal Pneumonia	60	54	51	38	44	31	33	24	37	43	37	70	525
Dysentery ...	5	29	58	45	55	47	55	45	25	41	56	33	495
Whooping Cough ...	96	79	109	98	179	143	172	194	243	169	219	232	1,935
Food Poisoning ...	11	1	12	5	4	5	86	7	19	70	38	10	265

TABLE 29.

NUMBER OF NEW CASES OF TUBERCULOSIS FOR 1954.

Age Periods	Under 5 yrs.	5-14 yrs.	15-24 yrs.	25-44 yrs.	45-64 yrs.	65 yrs. & over	Total	Total Respiratory
Respiratory—								1,135
Males ...	20	58	83	214	201	41	617	
Females ...	26	56	189	188	49	10	518	
Meninges and C.N.S.								Total Non-respirator
Males ...	2	1	1	3	1	—	8	
Females ...	7	5	3	—	—	—	15	
Other Forms—								147
Males ...	10	15	14	19	8	1	67	
Females ...	3	7	20	17	7	3	57	

TABLE 30.

DIAGNOSIS	RESPIRATORY			NON-RESPIRATORY			TOTAL			GRAND TOTAL
	Adults.		Children	Adults.		Children	Adults.		Children.	
	M.	F.		M.	F.		M.	F.		
NEW CASES examined during the year (excluding contacts): (Definitely Tuberculous)	528	421	185	44	44	45	572	465	230	1,267
CONTACTS examined during the year :										
(Definitely tuberculous ...	35	42	38	—	—	—	35	42	38	115
(Diagnosis not completed ...	62	58	176	—	—	—	62	58	176	296
(Non-tuberculous ...	329	694	1,960	—	—	—	329	694	1,960	2,893
CASES written off the Dispensary Register as Recovered ...	71	69	24	6	15	10	77	84	34	195
NUMBER OF CASES on Dispensary Register on Dec. 31st 1954 :—										
(Definitely tuberculous ...	3,771	3,640	969	315	344	353	4,086	3,984	1,316	9,386
(Diagnosis not completed ...	—	—	—	—	—	—	24	12	23	59
Number of attendances of patients at the dispensaries during the year 1954 ...			45,306	Number of patients under medical treatment at home on 31st December, 1954...						634
Number of visits paid by the Tuberculosis Medical Officer to the homes of patients during 1954 ...			2,308	Number of T.B. "plus" cases on Dispensary Register on 31st December, 1954... ..						3,774
Total number of cases vaccinated with B.C.G. during 1954 :—				Total number of visits paid to the homes of patients by Tuberculosis Visitors during 1954						21,295
Children			1,556							
Others			31							

TABLE 31.

DISEASE.	Reasons for non-notification.						
	No. of Deaths.	No. of cases not notified before death.	Diagnosis made at a post-mortem examination. (Includes Coroner's Cases.)	Diagnosis delayed owing to clinical difficulties.	Doctor thought case had been notified by another Practitioner.	Notification forgotten.	Patient died before notification could be effected.
Respiratory ...	232	12	7	—	—	—	1
Non-Respiratory ...	12	3	2	—	—	—	1

TABLE 32.
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.
1939 ...	317	0.38	99	0.12	0.09
1940 ...	274	0.36	122	0.16	0.11
1941 ...	305	0.44	147	0.21	0.13
1942 ...	348	0.52	124	0.18	0.11
1943 ...	335	0.51	103	0.15	0.11
1944 ...	250	0.37	82	0.12	0.10
1945 ...	248	0.36	96	0.14	0.10
1946 ...	237	0.32	79	0.10	0.08
1947 ...	234	0.31	85	0.11	0.09
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

TABLE 33.

AGE PERIODS OF DEATHS FROM TUBERCULOSIS DURING 1954.

Age Periods.	RESPIRATORY		MENINGES AND C.N.S.		OTHER FORMS	
	Males.	Females.	Males.	Females	Males.	Females.
0—	—	1	—	—	2	—
1—	—	—	—	2	—	—
5—	—	—	—	2	—	—
10—	—	—	—	—	—	—
15—	2	3	—	—	—	—
20—	4	11	1	—	—	1
25—	26	25	—	—	—	—
35—	17	16	1	—	1	—
45—	36	11	—	1	—	—
55—	40	6	—	—	1	1
65—	30	4	—	—	—	—
TOTALS ...	155	77	2	4	4	2

TABLE 34.

Residential Accommodation.

The total accommodation available for use on 31st December, 1954, was as follows:—

	<i>Beds</i>
Westminster House ...	907
New Grafton House ...	88
Moreno House ...	36
Lismore ...	36
New Parkfield House ...	27
Park House ...	20
Brookfield ...	19
Beechley ...	43
Aigburth House ...	52
Holt House ...	57
	<u>1,285</u>

TABLE 35.
RESIDENTIAL ESTABLISHMENTS.
STATEMENT OF ADMISSIONS, DISCHARGES AND DEATHS.

Establishment	Remaining 31/12/53	Admitted	Discharged	Died	Remaining 31/12/54
Westminster House ...	887	512	420	110	869
New Grafton House ...	87	33	35	1	84
Moreno House ...	34	10	7	1	36
Lismore ...	33	13	9	2	35
New Parkfield House	26	11	11	—	26
Park House ...	19	7	8	—	18
Brookfield ...	19	7	10	—	16
Beechley ...	37	25	22	1	39
Aigburth House ...	48	28	24	3	49
Holt House ...	52	28	26	1	53
TOTAL ...	1,242	674	572	119	1,225

TABLE 36.

AGED PERSONS MAINTAINED IN ESTABLISHMENTS PROVIDED BY OTHER LOCAL
AUTHORITIES AND BY VOLUNTARY ORGANISATIONS.

STATEMENT OF ADMISSIONS, DISCHARGES AND DEATHS.

Authority or Organisation	Remaining 31/12/53	Admitted	Discharged	Died	Remaining 31/12/54
War Memorial Home ...	23	6	9	1	19
Union Army Home, Liverpool	16	5	4	3	14
Union Army Home, Bootle ...	11	1	—	2	10
Union Army Home, Penketh	1	1	—	—	2
Union Army Home, Wicksted	—	1	—	—	1
Quaker Home for the Aged, Liverpool ...	9	—	—	—	9
Union Army Home, Bootle ...	3	—	—	1	2
Union Army Home, Newcastle	1	—	1	—	—
Home for Aged Jews, Liverpool...	20	2	4	1	17
Home of the Good Shepherd, Liverpool ...	8	—	—	—	8
"Dryland", Formby ...	1	2	1	—	2
St. Cross Home, Portmadoc ...	2	—	1	—	1
W.S. "St. Michael's Mount" Liverpool ...	5	6	2	—	9
2 Croxteth Road, Liverpool ...	8	1	2	1	6
(Personal Service Society)	—	12	1	—	11
4 Sefton Drive, Liverpool ...	—	—	—	—	—
(Personal Service Society)	1	—	1	—	—
Herode House, Harrogate ...	5	2	3	1	3
34th Legion Home, Ripon ...	—	—	—	—	—
"Sandale," Linnet Lane, Liver- pool ...	1	2	—	—	3
Protestant Eventide Home, Wakefield ...	—	1	—	—	1
Knill Bethesda Home ...	—	1	—	—	1
Stol Corporation ...	1	—	—	—	1
Ordon Corporation ...	1	—	—	—	1
Bournemouth Corporation ...	1	—	—	—	1
Shipport Corporation ...	1	—	1	—	—
Wt Ham Corporation ...	—	1	—	—	1
Gberland County Council ...	1	—	—	—	1
Wtshire County Council ...	1	—	—	—	1
Gnorgan County Council ...	—	1	—	—	1
Wtsey County Council ...	1	—	—	—	1
Stfordshire County Council ...	1	—	—	—	1
Wtckshire County Council ...	—	1	—	—	1
TOTALS ...	123	46	30	10	129

TABLE 37.

TEMPORARY ACCOMMODATION PROVIDED UNDER SECTION 21 (1) (b)
OF THE NATIONAL ASSISTANCE ACT.

Establishment	Remaining 31/12/53	Admitted	Discharged	Remaining 31/12/54
Lower Breck Road	60	898	916	42
St. Hilda's Hostel	—	4	—	4
TOTALS	60	902	916	46

TABLE 38.

Welfare Visitors.

The following Table includes details of some of the work of the Welfare Visitors and the Property Officer during the year.

Number of personal applications for advice and help ...	431
Number of visits paid (including 99 visits to handicapped persons)	2,167
Number of re-visits (including 3 re visits to handicapped persons)	6,103
Number of persons admitted to :—	
(a) residential accommodation	443
(b) hospital	75
Number of visits in connection with the protection of the property of persons admitted to hospital etc., and the effects of deceased persons with no known relatives ...	1,374
In addition, requests for assistance, either by letter or telephone, during the year numbered	1,669

TABLE 39.

The following table shows the number of registered blind persons in Liverpool:—

Age				Males	Females	Total
0	...	...	...	—	—	—
1	...	...	...	—	3	3
2	...	...	...	2	4	6
3	...	...	...	2	2	4
4	...	...	...	3	6	9
5—10	...	...	...	9	5	14
11—15	...	...	...	5	9	14
16—20	...	...	...	11	14	25
21—30	...	...	...	39	23	62
31—39	...	...	...	55	39	94
40—49	...	...	...	75	79	154
50—59	...	...	...	138	104	242
60—64	...	...	...	78	76	154
65—69	...	...	...	84	115	199
70 and over	...	...	...	222	523	745
TOTALS				723	1,002	1,725

TABLE 40.

The following table shows the number of registered partially-sighted persons in Liverpool:—

Age Groups				Males	Females	Total
0—1	...	...	...	—	—	—
2—4	...	...	...	1	—	1
5—15	...	...	...	41	26	67
16—20	...	...	...	5	11	16
21—49	...	...	...	11	6	17
50—64	...	...	...	9	20	29
65 and over	...	...	...	26	75	101
TOTALS				93	138	231

TABLE 41.

FOLLOW-UP OF REGISTERED BLIND AND
PARTIALLY SIGHTED PERSONS

(i) Number of cases registered during the year in respect of which para. 7 (c) of Form B.D.8 recommends :—	Cause of Disability			
	Cataract	Glaucoma	Retrolental Fibroplasia	Other
(a) No treatment	34	21	3	73
(b) Treatment (medical, surgical or optical)	25	22	—	29
(ii) Number of cases at (i) (b) above which on follow-up action have received treatment	10	21	—	23

TABLE 42.

HANDICAPPED PERSONS MAINTAINED IN ESTABLISHMENTS
PROVIDED BY VOLUNTARY ORGANISATIONS.

STATEMENT OF ADMISSIONS, DISCHARGES AND DEATHS.

Organisations	Remaining 31.12.53	Admitted	Discharged	Died	Remaining 31.12.54
Catholic Blind Institute	18	1	1	1	17
Herefordshire County Assn. for the Blind	1	—	—	—	1
Jewish Blind Home, Surrey.....	2	—	—	—	2
Manchester & Salford Blind Aid Society	1	—	—	—	1
Royal National Institute for the Blind, Hoyle	1	—	—	—	1
David Lewis Epileptic Colony...	5	—	1	—	4
Langho Epileptic Colony	24	7	3	5	23
Maghull Homes for Epileptics...	45	5	8	—	42
St. Elizabeth's Home for Epileptics, Much Hadham ...	2	—	—	—	2
Cotebrook Home for Cripples...	1	—	—	—	1
Hostels for Invalid Women, London	—	1	—	—	1
TOTALS	100	14	13	6	95

TABLE 43.

County Borough of Liverpool, 1954.

Food Poisoning.

1st Quarter	2nd Quarter.	3rd Quarter.	4th Quarter.	TOTAL
24	14	112	118	268

Outbreaks due to Identified Agents.

Outbreaks due to :—	Total Outbreaks.	Total Cases.
(a) Chemical poisons	—	—
(b) Salmonella organisms	—	—
(c) Staphylococci (inc. toxin)	1	78
(d) C.I. Botulinum	—	—
(e) Other bacteria	—	—
	1	78

Outbreaks due to Undiscovered Cause.

Total outbreaks—nil.

Total cases—nil.

Single Cases.

Agent identified.	Unknown cause.	Total cases.
180	10	190

TABLE 44.

APPENDIX D (ii)

FOOD POISONING OUTBREAK (Summary of details).

1. Food causing outbreak :

Roast beef.

Agent causing outbreak :

Staphylococcus Pyogenes.

2. Cases forming outbreak which occurred 8th-9th July, 1954.

Total notified	...	...	78
Total ascertained	...	...	78
Fatal	...	...	Nil

3. Clinical features :

Main symptoms : Diarrhoea and vomiting.

Severity of illness : Mild.

Duration of illness : A few hours.

4. Results of Laboratory Investigations :

Roast beef heavily infected with Staphylococcal Pyogenes.

5. Origin and preparation of food causing illness :

Kosher meat prepared and cooked in school canteen.

Allowed to cool in corridor unprotected from dust and passers-by.

6. Place at which food was consumed :

Hebrew School, Hope Place, Liverpool, 1.

TABLE 45.
 VENEREAL DISEASES.

	Male	Female	Con- genital	Total
No. of cases written to	1,033	841	137	2,011
No. of letters despatched	1,142	1,327	156	2,625
No. of cases reporting after receipt of letter...	479	543	114	1,136
No. of letters returned—Dead Letter Office ...	69	31	5	105
No. of cases traced and transferred	8	9	4	21

TABLE 46.
 VENEREAL DISEASES

	Male	Female	Con- genital	Total
No. of cases visited	487	458	51	996
No. of visits made	1,246	1,407	174	2,827
No. of cases attending following visits	266	244	36	546
No. of cases promising to attend but failing to do so	43	54	6	103
No. of cases removed, or not known at address given	85	63	3	151
No. of cases not contacted, no access, away from home, etc.	71	43	2	116
No. of cases who refused to re-attend	13	25	—	38
No. of cases removed to other districts, and trans. for follow-up	7	28	4	39
No. of cases deceased	2	1	—	3

TABLE 47.

SUMMARY OF PROSECUTIONS.

Act.	Section.	No. of Informations.	Penalties.	Costs.	Magistrates Orders.
			£ s. d.	£ s. d.	
Public Health Act, 1936 ...	75	18	10 15 0	Nil	—
Public Health Act, 1936 ...	94	85	85 10 0	0 4 0	51
Public Health Act, 1936 ...	95	4	7 0 0	Nil	—
Public Health Act, 1936 ...	154	4	3 0 0	Nil	—
Public Health Act, 1936 ...	269	1	2 0 0	Nil	—
Public Health Act, 1936 ...	290	34	41 10 0	Nil	—
Liverpool Corporation Act, 1921	468	6	9 0 0	Nil	—
Shops Act, 1950 (Evening Closing)	—	2	5 0 0	Nil	—
Shops Act, 1950 (Sunday Trading)	—	1	1 0 0	Nil	—
Food and Drugs Act, 1938 ...	13	5	—	Nil	—
Food and Drugs Act, 1938 (Bye-laws Nos. 5(a) to 7(e))	15	2	—	Nil	—
TOTALS ...	—	162	£164 15 0	£0 4 0	51

Cases withdrawn ... 11
 Cases dismissed ... 8
 Summonses not served ... 1

MISCELLANEOUS STATISTICS.

Area of City ...	27,818 acres
No. of inhabited houses at 31st December, 1954...	204,486
No. of structurally separate dwellings occupied (1951 Census)...	213,600
Rateable Value :	
1st April, 1954 ...	£6,918,414
31st December, 1954 ...	£7,046,533
Sum represented by a Penny Rate :	
Actual 1953/54 ...	£27,488
Estimate 1954/55 ...	£28,182

TABLE 48.

PARTICULARS OF INSPECTIONS.

APPROXIMATE NUMBER OF SHOPS IN THE CITY—16,788.

Inspection.				Contraventions.		
					Reported.	Remedied.
Mail shops visited	...	...	5,287			
Mail shops re-visited	...	...	6,382			
Mail warehouses visited	...	...	—	
Mail warehouses re-visited	...	...	—	
Assistants employed.						
Young Persons—Male	...	...	189	Shops Act 1950.		
Young Persons—Female	...	...	294	Half-holiday closing	604	604
Adults—Male	...	...	1,016	Mixed trades notice	68	68
Adults—Female	...	...	1,804	Closing notice		
shops visited	...	...	161	(Alt. W.H.H.)	9	9
shops re-visited	...	...	78	Assistants' Half-holiday	42	42
				Seats for female assistants	8	8
Wholesale shops visited	...	...	35	Assistants' half-holiday		
Wholesale shops re-visited	...	...	52	notice	206	204
Wholesale warehouses visited	...	...	23	Evening closing	37	37
Wholesale warehouses re-visited	...	...	11	Mixed trades notice	88	88
Young persons employed.				Hours of employment of		
Male	...	...	20	young persons	—	—
Female	...	...	7	Schedule...	—	—
Adults employed.				Record of hours of em-		
Male	...	...	103	ployment of young		
Female	...	...	43	persons	57	57
				Abstract of provisions of		
Half-holiday Closing.				1950 Act (Forms H		
to shops after 1 p.m.	...	...	19,879	and J) ...	58	58
				Notices as to seats for		
Evening Closing.				female assistants		
to shops—				(Form K) ...	211	209
At 7 p.m.	...	...	5,685	Other notices (A-Z)	—	—
At 8 p.m.	...	...	6,647	Ventilation	1	1
At 9 p.m.	...	...	5,131	Temperature	7	2
At 9.30 p.m.	...	...	7,155	Sanitary conveniences	468	384
At 10 p.m.	...	...	—	Lighting	7	7
				Washing facilities	50	33
Sunday Closing.				Facilities for taking meals	10	10
to shops on Sunday	...	...	7,840	Closing of shops on		
				Sunday	36	36
Public Health Acts.				Mixed Shops' Notice		
Nuisances reported	...	...	606	(Form I) ...	330	330
Nuisances abated	...	...	546	Record of Sunday		
Nuisances outstanding	...	...	60	employment	164	164
				TOTALS	2,461	2,351

TABLE 32.

PARTICULARS OF INVESTIGATION.

APPROXIMATE NUMBER OF AIDS IN THE CITY—1932.

Investigation		Contributions	
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TABLE 49.
POPULATION BY WARDS, 1951 AND 1931.

Administrative Area	Acreage (Land and Inland Water)	POPULATION					PRIVATE HOUSEHOLDS AND DWELLINGS, 1951					
		1931	1951				Private Households	Population in Private Households	Structurally Separate Dwellings Occupied	Rooms Occupied	Density of Occupation	
		Persons	Persons	Males	Females	Persons per acre					Persons per Room	Percentage of persons at more than 2 per room
LIVERPOOL, City of, *C.B. and *C.P. ...	27,356	856,072	788,659	369,523	419,136	28.8	217,685	765,260	195,981	931,394	0.82	6.0
Wards:—												
Abercromby ...	268	23,427	22,264	10,252	12,012	83.1	6,726	20,489	4,577	18,811	1.09	17.0
Aigburth ...	1,125	16,122	19,658	8,725	10,933	17.5	6,343	19,329	6,092	33,634	0.57	0.4
Allerton ...	1,589	9,068	12,851	5,735	7,116	8.1	3,909	12,628	3,809	20,523	0.62	0.4
Anfield ...	536	24,261	23,365	10,551	12,814	43.6	6,560	21,842	6,091	30,485	0.72	1.9
Breckfield ...	175	22,273	19,137	8,907	10,230	109.4	5,615	19,137	4,805	24,472	0.78	3.7
Brunswick ...	238	22,016	13,367	6,439	6,928	56.2	3,107	12,789	2,721	10,846	1.18	17.2
Castle Street ...	78	366	124	69	55	1.6	42	119	42	160	0.74	—
Childwall ...	1,285	5,986	18,444	8,334	10,110	14.4	5,648	17,949	5,562	28,731	0.62	0.1
Croxteth ...	3,553	25,024	53,682	25,609	28,073	15.1	12,986	53,636	12,694	55,909	0.96	5.3
Dingle ...	376	35,235	28,770	13,793	14,977	76.5	7,700	28,471	7,194	31,043	0.92	8.3
Edge Hill ...	248	31,008	22,508	10,676	11,832	90.8	6,036	22,508	5,666	24,193	0.93	6.5
Everton ...	210	32,602	22,060	10,617	11,443	106.0	5,585	21,134	4,774	21,740	0.97	11.7
Exchange ...	82	3,091	1,727	868	859	21.1	423	1,572	408	1,293	1.22	20.6
Fairfield ...	506	22,630	22,294	10,245	12,049	44.1	6,889	21,988	5,270	28,204	0.78	4.1
Fazakerley ...	1,710	25,940	29,930	14,237	15,693	17.5	7,380	28,851	6,980	32,726	0.88	4.9
*Garston ...	3,099	17,646	33,116	16,089	17,027	10.7	8,409	32,858	8,150	35,324	0.93	3.3
Granby ...	185	23,419	19,613	9,114	10,499	106.0	5,916	19,283	4,975	22,616	0.85	6.7
Great George ...	236	12,995	5,521	2,868	2,653	23.4	1,249	4,227	1,038	4,563	0.93	13.2
Kensington ...	252	24,588	20,985	9,874	11,111	83.3	6,246	20,919	5,625	26,434	0.79	2.6
Kirkdale ...	317	40,389	30,611	14,745	15,866	96.6	7,744	29,186	6,783	33,538	0.87	6.5
Little Woolton ...	1,389	1,470	5,076	2,284	2,792	3.7	1,338	4,578	1,334	6,393	0.72	0.2
Low Hill ...	175	26,345	18,452	8,581	9,871	105.4	5,250	18,243	4,540	21,693	0.84	6.0
Much Woolton ...	792	5,200	9,152	4,234	4,918	11.6	2,780	8,992	2,713	13,021	0.69	1.5
Netherfield ...	129	29,257	17,246	8,142	9,104	133.7	4,408	17,030	3,872	16,872	1.01	10.7
North Scotland ...	282	21,381	12,542	6,045	6,497	44.5	3,019	12,368	2,845	10,308	1.20	19.7
Old Swan ...	1,140	35,766	39,520	18,187	21,333	34.7	10,960	37,503	10,066	49,898	0.75	2.7
Prince's Park ...	259	21,570	18,105	8,345	9,760	69.9	5,394	17,849	4,259	20,509	0.87	6.1
St. Anne's ...	213	20,944	9,082	4,479	4,603	42.6	2,090	8,454	1,866	6,767	1.25	25.2
St. Domingo ...	179	27,182	21,082	10,062	11,020	117.8	5,786	21,044	5,127	24,249	0.87	4.7
St. Peter's ...	225	5,567	2,327	1,292	1,035	10.3	541	1,936	459	1,785	1.03	12.9
Sandhills ...	611	24,031	15,214	7,698	7,516	24.9	3,535	14,289	3,190	14,591	0.98	8.7
Sefton Park East ...	490	19,885	19,893	8,764	11,129	40.6	6,090	18,529	4,979	26,599	0.70	3.3
Sefton Park West ...	839	13,226	13,736	6,000	7,736	16.4	4,498	12,990	3,980	18,869	0.69	1.8
South Scotland ...	238	21,372	11,389	5,325	6,064	47.9	2,879	11,225	2,792	8,985	1.25	20.6
Vauxhall ...	244	8,635	4,883	2,411	2,472	20.0	1,012	4,213	964	3,407	1.24	23.6
Walton ...	679	36,510	32,700	15,247	17,453	48.2	9,426	32,640	8,522	41,350	0.79	3.1
Warbreck ...	691	28,267	27,984	13,271	14,713	40.5	7,656	25,371	6,930	35,604	0.71	2.0
Wavertree ...	1,076	30,702	30,115	13,511	16,604	28.0	9,235	29,098	8,418	44,181	0.66	1.8
Wavertree West ...	308	18,881	16,872	7,868	9,004	54.8	4,986	16,866	4,537	22,158	0.76	2.2
West Derby ...	1,329	41,855	43,262	20,030	23,232	32.6	12,469	43,127	11,332	58,910	0.73	2.1

This table is taken from the Census 1951 (page 5) England and Wales, County Report for Lancashire.
* These areas have altered during the intercensal period, and substantial ward changes have occurred since.

TABLE 50.
TABLE SHOWING POPULATION, BIRTH-RATES, DEATH-RATES, INFANT AND MATERNAL MORTALITY RATES, ETC., OF A NUMBER OF THE LARGER AUTHORITIES FOR THE YEAR 1954.

Name of Authority	Birmingham	Bradford	Bristol	Cardiff	Edinburgh	Glasgow	Kingston-upon-Hall	Leeds	Leicester	Liverpool	London C. C.	Manchester	Newcastle-upon-Tyne	Nottingham	Sheffield
Registrar General's estimated population for 1954	1,117,700	286,500	444,900	248,000	469,297	1,084,700	300,000	507,200	287,300	786,100	3,322,000	699,000	286,500	311,500	503,400
*Comparability factor—															
(a) Births	0.94	1.00	0.99	0.94	—	—	0.96	0.98	0.99	0.92	0.87	0.95	0.95	0.95	0.99
(b) Deaths	1.14	0.97	0.96	1.07	—	—	1.15	1.08	1.02	1.20	0.99	1.13	1.10	1.09	1.06
Crude birth rate per 1,000 population	16.36	16.4	15.04	18.11	15.5	19.3	18.3	15.0	15.36	20.02	15.24	16.94	16.95	16.05	13.64
Birth rate as adjusted by factor	15.378	16.4	14.89	17.02	—	—	17.6	14.7	15.21	18.42	13.26	16.10	16.10	15.24	13.50
Crude death rate per 1,000 population	10.64	14.78	11.61	11.58	12.9	11.8	10.7	11.3	11.28	11.38	10.68	12.20	11.27	10.61	11.56
Death rate as adjusted by factor	12.130	14.34	11.15	12.39	—	—	12.3	12.2	11.51	13.65	10.57	13.78	12.40	11.56	12.26
Infant mortality rate per 1,000 live births	24.23	31.4	20.77	34.06	25	35	33.9	26.0	27.19	30.80	20.7	29.47	25.53	24.35	23.88
Neonatal mortality rate per 1,000 live births	16.79	20.0	15.84	21.82	19	21	19.3	17.8	17.45	20.70	15.1	20.01	18.32	14.78	15.87
Stillbirth rate per 1,000 total births	21.62	24.9	23.35	25.39	21	29	27.6	24.2	23.24	24.78	19.8	31.80	25.48	19.79	24.16
Maternal mortality rate per 1,000 total births	0.803	0.42	0.58	1.30	0.1	0.07	0.71	0.64	0.44	0.49	0.66	0.49	0.20	0.59	0.43
Tuberculosis rates per 1,000 population															
(a) Primary notifications—															
Respiratory	0.99	0.92	0.868	1.19	1.70	2.03	1.15	0.93	0.947	1.44	1.27	0.96	1.50	1.29	0.97
Non-respiratory	0.12	0.12	0.110	0.24	0.18	0.22	0.11	0.16	0.150	0.18	0.12	0.15	0.19	0.08	0.13
(b) Deaths—Respiratory	0.20	0.11	0.151	0.30	0.19	0.387	0.25	0.16	0.237	0.29	0.18	0.27	0.27	0.23	0.179
Non-respiratory	0.01	0.02	0.016	0.02	0.01	0.033	0.02	0.01	0.028	0.015	0.02	0.03	0.03	0.01	0.028
Deaths Rates per 1,000 population from—															
Cancer (all forms)	2.05	2.30	2.084	2.06	2.45	2.063	1.98	2.03	2.064	2.01	2.31	2.24	1.93	1.90	2.22
Meningococcal infections	0.00	—	0.00	0.004	0.01	0.015	0.01	0.005	0.014	0.01	0.01	0.00	—	0.01	0.01
Whooping Cough	0.01	—	—	—	0.01	0.006	0.00	—	—	0.006	0.00	0.01	0.007	—	0.01
Influenza	0.03	0.12	0.04	0.032	0.04	0.024	0.07	0.03	0.010	0.019	0.02	0.05	0.063	0.03	0.03
Measles	—	—	—	—	0.00	0.004	—	—	—	0.003	0.00	0.00	—	0.00	—
Acute Poliomyelitis and Encephalitis	*0.00	—	0.00	—	0.00	0.003	0.01	—	0.0035	—	0.00	0.00	—	—	0.00
Diarrhoea (under 2 years)	0.01	0.02	0.00	0.048	0.01	0.030	0.02	0.02	0.010	0.01	0.02	0.02	0.007	0.00	0.02
Diarrhoea (under 2 years) (per 1,000 live births)	0.71	1.30	0.15	2.67	0.96	1.57	1.28	1.05	0.680	0.57	1.28	1.01	0.41	0.2	1.46

*Not used in Scotland.

CITY OF LIVERPOOL.

TABLE 51.

Infant Mortality during the year 1954.
Net deaths from stated causes at various ages under One Year.

CAUSE OF DEATH	Under 1 day	1 to 2 days	2 to 3 days	3 to 4 days	4 to 5 days	5 to 6 days	6 to 7 days	1 to 2 weeks	2 to 3 weeks	3 to 4 weeks	Total deaths under 28 days	28 days to 2 months	2 to 3 months	3 to 4 months	4 to 5 months	5 to 6 months	6 to 7 months	7 to 8 months	8 to 9 months	9 to 10 months	10 to 11 months	11 to 12 months	Total deaths under 1 year
Tuberculosis of Respiratory System	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1
„ Meninges, etc.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
„ Intestines, etc.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
„ Other Organs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	2
Syphilis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	—	—	—	—	—	—	1	1	2	—	—	—	—	—	—	—	—	4
Meningococcal Infections	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	—	—	1	—	1	1	6
Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	2
Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chickenpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Psychosis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Meningitis (non-tubercular)	—	—	—	—	—	—	—	1	—	—	1	—	1	—	—	—	—	—	—	—	—	—	2
Influenza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	—	—	—	—	—	—	—	—	—	—	—	15	14	14	3	5	1	2	—	—	—	—	54
Bronchitis	—	—	—	—	—	—	—	—	—	—	—	4	6	3	6	2	2	—	—	—	—	—	23
Esteritis	—	—	—	—	—	—	—	—	—	—	—	5	2	—	—	1	—	—	—	—	1	—	9
Malformations	25	6	8	3	5	—	—	10	5	5	67	10	7	2	5	2	—	2	1	1	—	—	97
Injury at Birth	25	7	5	7	2	—	1	3	1	1	52	1	—	—	—	—	—	—	—	—	—	—	53
Infections of Newborn	1	4	4	9	2	1	3	6	6	5	41	—	—	—	—	—	—	—	—	—	—	—	41
Other Diseases of Early Infancy	101	19	14	4	4	4	5	5	2	—	158	—	—	—	—	—	—	—	—	—	—	—	158
Other Causes	3	1	—	—	—	—	—	—	1	2	7	9	2	6	3	2	—	—	—	1	2	—	32
Totals	155	37	31	23	13	5	9	25	15	13	326	45	33	29	19	13	3	6	2	3	5	1	485

Net Births in the year { Legitimate ... 14,895
Illegitimate ... 847

Net Deaths in the year of { Legitimate Infants 449
Illegitimate Infants 36

TABLE 52.
NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS) DURING THE YEAR 1954.

DISEASE.	NUMBER OF CASES NOTIFIED.														TOTAL DEATHS
	At all Ages.	At Ages—Years													
		Under 1	1—	2—	3—	4—	5—	10—	15—	20—	35—	45—	65—		
Acute Infective Encephalitis	2	—	—	—	—	1	1	—	—	—	—	—	—	—	
Scarlet Fever.....	860	6	20	56	100	125	472	59	11	9	1	1	—	—	
Diphtheria	6	—	—	—	1	2	1	2	—	—	—	—	—	—	
Enteric Fever (including Paratyphoid)	9	1	2	—	—	—	4	—	1	—	—	1	—	—	
Puerperal Pyrexia.....	974	—	—	—	—	—	—	—	121	772	78	3	—	—	
Pneumonia	522	59	26	26	19	18	68	11	10	54	53	113	65	85	
Cerebro-spinal Fever	58	29	7	7	1	5	4	—	—	2	1	2	—	10	
Poliomyelitis (Paralytic)	26	2	6	6	1	3	3	3	1	1	—	—	—	—	
Poliomyelitis (Non-paralytic)	9	—	—	1	—	—	4	3	—	1	—	—	—	—	
Dysentery	494	75	78	75	54	32	88	16	3	29	6	5	33	1	
Ophthalmia Neonatorum	124	124	—	—	—	—	—	—	—	—	—	—	—	—	
Erysipelas	88	—	—	—	—	1	—	1	1	10	12	41	22	—	
Malaria	42	—	—	—	—	—	—	—	—	32	10	—	—	—	
Anthrax	3	—	—	—	—	—	—	—	—	1	1	1	—	—	
Measles	8599	556	1183	1392	1413	1170	2827	40	13	4	1	—	—	3	
Whooping Cough	1933	265	277	290	322	224	526	22	2	3	1	1	—	5	
Food Poisoning.....	268	46	32	20	13	10	45	50	7	20	10	8	7	1	
TOTALS.....	14017	1163	1631	1873	1924	1591	4043	207	170	938	174	176	127	105	

DEATHS REGISTERED DURING THE YEAR 1964

CAUSES OF DEATH	SEX		AGE—BELOW																								Totals	
	Males	Females																										
			1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	Over 90			
ALL CAUSES	4667	4279	485	28	10	15	5	28	20	38	61	71	108	129	187	334	496	638	867	1056	1319	1373	1006	474	178	8946		
I.—Infectious and Parasitic Diseases	201	309	18	3	1	2	1	1	...	7	18	26	28	17	21	23	32	30	31	20	16	9	1	3	...	310		
II.—Neoplasms	875	783	...	...	...	...	...	10	4	5	9	5	14	37	46	108	148	182	229	245	243	199	107	26	9	1626
III.—Allergic, Metabolic Diseases, etc.	47	94	...	...	...	...	...	1	...	...	2	...	2	1	3	7	7	11	16	30	22	24	12	3	...	447
IV.—Diseases of the Blood	16	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	4	1	10	7	9	4	...	53
V.—Mental, and Psychoneurotic Diseases	3	50	1	1	1	11	12	9	2	53	
VI.—Diseases of Nervous System	472	618	4	5	...	1	...	2	4	4	3	5	7	15	21	27	45	37	110	135	190	233	137	65	14	1090		
VII.—Diseases of Circulatory System	1630	1480	1	...	...	1	...	1	3	6	7	12	25	28	48	99	142	215	293	392	513	552	472	236	90	3126
VIII.—Diseases of Respiratory System	702	649	79	...	...	2	...	1	...	4	3	1	3	4	12	32	61	86	110	141	201	208	146	92	34	1251
IX.—Diseases of Digestive System	152	123	12	7	2	2	...	...	...	...	...	...	...	...	...	...	11	16	15	34	32	41	40	33	5	275
X.—Diseases of Genito-urinary System	109	75	2	...	...	2	...	2	2	2	1	5	5	3	7	7	9	13	10	20	31	25	23	8	1	184
XI.—Diseases of Pregnancy	...	8	...	...	...	...	...	...	...	...	2	1	3	1	1	...	...	...	...	...	...	...	...	...	...	8
XII.—Diseases of Skin	1	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	1	3	...	37
XIII.—Diseases of Bones	9	28	2	1	...	1	1	2	3	7	10	3	2	1	37
XIV.—Congenital Malformations	59	64	97	2	1	2	2	2	5	1	2	2	3	2	1	122	
XV.—Diseases of Early Infancy	163	90	252	252	
XVI.—Senility and Ill-defined Diseases	25	41	1	66	
XVII.—Deaths from Violence	264	169	16	9	4	3	3	30	5	7	14	10	12	11	16	15	24	19	23	21	35	41	31	18	9	354		
Class 1.—Tuberculosis of Respiratory System	155	77	1	...	...	1	1	...	...	5	15	25	36	15	18	18	29	23	23	14	12	6	...	2	...	232
Tuberculosis of Meninges, etc.	2	4	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	6
Tuberculosis of Intestines, etc.	4	2	2	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	...	...	...	...	...	...	6
Tuberculosis of Other Organs	21	4	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	4	6	4	3	2	1	...	...	25
Syphilis	
Typhoid Fever	...	1	1	
Dysentery	
Diphtheria	
Whooping Cough	3	2	4	1	5	
Hemorrhagic Infections	1	9	6	1	1	1	1	10	
Acute Polymyelitis	
Measles	3	...	2	1	3	
Other Infectious Diseases	12	10	3	2	2	1	1	1	...	2	2	1	2	1	2	1	1	22	
Class 2.—Malignant Neoplasm of Bun. Cavity	30	16	1	1	...	1	2	3	7	4	10	8	5	4	2	...	46	
Malignant Neoplasm of Digestive Syst.	295	341	...	...	...	...	...	...	...	...	...	...	4	7	16	28	55	84	97	117	99	58	11	5	...	636
Malignant Neoplasm of Respiratory Syst.	326	37	1	2	6	12	28	44	69	63	69	44	29	14	1	...	283	
Malignant Neoplasm of Breast	2	119	...	...	...	...	...	...	...	...	...	...	3	7	10	12	14	17	12	14	9	4	1	...	...	121
Malignant Neoplasm of Female G. Organs	...	80	...	...	...	...	...	...	...	...	...	...	3	16	3	16	30	12	17	12	6	...	...	...	...	80
Malignant Neoplasm of Other Organs	167	85	...	...	...	...	...	6	3	4	4	1	3	6	4	15	24	21	36	37	36	31	15	5	1	252
Leukemia	31	20	...	...	...	1	...	4	...	1	3	2	...	4	1	5	1	4	7	6	5	5	1	1	...	51
Benign Neoplasms	24	22	...	...	...	...	...	1	...	...	2	2	3	2	11	7	3	8	3	2	1	1	...	...	...	46
Class 3.—Thyroiditis	3	7	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	3	2	2	...	...	...	30
Diabetes mellitus	15	61	...	...	...	...	...	1	...	...	...	...	...	...	2	...	6	7	18	11	19	9	3	...	...	76
Other Allergic diseases, etc.	29	26	...	...	...	...	...	...	...	2	...	...	2	1	1	6	6	5	8	9	9	3	3	...	...	55
Class 4.—Anemias	11	22	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	2	1	7	6	9	4	...	...	33
Other Diseases of Blood	5	5	...	...	...	...	...	1	...	...	...	1	...	...	...	1	1	2	...	3	1	...	...	...	...	10
Class 5.—Psychoses and Psychoneurotic Disorders	3	50	1	1	1	...	2	6	8	11	12	9	2	...	53	
Class 6.—Vascular Lesions of Central Nervous Syst.	429	362	1	...	1	3	2	10	14	22	36	51	105	126	187	222	134	63	14	...	991	
Meningitis	3	4	2	3	1	1	7	
Epilepsy	10	15	1	2	1	2	1	1	3	5	2	2	1	1	1	1	...	1	25	
Otitis Media and Mastoiditis	2	2	1	1	...	1	1	...	1	...	8	5	4	8	6	11	2	2	4	
Other Diseases of Nervous System	28	35	1	2	1	1	2	4	1	2	3	8	5	4	8	6	11	2	2	63	
Class 7.—Rheumatic Fever	8	7	1	1	...	2	2	3	2	...	1	1	1	1	15	
Chronic Rheumatic Heart Disease	27	111	4	2	17	11	19	22	19	14	20	19	7	1	3	1	2	...	168	
Arteriosclerosis, etc. Heart Disease	1191	1066	1	9	20	37	142	187	270	371	424	373	181	73	...	2347	
Other Diseases of Heart	130	119	1	...	...	...	...	...	...	1	...	2	3	8	11	20	21	41	45	42	35	14	3	...	...	249
Hypertensive Disease	234	231	...	...	...	...	...	...	2	...	5	4	3	9	19	35	60	52	83	75	56	28	12	...	...	445
Other Diseases of Circulatory System	30	22	...	...	...	...	...	...	...	...	1	1	2	3	6	3	5	10	6	10	3	2	...	...	...	52
Class 8.—Influenza	6	9	1	2	1	1	1	1	3	3	2	15	
Bronchopneumonia	192	247	48	4	1	2	1	2	10	8	19	30	37	68	83	62	44	20	...	439	
Pneumonia	41	29	6	2	1	...	...	...	1	...	...	1	3	3	1	7	3	5	7	13	9	6	1	...	...	74
Bronchitis	456	228	23	1	1	2	...	...	...	...	...	...	5	12	36	55	66	102	107	146	75	45	13	...	...	600
Pharynx	5	5	...	...	...	...	...	...	...	...	...	...	1	1	1	1	1	1	1	1	2	...	...	...	...	7
Other Respiratory Diseases	42	34	2	2	2	1	2	6	8	7	8	13	9	10	3	2	1	...	56	
Class 9.—Ulcer of Stomach	69	23	3	2	2	6	5	6	14	13	19	15	6	1	...	92	
Gastritis	1	1	1	1	2	
Appendicitis	10	5	...	...	...	1	...	...	...	2	...	2	1	1	...	...	2	1	1	2	1	1	...	...	...	15
Intestinal Obstruction and Hernia	23	28	1	1	2	1	2	1	2	4	5	7	12	11	2	81	
Gastro-Enteritis	14	13	9	...	...	...	...	...	...	1	1	1	1	1	...	...	1	2	1	1	4	5	1	...	...	27
Cirrhosis of Liver	11	9	1	2	1	1	3	5	3	20	
Cholelithiasis	5	16	2	1	1	3	5	3	21	
Other Diseases of Digestive System	19	28	2	1	3	3	3	2	9	4	6	6	5	1	2	...	47	
Class 10.—Acute and Chronic Nephritis	28	45	1	...	2	2	1	1	5	5	2	5	4	7	6	3	10	11	4	2	1	1	...	73	
Other Diseases of Kidneys	21	19	2	...	...	...	...	...	...	1	...	...	...	...	...	3	2									

CITY OF LIVERPOOL

DEATHS REGISTERED DURING THE YEAR 1901

SEX		CAUSE OF DEATH	
MALE	FEMALE	MALE	FEMALE
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20
21	21	21	21
22	22	22	22
23	23	23	23
24	24	24	24
25	25	25	25
26	26	26	26
27	27	27	27
28	28	28	28
29	29	29	29
30	30	30	30
31	31	31	31
32	32	32	32
33	33	33	33
34	34	34	34
35	35	35	35
36	36	36	36
37	37	37	37
38	38	38	38
39	39	39	39
40	40	40	40
41	41	41	41
42	42	42	42
43	43	43	43
44	44	44	44
45	45	45	45
46	46	46	46
47	47	47	47
48	48	48	48
49	49	49	49
50	50	50	50
51	51	51	51
52	52	52	52
53	53	53	53
54	54	54	54
55	55	55	55
56	56	56	56
57	57	57	57
58	58	58	58
59	59	59	59
60	60	60	60
61	61	61	61
62	62	62	62
63	63	63	63
64	64	64	64
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