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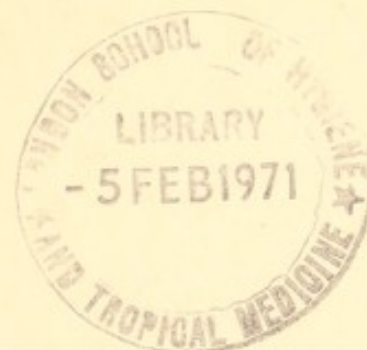
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REPORT

ON THE HEALTH OF THE

CITY OF LIVERPOOL

FOR

1969

BY THE

MEDICAL OFFICER OF HEALTH




REPORT
ON THE HEALTH OF THE
CITY OF LIVERPOOL

FOR THE
YEAR
1969

BY

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

Medical Officer of Health



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PREFACE

I have the honour to present my 18th Annual Report as Medical Officer of Health of the City of Liverpool and the 122nd report in the series.

During 1969 the birth rate in Liverpool continued to fall and reached a figure of 16.6 per 1,000 of the population as compared with 17.2 in 1968 and 17.8 in 1967. This continued trend has meant a reduction in the demands on domiciliary maternity services.

At the same time the percentage of illegitimate live births has continued to increase to a figure of 11.4 per cent of all live births as compared with 11.1 per cent in the previous year. This high figure is characteristic of most large urban authorities although the figure for England and Wales has barely changed over the last three years at 8.4, 8.5 and 8.4 respectively.

The number of deaths increased to 8,317 as compared with 7,958 in 1968 giving a rate of 12.3 per 1,000 of the population, higher than in any of the previous three years. The increase is mainly attributable to the large numbers of respiratory deaths, mostly in old people, during the winter months.

The infant mortality rate at 20.1 was the lowest ever recorded in Liverpool. However, it still compares unfavourably with that for England and Wales of 18.1 per 1,000 live births. The rate for illegitimate births was 19.4 a considerable reduction on the previous year when it was 39.7.

The number of domiciliary births at 877 was again considerably less than in 1968 when it was 1,121. The figure for 1969 is only 7.8 per cent of all births. In 1962 this percentage was 28.9. Whilst there has been a considerable drop in the number of domiciliary deliveries with a corresponding increase in institutional deliveries, it must be remembered that, at the same time, the number of patients discharged from hospital between the second and seventh days after confinement is increasing very rapidly. In 1969 these numbered 7,517 as compared with 5,157 in the previous year.

Co-operation between the domiciliary and hospital midwifery services has continued. During the past year, domiciliary midwives took blood samples for the Guthrie test from all babies born in Liverpool between the sixth and fourteenth day of life. The vast majority of these children were, of course, born in hospital. In addition domiciliary midwives gave valuable assistance with additional visits arising out of minor outbreaks of infection in hospitals, thus enabling hospitals to close the wards quickly, so that disruption of their services was reduced to a minimum.

Domiciliary midwives also gave a valuable service to patients booked for hospital by visits, in the ante-natal period, to assess home conditions for early discharge.

In March, 1969, a new family health clinic in Hartington Road was opened. Its activities comprise child health, ante-natal, mothercraft, chiropody, family planning and home help services for the area.

Health visitors continued in their work with the care of children, paying particular attention to children who were born "At Risk" and endeavouring to reassure parents and educate them in the acceptance and handling of a handicapped child. Visits to the elderly and problem families continued.

At the end of the year nine group practices in Liverpool had health visitors attached to them on a liaison basis and one had full attachment. As well as this general practitioner liaison, co-operation with hospitals was maintained, in particular in connection with patients suffering from diabetes.

Sixteen family planning sessions were held weekly at family health clinics and regular sessions were also started at two Liverpool hospitals.

During 1969, 4,869 women attended cervical cytology sessions at local authority premises and at five factories. This compares with 3,488 in the previous year. The response to arrangements made at work places was good and, it is hoped, more factories will make use of this very necessary service.

Of six maternal deaths occurring during the year, five were due to conditions arising directly from pregnancy or delivery. All the women concerned had received satisfactory care and attention.

The district nursing service continued to meet the growing demands of an ageing population with its attendant increase for nursing the chronically sick. Visits paid increased from 392,866 to 407,753. Three nursing liaison officers were selected for direct co-operation with three hospitals in the City. This new scheme is designed to secure closer co-operation between hospital and local authority nursing services, and became fully operational in the latter half of the year.

The first Health Education Officer in Liverpool took up his appointment in May and will be concerned with the provision of a service designed to educate the public in matters of health and to influence them towards healthy living. Regular issues of posters and pamphlets were made and the national anti-smoking campaign was supported by displays of posters and the provision of lectures throughout the community.

Home helps attended 4,512 households during the year including 4,055 persons over the age of 65. Some progress was made with the decentralisation of the service.

The epidemiological pattern of infectious diseases during 1969 was remarkable for a large decrease in the notified cases of measles from 4,444 in 1968 to 1,112 in 1969, this being the lowest measles figure for thirty years. Increases occurred in notifications of scarlet fever and dysentery and there was one case of anthrax. One general outbreak of food poisoning involved 47 people and single cases of typhoid and paratyphoid occurred in persons recently returned from holiday visits in foreign countries.

Although the number of completed immunisations against diphtheria increased from 7,179 in 1968 to 7,974 in 1969, this total is still disappointing having regard to the total number of children at risk. Infant vaccinations against smallpox fell to the extremely low figure of 3,385. The number of children receiving primary courses of immunisation against poliomyelitis also fell, and there can be no complacency about the general level of immunisation amongst children.

The work of the medical examination section continued to develop and 5,416 examinations were carried out during 1969, being an increase of nearly twenty per cent on the previous year.

The number of new cases of tuberculosis at 214 was again the lowest ever recorded. Compulsory powers were invoked for the admission of one infectious patient to hospital after all methods of persuasion had failed. Although the use of compulsory powers was necessary in this particular case it is true to state that, in almost all cases where an infectious patient refuses to enter hospital, it is sufficient to acquaint the patient concerned of the existence of these powers to ensure co-operation on his part.

The amount of venereal disease in the City showed little significant change.

The chief development in the mental health service during 1969 was the building of a special training centre at New Hall designed to take 48 children and adults who are physically as well as mentally handicapped. A survey was carried out to provide information about attainment and progress in training centres. The figures did not reveal a static condition in any of the people attending. Even those with the severest of handicaps made some progress. Centralising training at New Hall has been a success and the workshop has been full to capacity throughout the year. Training has been extended to the new laundry where 1,500 articles are now being washed per week. The modernised swimming bath has proved a great attraction and 70 residents have learned to swim.

Future plans include the provision of hostels within the community for the mentally ill but success in this new development will depend on the recruitment of sufficient staff of suitable qualifications, experience and temperament.

The occupational therapy and rehabilitation services had an extremely busy year and 653 new cases were visited by the four domiciliary occupational therapists. Following consultations between the Renal Unit and the Head Occupational Therapist, two kidney machines were installed in the homes of patients. The work of the rehabilitation units continued successfully and detailed case histories are given in the text. These are remarkable for the scope and variety of the aids used and illustrate the fact that even the most severely handicapped can achieve a greater measure of independence.

The medical assessment work for the re-housing of applicants on medical grounds continued satisfactorily and 7,592 applications were dealt with. Of these 162 were recommended for special priority and 246 for transfer on the grounds of medical urgency.

The environmental work of the department continued at the usual concentrated high level and, in all 262,612 visits and inspections were carried out under the various enactments.

Detailed inspections and observations of vehicles being used for street trading numbered 1,516 and 32 prosecutions were taken against traders in connection with infringements of the Food Hygiene Regulations.

During the year 1,156 houses were inspected following enquiries regarding improvement grants and a number of representations were received from tenants of houses requesting the Council to exercise its powers under the provisions of the Housing Act, 1964, to secure improvements.

Inspections under the Offices, Shops and Railway Premises Act continued, and so much satisfactory work was completed by employers and owners of premises that it was not considered necessary to initiate court proceedings in any particular case during the year.

The text of the report gives details of accidents notified to the department and comments on the fact that many persons, usually girls or women, wear old footwear whilst working and the insecure fitting of such footwear presents a serious hazard and has been a contributing factor in certain accidents.

Inspection of foodstuffs imported in sealed containers is now deferred until the consignment reaches its final destination. As a result, a considerable number of consignments of foodstuffs, previously examined at the port of entry, are now inspected on wholesale premises in the City. Examinations of this nature numbered 878 in 1969 and are likely to increase.

Complaints were received in connection with activities in factories where work is carried out during the night particularly those in close

proximity to residential premises. Other noise nuisances were caused by pneumatic drills, extractor fans, music from entertainment clubs and the excessive barking of dogs.

Progress in smoke control has been slowed down through the amount of financial assistance available and also the inadequate supplies of smokeless fuel available to replace bituminous coal. Under the provisions of the Clean Air Act, 1968, it is now an offence to sell any solid fuel, other than an authorised fuel, in a smoke control area and a close watch has been kept in this practice and warning letters issued.

Rodent control and disinfection sections continued to operate satisfactorily during the year.

In a word, it has been a satisfactory year and some progress has been made. I wish to record my thanks to the staff of the Health Department for their continued efforts and loyal support. I would also like to thank the Chairman and Members of the Health Committee for their assistance and co-operation throughout 1969.

I am,

Your obedient servant,

Andrew B. Semple

Medical Officer of Health.

VITAL STATISTICS

	1967	1968	1969
Area (land and inland water)—acres	27,819	27,819	27,819
Population (Estimated by Registrar-General)	705,310	683,010	677,450
Deaths (all causes)	8,148	7,958	8,317
Death rate per 1,000 (unstandardised)	11.6	11.6	12.3
Live Births	12,583	11,847	11,268
Live Birth rate per 1,000 population	17.8	17.2	16.6
Percentage of illegitimate live births	10.3	11.1	11.4
Stillbirths	223	219	168
Stillbirth rate per 1,000 total (live and still) births	17.4	18.2	14.7
Total Births (live births and still births)	12,806	12,066	11,436
Infant Deaths (under one year)	277	262	227
Infant Mortality rate per 1,000 live births	22.0	22.1	20.1
" " " " 1,000 legitimate births	21.6	19.9	20.2
" " " " 1,000 illegitimate births	25.5	39.7	19.4
Neo-Natal Mortality rate (under 28 days) per 1,000 related live births	14.9	14.6	12.3
Early Neo-Natal Mortality rate (under one week) per 1,000 related live births	13.0	12.8	10.6
Perinatal Mortality rate (stillbirths & deaths under one week) per 1,000 total live and stillbirths	30.2	30.7	25.0
Maternal Deaths	1	1	4
Maternal Mortality rate per 1,000 total births	0.078	0.083	0.350
Deaths from:—			
Pulmonary Tuberculosis	44	39	25
Death rate per 1,000 population (unstandardised)	0.062	0.057	0.037
Non-pulmonary Tuberculosis	5	5	3
Death rate per 1,000 population (unstandardised)	0.007	0.007	0.004
Respiratory Diseases	1,331	1,221	1,451
Death rate per 1,000 population (unstandardised)	1.9	1.8	2.1
Cancer (all forms)	1,706	1,772	1,825
Death rate per 1,000 population (unstandardised)	2.4	2.6	2.7

BIRTHS

During the year, 11,268 live births were registered within the City, which represents a birth rate of 16.6 per thousand of the estimated mid-year population. The number of illegitimate live births was 1,290 this being 11.4 per cent of the total live births. This figure was a further increase in the percentage of illegitimate births, which has now reached a new peak. The birth rate within the City continued to be higher than the average for England and Wales, which for the year 1963 was 16.3 per thousand.

STILLBIRTHS

The 168 stillbirths registered in the City during the year represent a stillbirth rate per thousand total live and stillbirths of 14.7. The stillbirth rate among illegitimate babies was 10.7 and among legitimate babies 15.2 per thousand.

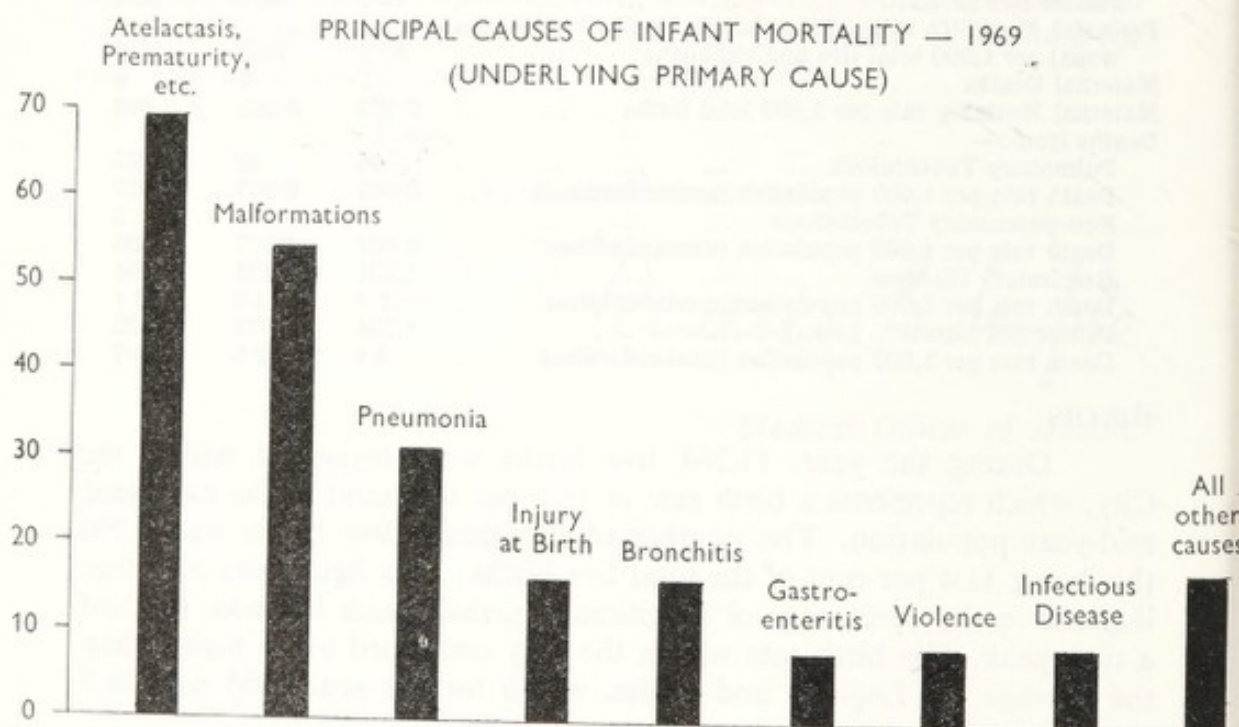
MORTALITY

There were 8,317 deaths registered within the City during the year, 4,251 males and 4,066 females. This gives a general death rate of 12.3 per thousand, as compared with 11.6 per thousand for the preceding year.

The number of deaths from cancer of the respiratory system was 546. Deaths from tuberculosis during the year were 28 as compared with 44 in the previous year. The trends of mortality of certain specified diseases are given in the tables in the statistical appendix.

INFANT MORTALITY

The infant mortality rate during the year was 20.1 per thousand live births as compared with 22.1 for the previous year. A total number of 227 infant deaths occurred, of which 25 were illegitimate children. This represents a legitimate infant mortality rate of 20.2 per thousand and an illegitimate infant mortality rate of 19.4 per thousand. The neonatal mortality rate (under 28 days) was 12.3 as compared with 14.6 for the previous year, whilst the early neonatal mortality rate (under one week) was 10.6 as compared with 12.8 per thousand related live births. The principal causes of infant mortality are represented in the diagram below.



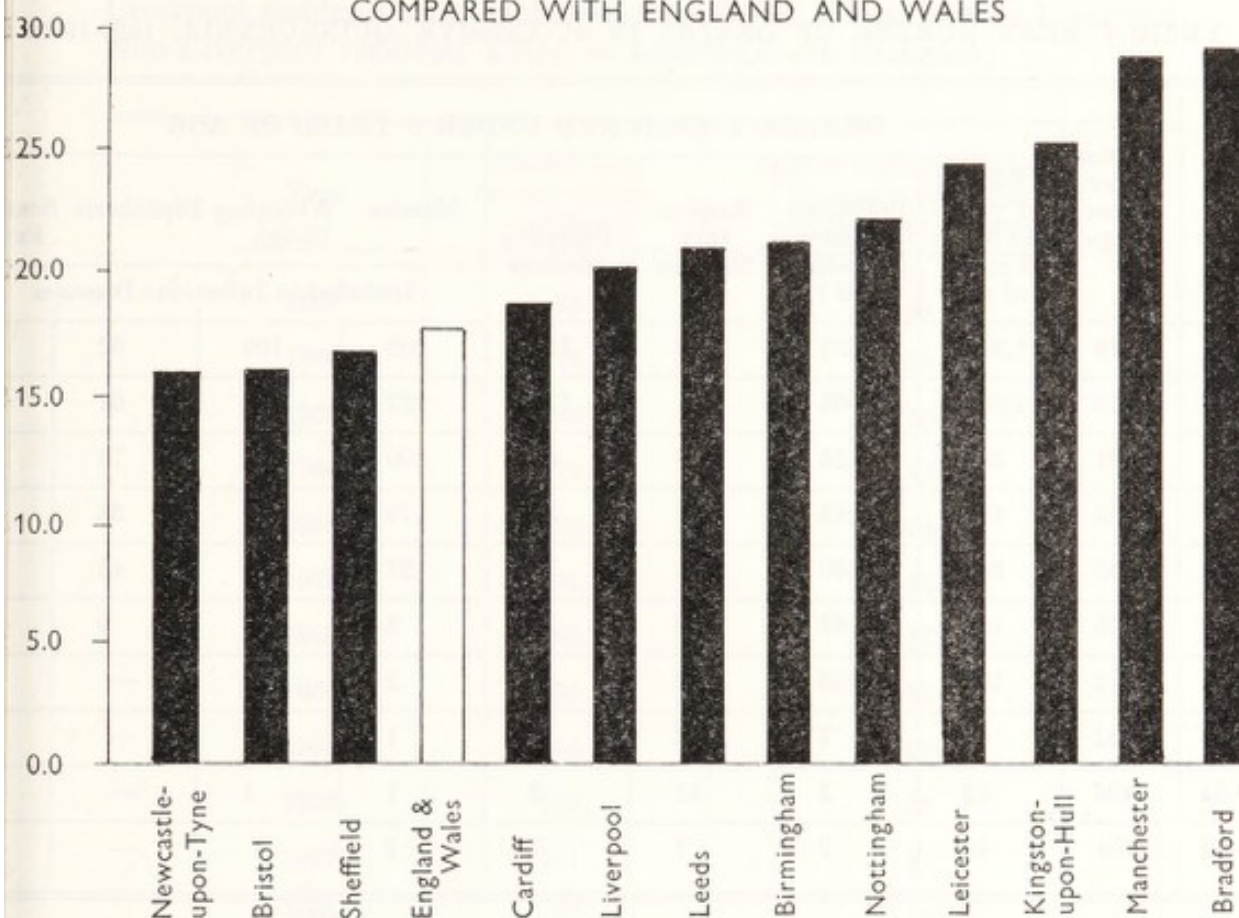
Code Numbers included in each category (List A)

Atelactasis, prematurity, etc. ...	...	...	...	133-5
Malformations ...	...	...	...	126-130
Pneumonia ...	...	...	...	91, 92
Injury at birth ...	...	...	...	131, 132
Bronchitis ...	...	...	...	89, 93
Gastroenteritis ...	...	...	...	5
Violence ...	...	...	...	138-150
Infectious disease ...	...	...	...	1-4, 6-44, 72
All other causes...	...	...	...	remainder

These code numbers are from the eighth revision of the W.H.O. Manual, published 1967.

rate per 1,000
live births

CHART SHOWING INFANT MORTALITY RATE FOR A NUMBER
OF THE LARGER AUTHORITIES FOR THE YEAR 1969,
COMPARED WITH ENGLAND AND WALES



PERINATAL MORTALITY

This rate, which is the number of stillbirths and the number of deaths in infants under one week per thousand births, represents very fairly the hazards of childbirth. During 1969 the rate was 25.0 compared with 30.7 in 1968.

CHILD MORTALITY

The various causes of child mortality both in total and for specific diseases are given in the table illustrated below.

YEARLY MEAN NUMBER OF DEATHS IN SUCCESSIVE QUINQUENNIA, 1920-1969.

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	Infectious Diseases (including T.B.)	Respiratory Diseases	Digestive Diseases	Measles	Whooping Cough	Diphtheria	Scarlet Fever
						Included in Infectious Diseases			
1920-24	2,278	1,349	557	513	121	202	109	62	28
1925-29	1,879	1,252	564	461	121	227	118	61	23
1930-34	1,601	890	456	278	63	200	72	79	9
1935-39	1,283	487	243	147	30	79	46	58	3
1940-44	1,140	366	160	94	17	27	23	45	1
1945-49	1,100	168	67	36	13	8	15	9	—
1950-54	553	100	26	22	5	2	4	—	—
1955-59	432	57	7	12	5	1	—	—	—
1960-64	426	52	3	11	3	1	1	—	—
1965-69	280	40	2	7	1	1	—	—	—

DEATHS FROM CANCER

The total number of deaths from cancer during the year was 1,826 as compared with 1,772 in 1968. The number of deaths from cancer of the respiratory tract decreased from 575 to 546.

MOTOR VEHICLE ACCIDENTS

The number of deaths from motor vehicle accidents was 86, as compared with 85 in 1968. The following figures relate to deaths of Liverpool residents only, including those killed whilst outside Liverpool. Non-Liverpool residents killed in Liverpool are excluded :—

Year	Deaths from motor vehicle accidents	Deaths registered outside Liverpool (included in previous column.)
1957	93	21
1958	78	13
1959	98	25
1960	119	22
1961	112	24
1962	81	12
1963	86	17
1964	105	21
1965	115	20
1966	115	25
1967	101	17
1968	85	16
1969	86	20

An average of one-fifth of the total deaths relates to deaths of Liverpool residents occurring outside the City.

MATERNITY AND CHILD WELFARE

NOTIFICATION OF CONGENITAL ABNORMALITIES

During the year children born with obvious congenital abnormalities were notified to the Medical Officer of Health. The number so notified was 264, and the abnormalities occurred in the different systems as shown below:—

Central Nervous System	...	...	...	...	...	40
Eye and Ear	...	...	...	...	...	5
Alimentary System	...	...	...	...	...	27
Heart and Great Vessels	...	...	...	...	...	29
Respiratory System	...	...	...	...	...	1
Urogenital System	...	...	...	...	...	23
Limbs	...	...	...	...	...	92
Other Skeletal Deformities	...	...	...	...	...	7
Skin	} Defects	...	...	...	...	23
Muscle						
Endocrine						
Mongolism	} Others not Specified	...	...	...	...	17
Others not Specified						
						264

REGISTER OF CHILDREN BORN AT RISK

The register of children likely to develop a handicapping condition was kept in 1969 as in previous years. The condition of the children was reviewed at six-monthly intervals, and the name of any handicapped child transferred to the special register of handicapped children. After two years, if a child has remained healthy, the name is removed from the register.

The total number of children under the age of two years on the register at the end of 1969 was 4,115; of these, 1,983 were born during the year.

MIDWIFERY

During the year, 345 midwives notified their intention to practise midwifery in the City, this was one less than in 1968. Notifications from hospital midwives numbered 286, those from domiciliary midwives, 49, and ten were in nursing homes and private practice.

The number of domiciliary births was 877 compared with 1,121 in 1968. The number of patients nursed at home after hospital confinement was 8,592; in 1968 the number was 6,210. This shows a decrease in domiciliary births of 244 from the previous year, and an increase of 2,382 patients nursed at home after hospital confinement.

A table is given showing the number of patients discharged from each hospital, and the day of discharge. The total was 9,510, but of these 671 were premature babies who were cared for by three specially trained midwives.

The following table shows how the number of patients discharged between the second and seventh days after confinement has increased since 1968.

	2nd day	3rd day	4th day	5th day	6th day	7th day
1968	679	797	672	908	1,018	1,083
1969	1,080	701	654	1,101	1,714	2,267

Medical Aid

The midwives called in medical aid for 161 cases for different abnormalities. In 156 cases a doctor had already been booked for maternity medical service. Of the 161 cases, 82 were for patients discharged from hospital for domiciliary attendance, and 79 were for patients booked for home confinement, or delivered at home. Details are given in the statistical appendix.

Staff

The midwifery staff at the end of the year consisted of:—

- 1 Non-Medical Supervisor
- 2 Assistant Supervisors
- 1 Training Superintendent
- 1 Midwifery Tutor
- 37 Full-time Midwives
- 3 Premature-baby Midwives
- 4 Part-time Midwives

During the year two midwives left the staff, one of them due to retirement. The new midwives were appointed to the staff.

Training of Part II Pupil Midwives

The training scheme continued with pupil midwives from Sefton General Hospital, Liverpool Maternity Hospital, Mill Road Maternity Hospital and Broadgreen Hospital. An average of 29 pupil midwives each quarter worked under the supervision of their teaching district midwives, and tutorials and practical teaching were given by the supervisor of midwives, the tutor and the training superintendent.

One hundred and eighteen pupils took the course and 115 qualified as midwives. At the end of the year, 25 were still in training. During 1969, 32 midwives worked as approved district teachers.

Student nurses undergoing obstetric training at Sefton General Hospital, Liverpool Maternity Hospital and Broadgreen Hospital continued to visit the domiciliary service and spend a day on the district.

An average of 25 students every three months spent a morning visiting with a midwife, and attended a child health clinic in the afternoon.

Accommodation

Twenty-four midwives occupied Corporation houses or flats, five of these lived in furnished accommodation.

Transport

Thirty-eight midwives (both full-time and part-time, the premature baby team and the administrative staff) were car owners and drivers, four midwives were cyclists and seven used public transport.

Ante-Natal Care

Ante-natal care of the mother was carried out at 28 general practitioner clinics, including the health centres at Toxteth and Cantril Farm, at local authority clinics run by midwives and also by visits to the homes of patients.

Midwives attended 1,267 sessions with family doctors, 96 sessions at medical officers' clinics, and 1,777 at their own clinics. Visits to homes of patients numbered 9,405.

Post-Natal Care

After confinement, midwives paid 13,758 visits to their booked cases, 42,839 visits to mothers and babies discharged home from hospitals before the end of the lying-in period, and 5,548 visits to patients referred from hospitals for the assessment of home conditions. These figures show an increase in the number of home condition assessment visits of 1,149 over 1968.

Postgraduate Courses.

The statutory courses held in various parts of the country were attended by fifteen midwives.

Twelve midwives were able to attend a two-day intensive course on relaxation, ante-natal and post-natal exercises, which was held in July, 1969. They all enjoyed the course, and both they and their patients benefited from it.

The Transfusion Unit

The Emergency Obstetric Flying Squad was called out seventeen times to the homes of patients. Blood transfusion was given in five cases.

Reasons for calling the unit were:—

Retained placenta	9
Post partum haemorrhage	5
Undiagnosed twins	1
Forceps delivery	1
Post partum eclampsia	1

Ten patients were transferred to hospital, and seven were able to remain at home.

Emergencies

Midwives were called to emergencies by the ambulance service on 52 occasions. Four of these patients were having miscarriages, the remainder were patients who were booked for hospital, but called the ambulance too late, or patients who had received no ante-natal care. In all, 37 mothers were transferred to hospital in labour or immediately after delivery, and fifteen mothers and babies were nursed at home. The Emergency Obstetric Flying Squad was called to three cases, two of these being for post-partum haemorrhage and one case of post-partum eclampsia.

Co-operation with Hospital Services

Co-operation between the domiciliary and hospital midwifery services has continued to be very good. During the past year, domiciliary midwives have taken blood samples for the Guthrie test from all babies between the sixth and fourteenth day of life. The test was performed by the staff not only on babies born at home, but on all babies discharged from hospital who reside within the local authority area up to and including the tenth day of life.

Although there were no major outbreaks of infection amongst babies born in hospital, midwives were able to give valuable assistance when one baby was thought to be suffering from pemphigus in February, and during March and November, 1969, when there were minor outbreaks of gastro-enteritis at another hospital.

In each of these instances, two midwives were allocated to attend all babies who were contacts, enabling the hospital to close the wards concerned quickly, so that disruption of their service was reduced to a minimum. All contacts in these cases were visited for at least a week after discharge from hospital.

It is also becoming obvious that the domiciliary midwives are giving a valuable service to patients booked for hospital, in the ante-natal period, when they visit to assess home conditions for early discharge. They can advise patients regarding their problems, and these patients sometimes contact them by telephone for advice. In one instance, a patient who was not due to attend clinic for another week was able to be admitted to hospital the following day due to the report of the visiting midwife.

Premature Babies

Twenty premature babies were born at home, of these two were transferred to hospital and the remaining eighteen were able to be

nursed at home; 671 premature babies born in hospital were later discharged to the care of the specially trained midwives. Among those babies discharged from hospital were 33 sets of twins, six babies who were one of twins and one set of triplets.

The midwives caring for premature babies made 199 visits to home deliveries, and 3,050 visits to those discharged from hospital. They also visited 170 homes before the babies were discharged, to advise the mothers on conditions suitable for small babies.

Equipment loaned was as follows:—

Hot-water bottles and covers...	...	15
Premature baby gowns	...	9
Premature baby vests	...	9

HEALTH VISITING SERVICE

Eleven months after the foundations were laid, the new family health clinic in Hartington Road was completed and opened on the 17th March, since when its activities have gone from strength to strength, providing child health, ante-natal, mothercraft, chiropody and family planning clinics.

There were no outbreaks of serious infectious disease during the year, and there was a decrease in the number of children presented for prophylactic immunisation. Because of this it was necessary from time to time for the staff to exert extra pressure on this aspect of health education, and towards the end of the year there was an improvement.

Training

Recruitment for health visitor training presents a problem as many nurses who are interested cannot be accepted as they lack the requisite educational qualifications.

Thirty-one students commenced training in September for the 1969/70 course, but one was withdrawn at the end of the first term. Seven were sponsored by Lancashire County, four by Cheshire County, two each by Birkenhead, Caernarvon and St. Helens, and one each by Southport, Flintshire, Shropshire and Chester. One was sponsored by the World Health Organisation, and the remaining eight by Liverpool.

Twenty-seven students, from the previous course, sat the examination in September, and all but one were successful on the first occasion. The student who failed was successful at the second attempt. Five of the Liverpool students were appointed to the staff.

Towards the end of 1968, the Department of Health and Social Security directed that all fieldwork instructors should attend a refresher

course. As a result an increased number of health visitors were away during the year; twenty being away from their fieldwork for two weeks each.

The number of qualified staff decreased in 1969; five retired, five left to other local authorities, and two to have babies; six new appointments and one re-appointment were made, a total of seven.

At the beginning of the year it became obvious that more facilities for family planning advice were needed, and by the end of the year fourteen centres, including one in Broadgreen Hospital, were in use, and nine more nurses were employed to staff them.

The inclusive staff, therefore, at the end of the year was;—

- 1 Superintendent Health Visitor
- 1 Deputy Superintendent Health Visitor
- 1 Assistant Superintendent Health Visitor
- 1 Principal Tutor
- 1 Tutor
- 14 Group Advisers
- 15 Field Work Instructors
- 52 Health Visitors
- 1 Part-time Health Visitor
- 4 Full-time State Registered Nurses
- 19 Part-time State Registered Nurses,

Care of Children

The number of babies born alive fell slightly again this year, 11,268 as against 11,847 in 1968; 118 babies moved into the City shortly after birth, making a total of 11,386.

Primary visits were made to all these babies as quickly as possible after they were discharged from maternity hospital, or from the care of the domiciliary midwife, to ensure that all was well with mother and baby, to give advice on baby and family care, and to help with any problems which might have arisen.

Seven hundred and ninety-seven babies survived being born prematurely, and these, together with all babies who were born "At Risk", required special attention, and more of the health visitors' time was spent with them. Some of these babies were born with a handicap, and because of this had anxious parents. A great deal of time and patience is necessary to reassure these parents, and to educate them in the acceptance and handling of their handicapped children.

One hundred and twenty-three thousand, three hundred and fifty-seven effective visits, and 26,824 non-effective visits were paid to children under the age of five years, to give as always help and advice, to practise health education within the family and to help to promote and maintain as high a standard of living as possible.

Health visitors are trained to detect any deviation from the normal development of the children they are visiting, and then refer them for further advice; 594 children required specialist advice, which was sought through the facilities provided by the School Health Department.

Investigation was requested for the following reasons :—

Mental and physical assessment ...	39
Hearing tests	43
Speech defects	35
Educational tests	17
Eye defects	281
Orthopaedic defects	179
Total	<hr/> 594 <hr/>

Routine testing for phenylketonuria continued, and since the 6th January, 1969, all babies born have had the Blood Guthrie test, and the urine test was performed on very few children. This procedure, which primarily was the responsibility of the health visitors, is now shared by the domiciliary midwives and those midwives in hospital; 12,586 blood tests were made, and from these two positive cases were diagnosed. Needless to say treatment was started immediately.

During the year 58,488 children under the age of five years, and their families, were visited. In addition to this, over 12,000 cases of a special nature were visited.

The Elderly

Visits to the elderly increase year by year, as do those of a special nature which are referred to the health visitors by the consultant geriatricians, as elderly sick, for whom admission to hospital has been requested. Much time was spent on these visits, as many of those visited did not need admission to hospital, but ancillary services in their own homes, and 198 elderly men and women were sent away for periods of convalescence. In many cases this gave a period of relief to relatives as well as being of benefit to the elderly themselves.

Families with Problems

During the year the assistance of other workers was sought on 5,774 occasions, as follows :—

General Practitioners	741
Ministry of Social Security	277
Medical Social Workers	693
Welfare Department... ..	756
Health Inspectors	775
Home Helps	407
Children's Department	352

Education Welfare	180
Mental Health Service	162
Occupational Therapist	172
Probation Officer	79
Moral Welfare	44
National Society for the Prevention of Cruelty to Children	130
District Nurses and Chiropodists ...	1,006

Convalescence for Mothers and Children

Despite some difficulty in finding establishments willing to help mothers in the care of their children, 22 mothers and 74 children were sent for periods of convalescence.

Vaccination and Immunisation

The response to health education in this field was disappointing, and the following table shows the work done at local authority clinics, and during home visits:—

Poliomyelitis	18,714 doses
Diphtheria, Whooping Cough and Tetanus	15,763 doses
Smallpox Vaccination	1,840 children vaccinated
Measles Vaccination	1,208 children vaccinated

SPECIAL WORK

Diabetes

Seven hundred and thirty-one persons suffering from diabetes were under the surveillance of the health visitor who specialises in this work. Close contact was maintained with the hospitals, and many requests were received for this service.

Neurological

Owing to the ill health of the officer concerned, this post was vacant for several months during the year. It proved very difficult to fill, and at the end of the year temporary arrangements were made for the work to continue.

Hospital Liaison

Most hospitals in the City now have contact with the local health authority through health visitors, and lines of communication are improving all the time.

General Practitioner Liaison

At the end of the year, nine group practices had health visitors attached to them on a liaison basis, and one had full attachment. Four doctors working independently also had liaison visits from health

visitors. In addition to this regular contact with doctors, the health visitors do not hesitate to seek advice and have discussions with most of the general practitioners in the City.

Teaching

In 1969, 82 lectures were given to student nurses and various types of postgraduate students by the superintendent health visitor and her two deputies in comparison to 75 given in 1968. In addition to this, twelve talks were given to women's organisations and clubs.

The Parents' Club at the Norris Green Centre has flourished, and has now been extended to two church groups. Interesting talks and lectures arranged by the health visitors at that centre have been received with tremendous enthusiasm. The following are examples of the interesting events arranged for the club members:—

Fire prevention in the home,
Progress of the second Mersey Tunnel,
The work of Dr. Barnardo's,
Cheap and good cuts of meat—Butcher,
Probation and after care,
The Changing Face of Liverpool
The work of the Citizen's Advice Bureau,
Cooking demonstration,
Care of your hair.

V.D. Welfare

Contact and follow up of women and children continued to be very necessary. The following is a summary of the work during the year:—

	1968	1969
Number of cases written to...	314	402
Number of letters despatched	576	1,280
Number of cases reporting after receipt of letter...	231	191
Number of letters returned (dead letter office)	21	31
Number of cases visited	193	212
Number of visits made	870	721
Number of cases reporting after visiting	97	139
Number of cases promising, but failing to attend	17	15
Number of cases removed or not known at address given	39	33
Number of cases not contacted	28	20
Number of cases refused to attend...	8	3
Number of cases transferred to other clinics	4	2

FAMILY HEALTH CLINICS

During the year three premises were closed and three were opened, so at the end of the year the number operating throughout the City remained the same, 28. Of these, clinics were held in thirteen purpose-built premises and seven adapted premises, whilst eight were in hired premises used on a sessional basis.

CERVICAL CYTOLOGY

During 1969 cervical cytology sessions were held at local authority premises and at five factories. Appointments were made for 6,092 women, but only 3,444 attended for examination. One thousand four hundred and twenty-five women were examined at factories. The response is always good when arrangements are made at work places, and it is hoped that more factories will make use of this service.

	1968	1969
January ...	218	646
February...	193	372
March ...	246	296
April ...	232	388
May ...	382	599
June ...	297	408
July ...	291	400
August ...	283	309
September ...	268	370
October ...	387	495
November ...	358	326
December ...	333	260
Total for Year ...	3,488	4,869

Smear Reports

Number of smears which were technically unsatisfactory and were repeated ...	51
Number of smears showing some abnormality requiring hospital observation (not thought to be carcinoma <i>in situ</i>) ...	18
Number of smears showing carcinoma <i>in situ</i> (hospital treatment in all cases) ...	2
Number of frank carcinoma of cervix ...	6

One thousand eight hundred and sixty-eight women were referred to their own doctors, or to hospital, for other disorders discovered at examination.

The following table shows the number and type of condition for which these patients were referred:—

Erosion of cervix ...	942
Fibroids ...	15
Cervical polyps ...	110
Vaginal discharge ...	447
Vaginitis (mainly senile) ...	58
Low haemoglobin reading (anaemia) ...	3
Breast neoplasms (mainly benign) ...	5
Menstrual disorders ...	49
Others ...	239
	<hr/> 1,868 <hr/>

CHIROPODY SERVICE

The chiropody service continued during 1969. One new centre was opened at Hartington Road clinic and overall three full-time and 28 part-time chiropodists provided the treatments at local authority premises, premises provided by voluntary organisations, local authority hostels, and in patients' homes.

In the past three years, the number of patients attending each session has dropped, possibly due to transport difficulties. As the requests for treatment have not decreased in number in a similar way, the difficulty of allocating appointments has increased. The average attendances per clinic session are shown below :—

	1967	1968	1969
Attendances	35,695	36,135	37,919
Sessions	4,830	5,665	5,527
Average Attendances	7.39	6.37	6.86

The reduction in clinic sessions during 1969 was due to the transfer of one chiropodist from clinic to mainly domiciliary work, and to illness.

	1968	1969
Total number of treatments given	40,033	42,129
At clinics	36,135	37,919
At home	2,830	3,154
At hostels to aged and handicapped persons	1,068	1,056
Total number of patients... ..	10,732	10,983
Total number of domiciliary patients	1,173	1,214
Total number of patients at clinics etc.	9,559	9,769
Total number of sessions... ..	5,817	5,669
Total number of clinic sessions	5,665	5,527
Total number of sessions in hostels	152	142

MATERNAL DEATHS

During 1969, six maternal deaths occurred in Liverpool. One of these deaths was not due to pregnancy or childbirth, but to meningitis, which occurred during pregnancy. The remaining five were due to conditions arising directly from pregnancy or delivery. One death was due to a pulmonary embolus after a post partum haemorrhage and hysterectomy, one followed a ruptured ectopic pregnancy, one after a spontaneous rupture of the uterus, one occurred after a caesarean section, and one was due to renal cortical necrosis.

It is unusual for this number of maternal deaths to occur, but all the women concerned had received satisfactory care and attention.

[Note.—One death was not registered until 1970 and, for statistical purposes will be counted in that year.]

DISTRICT NURSING SERVICE

During 1969 the district nursing service continued to meet the growing demands of an ageing population with its attendant increase in the need for nursing the chronically sick. There is also a greater awareness of nursing skills offered by the district nurses and many acute cases are now cared for at home. In all 407,753 nursing visits were paid during the year.

Staff

Recruitment remained fairly constant, though with increasing opportunities in the hospital services, it is anticipated that greater difficulty will be experienced in the future.

Staff figures at the 31st December, 1969, are shown as follows:—

- 1 Senior Superintendent
- 1 Deputy Senior Superintendent
- 1 Tutor
- 3 Area Superintendents
- 6 Assistant Area Superintendents
- 71 Qualified District Nursing Sisters
- 14 State Registered Nurses
- 34 State Enrolled Nurses
- 5 Part-Time Nurses
- 12 Part-Time Nursing Auxiliaries
- 2 Full-Time Nursing Auxiliaries

Liaison Officers

There has long been a need for closer co-operation between Hospital and Local Authority Nursing Services, and it was agreed to commence a liaison scheme with three hospitals in the City. Three nursing liaison officers were selected from District Nursing Service personnel, and the project became fully operational during the latter part of the year.

Each liaison officer visited many of the patients on the ward before discharge from hospital, and acquainted them with the nursing and social services which might be available to them. In many instances she was able to alleviate unnecessary anxiety. She was further able to familiarise her colleagues with many details of the patient's condition and particular needs, which might otherwise have been overlooked.

Visits

In all 407,753 visits were made to 12,850 patients during the year.

In addition to the increase in the number of patients, there was an increase in the number of persons who were aged 65 years and over at the time of their first visit, and a high proportion of these visits were

made to patients who were chronically ill, or suffering from terminal disease. This particular group of patients presented heavy nursing problems requiring a considerable amount of time, and skilled nursing care.

The downward trend in the number of intra-muscular injections given continued. This decline has been constant since 1961.

Comparable tables of work undertaken by the District Nursing Service are as follows:—

	1968	1969
Patients	12,649	12,850
Visits	392,866	407,753
Number of patients aged 65 years or over ...	5,941	6,504
Number of visits to such patients	210,563	217,319
Number of late night visits	4,566	6,668
Number of injections as a percentage of total visits	30.31%	27.29%

Training

As there is no longer a Queen's Institute badge for successful district nurse students, it was felt that present day candidates might feel at a disadvantage compared to their colleagues who trained prior to April, 1968. The Health Committee kindly consented, therefore, to a prize of ten guineas being awarded to the student from the Liverpool School of Art who submitted the most suitable design. The badge selected was then cast in metal and is now readily recognised as belonging to the "Liverpool District Nurses".

Twenty-three nurses undertook the course leading to the National District Nursing Certificate; twenty of these were staff students, and the remaining three were from other authorities. In addition, fourteen students attended Liverpool for the theoretical part of the syllabus only.

Visits to the District Nursing Service

This year a total of 397 hospital students visited the District Nursing Service, and programmes were arranged which enabled them to gain insight into the work of the service. After the students' visits, Senior District Nursing Officers attended the hospitals to give "follow-on" talks.

As in previous years, visits were made to the Liverpool District Nursing Service by senior nursing personnel. A programme was arranged at the request of the Department of Health and Social Security for an officer from Mauritius on a World Health Organisation Fellowship to spend seven weeks in the City of Liverpool studying nursing management and training techniques.

DAY NURSERIES

The twelve day nurseries continued to provide places for approximately 670 children, all admitted because of special needs. Trans-

port was provided for eighteen children who for different reasons could not be taken to the nursery by their families. In one case, the mother was blind, and the father worked outside Liverpool, and in another, three children had a father who was ill, and their mother worked as a receptionist and caretaker.

The number of child minders and private day nurseries registered at the end of the year was 134. A health visitor visited these premises during the year, and gave assistance and advice regarding the running of these establishments.

HEALTH EDUCATION

Effective health education is the result of the effort of all Health Department staff having contact with the public, whether on a personal basis or in more formal health education situations, as well as the spread of information by various publicity media. Since appointment in May the health education officer has been concerned with the provision of a service which could facilitate the constant effort of staff to educate the public in matters of health, and to influence them towards healthy living.

Advice and information on all matters of health education is available to staff, students and public; requests vary from information for a school project, to full discussion of health education with post-graduate students from as far afield as Thailand and Turkey.

Regular issues of posters and pamphlets on health topics are made; the Department is contributing to the current national anti-smoking campaign, by the display of posters and the provision of lectures throughout the community.

A visual-aids service has been established to assist staff in their work; and training is provided in the use of material and equipment; increasing use is made of the service in support of group educational work.

Immunisation

A survey was carried out in co-operation with the health visiting staff to assess reasons for mothers' non-acceptance of this important protection for their infants. Information about Purpose, Availability and Method of immunisation was found to be very high in the group of non-accepters. This illustrates the fact that information does not motivate to behaviour on its own, as is also made clear from national cigarette smoking behaviour. It was interesting to find that anxieties, major and minor, related to infant immunisation were expressed by nearly 50 per cent of this group. Continuing efforts by the health visiting staff in this area of infant immunisation have resulted in a steady increase in acceptance, although figures are still not at an acceptable level.

School Health

Broadly based programmes have been developed which can be provided in schools on request, whenever possible the lectures are fitted into existing school syllabuses of the "Design for living" type; the lectures are provided by the school nurse, supported by other members of the Department staff. Experience with these programmes will point the way to the most useful contribution which can be provided in this all-important area of health education. The health education officer

provides advice and assistance to staff; and provides a link between schools and School Health Department in the field of health education.

Training

Lectures in health education were provided for school nursing staff, and district nurse students; a continuing programme of training in Audio-Visual aids is in being, providing essential skills for those undertaking group health education. "Educating the Educators" is an essential function of the health education officer and this area of work will be extended.

Voluntary Organisations

The Department works with the Merseyside Cancer Education Committee in providing medical personnel for lectures, and providing projection equipment when necessary. When possible lectures in school on this subject are incorporated within existing health education programmes, providing more credibility than if they occurred in isolation.

The health education officer attends the meetings of the Education Sub-Committee of the Merseyside Council on Drug Addiction. Relevant lectures on the subject of the misuse of drugs are provided by Department staff on request.

General

The Health Education Officer undertook some 50 lectures personally on a wide range of topics, the bulk as contribution to school health education programmes.

The object of health education effort is to influence the public to conduct their lives in a way which will improve rather than take from their health and efficiency as human beings, and to equip them to make best use of available health and medical services in their own and the community's interest. Awareness of the need for health education is apparent in the willingness with which people, professional and public give time and effort; an effective health education service depends on the co-operation of all staff. It is encouraging to find so many willing to award some priority to health education in their work.

MERSEYSIDE CANCER EDUCATION COMMITTEE.

Mrs. P. Hobbs, Administrator writes :—

Progress Report, 1966-69

'The steady expansion of the provision of public education about cancer in Liverpool may be demonstrated by comparing the figures for the past few years:—

NUMBER OF MEETINGS ARRANGED

Year	Total	Profes- sional	Adult					Youth Clubs	School		People at Work	Hospital Student Nurses
			1st	2nd	3rd	4th	5th		1st	2nd		
1966	47	4	15	2	—	—	—	14	—	—	9	3
1967	53	—	30	10	—	—	—	5	1	—	6	1
1968	68	2	10	11	2	1	—	5	3	—	27	7
1969	129	2	11	11	3	1	1	—	19	7	66	8

'In 1967 the Merseyside Committee produced a second leaflet on cervical cytology, "Mary Makes up her Mind", which used an entirely different format from the previous leaflet, and a teaching kit on breast self-examination, comprising a filmstrip/set of slides, teaching notes and commentary and leaflets—all original material—and teaching on this subject was incorporated into the educational programme.

'In 1968 a leaflet summarising the basic teaching on the advantages of early treatment for cancer, "Hopeful Facts About Cancer" was produced and in 1969 a teaching kit on the cervical smear test, "Towards Ten out of Ten". This teaching material is available together with automatic sound/slide projection equipment and a daylight screen for exhibitions, factory canteens, and clinic waiting rooms and it is hoped that it will be used in as many ways and places as possible so as to encourage women to have the test done. In 1969 also the Committee printed, with the permission of the United States Health and Welfare Department, a pair of leaflets which together form a Smoker's Self-test Kit, designed to help those who have decided to give up smoking. All of these leaflets are freely available in the City, either from the speakers supplied by the Committee or in clinics or from the health visitors.

Survey of Public Opinion on Cancer

'The survey, which was carried out in 1966, was reported on in 1968: "Public Opinion on Cancer: a survey of knowledge and attitudes among women on Merseyside, 1966", and, because most of the sample was drawn in Liverpool a separate report on the Liverpool findings was prepared and submitted to the Medical Officer of Health, in 1969.

'The findings of the survey have had a two-fold application. One is to act as a base-line from which to measure future change in opinions about cancer, as a check on the educational programme's effectiveness, and the other, of immediate usefulness, to give guidance as to the content and methods of the programme in the light of the beliefs and attitudes revealed by the survey.

Business and Industry.

'Much of the increase during 1969 was of an experimental nature to see if the extension of the programme to reach people at their place of work was feasible. The built-in difficulty is the necessity to fit the programme to the times and occasions acceptable to employers and this can usually only be overcome by the appointment of a full-time lecturer, rather than by using the doctors who are members of the Merseyside Committee's Panel of Speakers and whose other duties must take priority. Unfortunately, in a period of financial stringency, such an appointment has not been possible on Merseyside.

'However, largely due to the enthusiasm of Dr. J. B. Meredith Davies, Deputy M.O.H., for the cancer education programme, the 1969 experiment got underway and showed that the extension of the service in this way is possible—if demanding for the doctors. A number of the meetings held were for the staff of the Health Department and the Town Clerk's Department and the Merseyside Committee is grateful to the Heads of Department for their co-operation.

Schools

'Most of the increased work in the schools is a direct result of the appointment of a health education officer in the City. The courses on "Design for Living" initiated by him and run by the school nurses include two periods on cancer for which the Merseyside Committee supplies the speakers.'

HOME HELP SERVICE

Service was provided for 4,512 households in 1969. This figure comprises :—

- 4,055 persons aged 65 years and over.
- 387 chronically ill persons under 65 years of age.
- 31 acute cases of illness, under 65 years of age.
- 39 maternity cases.

Comparison with the figures for 1951 shows clearly the present emphasis on the care of the aged. In that year the figures were :—

- 533 maternity cases, including expectant mothers.
- 60 cases of tuberculosis.
- 482 others, including aged persons, a total of 1,075.

DISTRICT OFFICES

Until 1969 there was one district office only and this was at Toxteth Health Centre. In March, 1969, a second district office was opened at Hartington Road Clinic. Accommodation was available for two district organisers who were responsible for the areas extending from Netherley, Woolton and Mossley Hill in a townwards direction as far as Hope Street.

In June, 1969, a third office became available at "Balliol", Mill Bank, Liverpool, 13, and the two organisers installed were responsible for an area bounded by Walton Hall Avenue, East Lancashire Road, Queens Drive and Bowring Park Road. The City boundary formed the fourth side of the area.

Each organiser was responsible for an average number of 280 patients and 56 home helps.

PAYMENT BY SECURITY SERVICES

September, 1969, saw the commencement of the payment of wages by a security firm. Seven pay centres in various parts of the City were made available and in groups of 30 to 220, home helps assembled at an arranged time with their organiser or clerk and the paying officer.

DISTRICT ORGANISERS

Duties of the eleven district organisers in 1969 included the arranging and reviewing of services, the assessment of charge, if any, the deployment and supervision of home helps within each area and the invocation of aid from other services on behalf of the patient and to support the home help.

HOME HELPS

Six hundred and four home helps were employed on 31st December, 1969. Two hundred and fifty-five were recruited during the year and 245 left the service for the following reasons:—

transferred to other departments	...	...	3
medically unfit	...	...	17
deceased	...	...	2
retirement	...	...	1
resignation	...	...	192
unsuitable	...	...	30

It is interesting to note that home helps with service of five or more years rarely leave their employment for reasons other than ill health or retirement and that their absence record is lower than that of newcomers. In fact, the high turnover in staff is composed chiefly of employees with less than two years' service.

The principal cause of dissatisfaction is Saturday employment and the possibility of employing helpers for Saturday and Sunday only is being considered.

CLEANERS

The three women employed to clean neglected homes prior to the discharge of patients from hospital have been fully employed since they commenced duty in January, 1967. They work as a team spending as little as three hours in one house and as much as 24 hours in another.

One of their first duties is to clean windows and, if necessary, beg for curtains, as window dressing is the recognised hallmark of the condition of the home to a passer-by.

Although permission is given by the patient for the entry of these cleaners, he or she is quite liable to be an eccentric who prefers to be dirty, and the house subsequently lapses into its original condition if the services of a home help are refused. The cleaners are paid an additional 1s. per hour above the pay of a home help.

EPIDEMIOLOGY

The number of cases of notifiable infectious disease occurring in 1969 compared with 1965, 1966, 1967 and 1968 is shown in the table below.

	Notified Cases 1965	Notified Cases 1966	Notified Cases 1967	Notified Cases 1968	Notified Cases 1969
Scarlet Fever	628	808	536	185	329
Whooping Cough	425	944	494	609	209
Measles (excluding rubella)	7,319	5,094	5,771	4,444	1,112
Poliomyelitis	—	—	—	3	—
Tuberculosis, respiratory	249	235	234	219	186
Tuberculosis, non-respiratory	34	30	29	33	28
Diphtheria	—	—	—	—	—
Smallpox... ..	—	—	—	—	—
Meningococcal Infection	16	7	3	3 (A)	—
Meningitis Acute	—	—	—	2 (B)	4
Acute Encephalitis, post-infectious	2	1	1	—	—
Dysentery	259	372	425	341	386
Ophthalmia Neonatorum	79	62	70	70	64
Puerperal Pyrexia	265	230	287	269 (A)	—
Acute Pneumonia (primary or influenzal)	205	158	182	70 (A)	—
Paratyphoid Fever	12	5	1	1	1
Typhoid Fever	—	1	1	1	1
Food Poisoning	72	59	78	139	93
Erysipelas	21	26	20	13 (A)	—
Malaria (contracted abroad)	6	3	5	5	4
Anthrax	—	—	2	—	1
Infective Jaundice	—	—	—	439 (C)	381

(A) Nine months' figures only (January—September). Ceased to be notifiable from 1st October, 1968.

(B) Newly notifiable from 1st October, 1968.

(C) Newly notifiable from 15th June, 1968.—Includes 242 voluntarily notified, (Jan.—June), 197 statutorily notified (June—Dec.).

The number of cases of infectious diseases notified, especially measles showed a big decrease. Compared with the 1968 figure of 4,444 cases of measles, there were only 1,112 in 1969. This is the lowest measles figure for 30 years, and is associated with measles vaccination, although the numbers vaccinated were lower than in 1968. There were also decreases in notifications of food poisoning, infective jaundice, malaria contracted abroad, ophthalmia neonatorum, poliomyelitis (no cases), tuberculosis and whooping cough. Increases occurred in anthrax (one case), dysentery and scarlet fever.

Exclusion of Children from School

The total number of children excluded from school on account of infectious disease was 121. The average period of exclusion was 30 days.

ANTHRAX

A case of anthrax occurred in a woman who worked for a sack merchant. *B. Anthracis* was isolated from sacks and roof timbers at the premises. As the result of an inspection carried out by officers of the Department in conjunction with H.M. Factory Inspectorate, conditions at the premises were improved. The other workers were immunised against the disease.

DYSENTERY

During 1969, 386 cases were notified. The following table gives the number of cases of dysentery notified between 1959 and 1969.

1959	407
1960	515
1961	335
1962	296
1963	383
1964	313
1965	259
1966	372
1967	425
1968	341
1969	386

When a case is notified the patient is visited and, as soon as possible, a bacteriological diagnosis is made. The situation is then assessed. Food handlers are invariably excluded from work. In cases of children and people not handling food, careful consideration is given to the need for exclusion, and this is avoided if it is at all possible, provided that, at the same time, the spread of the disease can be adequately prevented. In some circumstances exclusion can lead to unnecessary hardship, either where the person is excluded from work and so suffers, or where because a child is excluded from school, the parent is unable to go to work.

FOOD POISONING AND SALMONELLA INFECTION (EXCLUDING TYPHOID AND PARATYPHOID)

It is customary to classify outbreaks of food poisoning and salmonella infection into three groups: (a) general outbreaks, which comprise two or more unrelated cases due to a common cause; (b) family outbreaks where two or more cases are related; or (c) single cases not connected with any other.

The total number of cases coming to the attention of the Department was 93. Of these, eight occurred in a series of four family outbreaks and 72 occurred in isolation. There was also one general outbreak in which there were thirteen cases

A table giving the organisms found in notified cases is listed below:—

Organism	Number of persons from whom organism was isolated
Salmonella bredeney	2
Salmonella derby	1
Salmonella enteritidis	1
Salmonella heidelberg	10
Salmonella indiana	2
Salmonella kottbus	1
Salmonella montevideo	1
Salmonella muenchen	1
Salmonella panama	46
Salmonella stanleyville	1
Salmonella takoradi	1
Salmonella typhimurium	18
Salmonella virchow	7
Salmonella untypable	1
	<hr/> 93 <hr/>

The general outbreak occurred at a wedding reception attended by 47 people, including six from outside the City. The Medical Officers of Health of the areas concerned were notified regarding the latter. The agent causing the outbreak was salmonella panama. Symptoms included pyrexia, abdominal pain and diarrhoea. The average length of the illness was 4.4 days.

In addition to those who suffered symptoms, there were eleven positive carriers without symptoms. Two were employed as food handlers, and these were excluded from employment until clear. Another, not employed as a food handler, took part in the preparation of the meal.

The wedding reception was held in a scout hut, the catering being done by a person who stated he had obtained the food from two Liverpool firms. He was assisted by his wife, who was found to be a positive carrier, and two other persons who were negative. The food, which included sliced tongue, roast pork, roast beef, meat pies, trifles,

fancy cake and bread, was delivered to the hut about two hours before the reception, and sandwiches were prepared on the premises.

It was not possible to obtain samples of the actual food consumed. Samples of similar foods were obtained from the firms named, but were all negative. It therefore proved impossible to establish the cause of the outbreak with any certainty.

INFECTIVE JAUNDICE

During the year 381 cases were notified. There were also four deaths from this cause.

POLIOMYELITIS

No cases occurred in Liverpool during the year.

TYPHOID

A severe case of typhoid occurred in a lady who had spent a fortnight's holiday during the summer in Gibraltar and Tangier. On her return from abroad she continued her holiday in several different parts of the country, until after fifteen days she became ill. She cut short her holiday and returned to Liverpool where her condition deteriorated and she was admitted to isolation hospital as a query typhoid. This was subsequently proved to be the diagnosis. For the first week after her admission her condition was critical. She made a slow but marked recovery, remaining intermittently positive until October, and was discharged on treatment in November. She was re-admitted for further tests in January, 1970. Thirteen consecutive negative specimens were obtained, and she was discharged as clear of infection during February.

Several people from outside Liverpool had accompanied her on her tour abroad, and the Medical Officer of Health of these areas and of the areas she had herself recently visited in other parts of this country, were informed. Her home contacts were kept under supervision. One proved negative for typhoid organisms, but the other, an elderly person, refused to provide the necessary specimen for laboratory investigation.

Typhoid Contacts

From August onwards the department was notified, by Medical Officers of Health of other areas, of the occurrence of several cases of typhoid in parties of travellers from Tunisia, Tangier and Australia. None of the cases lived in Liverpool, but there were Liverpool people in the parties, and all of them were visited and gave specimens which fortunately proved negative. Twenty-nine people were investigated. In addition some of those notified to the Department were found to live outside the City boundary, and in these instances the appropriate Medical Officers of Health were informed.

PARATYPHOID

Case 1. A party of 40 people, 36 pupils and four adults, from a senior school went on a trip to Israel for four and half weeks during July and August. One of the boys contracted paratyphoid and spent two weeks there in hospital. Though still feeling unwell he travelled back with the party, and was seen by his general practitioner who took a stool specimen. Three days later the boy was taken to hospital with diagnosis of paratyphi B. Visits were made to his immediate family and specimens taken which proved negative. None became ill. A list of the people on the trip was obtained and all were kept under supervision. The boy eventually gave a series of negative specimens and was discharged from hospital after a stay of 24 days.

Case 2. The following case is not included in the figures of the diseases notified in the City, as the illness occurred whilst the person was in another part of the country.

A Liverpool school teacher went on a camping holiday to Morocco, returning via Spain and France. He was accompanied by his wife, who was a teacher in an adjacent local authority area. On his return he took ill whilst visiting his parents in another part of the country. Stools taken were positive for paratyphoid. He was admitted to hospital there but soon recovered from his symptoms and was discharged, when he returned to Liverpool. His general practitioner was informed and he in turn notified this Department. Specimens were collected over a period from the teacher, who was excluded from his school until clear of infection. The time from his illness until he was clear was about six weeks. The Department notified the local authority concerned regarding his wife, and she too was excluded from school for a time. Fortunately she remained negative.

Paratyphoid Contacts

Three cases paratyphoid in non-Liverpool residents were reported to the Department on account of Liverpool contacts. Two of these cases occurred on Mediterranean cruises, the other during a holiday in Jersey. The Liverpool contacts were followed up but none proved positive.

WINTER EPIDEMIC SPOTTING

An increase in absences from work ascribed to influenza occurred towards the end of February and during the whole of March. Claims for sickness benefit were above normal during this period, and there was a corresponding increase in deaths. During the whole year there were 27 deaths from influenza, compared with four in 1968. Twenty of the deaths occurred during the first four months of the year, and the others during November and December.

IMMUNISATION AND VACCINATION

DIPHTHERIA IMMUNISATION

The number of persons under the age of sixteen receiving a primary course of diphtheria immunisation in 1969 was 7,974, an improvement on the 1968 figure of 7,179.

During 1969, totals of 1,253 primary courses and 5,023 booster doses were given in schools. The primary figure is lower than the previous year's total, but the booster figure is higher.

The number of primary courses carried out in Maternity and Child Health Clinics was 4,098, a substantial increase on the 1968 figure; in addition 2,623 were performed by general practitioners. The number of booster doses given in Maternity and Child Health Clinics, 821, was slightly higher than in 1968, whilst the numbers given by general practitioners decreased from 1,644 to 1,158 in 1969. These figures, together with 5,023 boosters given in schools, give an overall total of 7,002 booster doses, an improvement on the 1968 figure of 5,676.

The above comments refer to persons under age sixteen. Table B also includes separate figures for age sixteen and over.

TABLE A

PRIMARY DIPHTHERIA IMMUNISATIONS—1959-1969

Where immunised	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Maternity and Child Health Clinics	5,789	13,091	5,479	5,016	5,263	5,710	6,023	5,843	4,799	2,155	4,098
Schools	3,245	3,926	1,332	1,464	1,362	2,732	1,401	1,818	1,698	1,678	1,253
General Practitioners ...	5,102	8,929	6,375	3,523	3,399	3,397	3,405	3,189	3,458	3,346	2,623
TOTAL	14,136	25,946	13,186	10,003	10,024	11,839	10,829	10,850	9,955	7,179	7,974

TABLE B

DIPHTHERIA IMMUNISATION—1969

Where Immunised		Year of Birth					
		1965-69 (0—4 yrs.)	1961-64 (5—8 yrs.)	1954-60 (9—15 yrs.)	Total (0—15 yrs.)	1953 and before (16 and over)	Total all ages
Primary Course	Maternity and Child Health Clinics ...	3,864	224	10	4,098	3	4,101
	General Practitioners	2,441	151	31	2,623	89	2,712
	Schools ...	35	1,148	70	1,253	—	1,253
	Total	6,340	1,523	111	7,974	92	8,066
Booster Doses	Maternity and Child Health Clinics ...	115	699	7	821	15	836
	General Practitioners	290	759	109	1,158	31	1,189
	Schools ...	144	4,700	179	5,023	1	5,024
	Total	549	6,158	295	7,002	47	7,049

WHOOPING COUGH IMMUNISATION

The number of primary courses of whooping cough immunisation in 1969 was 6,409 compared with 5,211 in 1968.

Booster doses numbered 1,132 as compared with 1,499 in 1968.

TABLE C

WHOOPING COUGH IMMUNISATION—1969

Where Immunised		Year of Birth			
		1965-69 (0—4 yrs.)	1961-64 (5—8 yrs.)	1954-60 (9—15 yrs.)	Total (0—15 yrs.)
Primary Course	Maternity and Child Health Clinics ...	3,783	100	1	3,884
	General Practitioners	2,379	128	18	2,525
	Total	6,162	228	19	6,409
Booster Doses	Maternity and Child Health Clinics ...	41	270	1	312
	General Practitioners	244	536	40	820
	Total	285	806	41	1,132

TETANUS IMMUNISATION

The level of tetanus immunisation in children under sixteen showed some improvement this year, 7,979 primary courses being completed as compared with 7,168 in 1968. In addition, 7,072 booster doses were given, compared with 5,711 in 1968. Separate figures are included in Table D for persons aged sixteen and over.

TABLE D

TETANUS IMMUNISATION—1969

Where Immunised		Year of Birth					
		1965-69 (0-4 yrs.)	1961-64 (5-8 yrs.)	1954-60 (9-15 yrs.)	Total (0-15 yrs.)	1953 and before (16 yrs. & over)	Total all ages
Primary Course	Maternity and Child Health Clinics ...	3,864	227	11	4,102	7	4,109
	General Practitioners	2,428	157	39	2,624	142	2,766
	Schools ...	35	1,148	70	1,253	—	1,253
Total		6,327	1,532	120	7,979	149	8,128
Booster Doses	Maternity and Child Health Clinics ...	117	695	6	818	29	847
	General Practitioners	296	781	154	1,231	132	1,363
	Schools ...	144	4,700	179	5,023	1	5,024
Total		557	6,176	339	7,072	162	7,234

TABLE E

PRIMARY COURSES OF ANTIGEN

Diphtheria/tetanus and whooping cough ...	6,406
Diphtheria and whooping cough ...	7
Diphtheria and tetanus ...	1,633
Diphtheria ...	20
Tetanus ...	89

SMALLPOX VACCINATION

Infant vaccination remained low in 1969, only 3,385 primary vaccinations against smallpox being carried out. The figure for 1968 was 4,525.

The number of smallpox vaccinations at the clinic held for the purpose of people travelling abroad increased from 4,479 in 1968 to 5,722 in 1969. It is probable that most of the re-vaccinations carried out by general practitioners were also for this purpose.

TABLE F
SMALLPOX VACCINATION

Age at date of vaccination	Primary Vaccination			Revaccination		Total	Vaccination at clinic for International Travel	Total
	Maternity and Child Health Clinics	General Practitioners	Total	Maternity and Child Health Clinics	General Practitioners			
0-3 months	16	15	31	—	—	—		31
4-6 months	7	16	23	—	—	—		23
7-9 months	11	20	31	—	—	—		31
10-12 months	34	27	61	—	—	—		61
1 year	871	738	1,609	—	—	—		1,609
2-4 years	798	651	1,449	2	22	24		1,473
5-15 years	59	122	181	4	87	91		272
Total under 16	1,796	1,589	3,385	6	109	115		3,500
Others	44	166	210	137	1,138(A)	1,275		1,485
Total	1,840	1,755	3,595	143	1,247(A)	1,390	5,722(B)	10,707

NOTES—(A) The revaccination figures for general practitioners include vaccinations for persons travelling abroad.

(B) The vaccination figures of the vaccination clinic for international travel include persons of all ages, some of whom are not resident in Liverpool. The vast majority are adults.

POLIOMYELITIS IMMUNISATION

The number of children under sixteen receiving primary courses of poliomyelitis immunisation dropped slightly, from 9,746 in 1968 to 9,275. The number of booster doses also fell, but the 1968 figure was abnormally high on account of the occurrence of three cases of poliomyelitis.

TABLE G
POLIOMYELITIS IMMUNISATION—1969
Completed Primary Courses

Where Immunised	Year of Birth						Others under 16	Total under 16	16 and over	Total all ages
	1969	1968	1967	1966	1965	1961-64				
Maternity and Child Health Clinics ...	78	2,788	1,137	470	310	477	63	5,323	533	5,856
General Practitioners	387	1,506	300	197	128	280	121	2,919	474	3,393
Schools ...	—	—	—	7	23	774	229	1,033	5	1,038
Total ...	465	4,294	1,437	674	461	1,531	413	9,275	1,012	10,287

Reinforcing Doses

Maternity and Child Health Clinics ...	—	19	30	47	153	679	104	1,032	1,610	2,642
General Practitioners	—	58	93	55	80	816	239	1,341	510	1,851
Schools ...	—	—	—	17	473	2,922	478	3,890	180	4,070
Total ...	—	77	123	119	706	4,417	821	6,263	2,300	8,563

MEASLES IMMUNISATION

During the year 2,232 measles vaccinations were carried out, compared with 5,600 during the period June to December, 1968. The fall in numbers was caused by the withdrawal by one manufacturer, after consultation with the Department of Health and Social Security, of stocks of one make of vaccine in March. The reason for this action was that three children, all in the second year of life, were reported as suffering from a condition clinically diagnosed as encephalitis. The onset of the illness was in each case about a week after measles vaccination. These cases did not occur in Liverpool.

TABLE H
MEASLES VACCINATION IN 1969

Where Immunised	Year of Birth						Others under 16	Total
	1969	1968	1967	1966	1965	1961-64		
Maternity and Child Health Clinics	—	161	399	276	214	155	3	1,208
General Practitioners ...	5	204	275	200	144	176	20	1,024
Schools	—	—	—	—	—	—	—	—
Total	5	365	674	476	358	331	23	2,232

VACCINATIONS FOR INTERNATIONAL TRAVEL

A total of 12,622 doses of vaccine for international travel was given at the clinic which is held every afternoon for the purpose. This compares with 9,614 in 1968.

TABLE J
VACCINATIONS FOR
INTERNATIONAL TRAVEL—1969

Month	Yellow Fever Number of Persons	Smallpox— Number of persons vaccinated	T.A.B.— Number of full courses	Cholera— Number of full courses	Total
January ...	376	374	62	149	961
February ...	220	337	43	132	732
March ...	242	452	71	110	875
April ...	252	701	60	97	1,110
May ...	233	675	63	215	1,186
June ...	339	624	110	121	1,194
July ...	282	643	110	169	1,204
August ...	230	512	83	151	976
September ...	217	434	791	187	1,629
October ...	307	353	200	230	1,090
November ...	282	319	92	227	920
December ...	193	298	99	155	745
Totals ...	3,173	5,722	1,784	1,943	12,622

ANTHRAX IMMUNISATION

Anthrax immunisation is offered by the Health Department to persons at special risk, these being those working in such establishments as tanneries, glue, gelatine and bonemeal factories, and woollen mills, who are regularly handling such materials as wool, camel hair, horse hair, hides and hoof and horn meal, particularly those imported

from India, Pakistan, the Middle East, China, Africa, Asia, Central and South America.

TABLE K

ANTHRAX IMMUNISATIONS

	1st Injection	Booster
1966	21	29
1967	23	76
1968	27	22
1969	27	49

CONTROL OF RADIATION HAZARDS

REGISTERED USERS UNDER RADIOACTIVE SUBSTANCES ACT, 1960.

Three additional users were added to the Register of Users during 1969.

USE OF RADIOACTIVE SOURCES IN SCHOOLS, ESTABLISHMENTS OF FURTHER EDUCATION AND TRAINING COLLEGES.

Forty schools are now using radioactive substances.

Tables listing all sources at present held in the City, excluding hospitals and the University, are given below:—

RADIOACTIVE SEALED SOURCES—INDUSTRIAL ESTABLISHMENTS

Nature of Source	Size of Source	Number of Sources
Carbon 14	1 microcurie	1
	0.5 "	1
	0.75 "	1
Caesium 137	0.5 millicuries	2
	10 "	1
Cobalt 60	0.5 "	1
Iridium 192	500 "	1
	20 curies	1
Strontium 90	469 millicuries	1
Thallium 204	24 "	1
	30 "	1
Thulium 170	300 "	1
	20 curies	1
Tritium	60 millicuries	1
	10 curies	1

RADIOACTIVE SEALED SOURCES—EDUCATIONAL ESTABLISHMENTS

Nature of Source	Size of Source	Number of Sources
Americium 241	0.125 microcuries	23
	1 "	1
	5 "	1
Cobalt 60	0.125 "	1
	5 "	33
Plutonium 239	0.1 "	15
Radium 226	5 "	46
Strontium 90	0.125 "	23
	1 "	12
	5 "	5
	9 "	19

MEDICAL CARE OF IMMIGRANTS

MEDICAL ARRANGEMENTS FOR LONG-STAY IMMIGRANTS

In January, 1965, the Ministry of Health introduced a scheme under which medical inspectors at ports endeavour to obtain destination addresses from those immigrants who are referred to them. They then forward these addresses to the Medical Officers of Health of the areas concerned, who arrange for the immigrants to be visited and given general information about the health services, and persuaded to register themselves and their dependants with general medical practitioners with a view particularly to chest X-ray where this is appropriate.

On receipt of each advice note of the arrival of an immigrant in Liverpool arrangements are made for a health visitor to call at the address given. Quarterly returns of figures relating to the visits are made to the Department of Health and Social Security.

Although the tracing of immigrants is laborious and time-consuming, there has been little difficulty in obtaining co-operation when first anxieties have been dispelled. A constant problem remains of incorrect addresses being given; temporary accommodation being given as a permanent place of residence. Whenever possible, when this latter occurs, the information is passed on to the appropriate Medical Officer of Health of the area to which the immigrant has moved.

A summary of the results for the year is given below:—

Advice notes received relating to 285 persons, including 23 not Liverpool addresses. The latter were forwarded to the correct local authorities.

Successful first visits were made relating to 204 persons and an additional twelve successful first visits relating to advice notes received towards the end of 1968.

Not traced during the period: 47 persons.

MEDICAL EXAMINATIONS

This section of the Department is primarily concerned with the occupational health of employees of the Liverpool Corporation. It is equipped with Electrocardiograph, Vitalograph and other diagnostic aids together with facilities for simple estimations of blood and urine. Chest X-rays are arranged through the Liverpool Central Chest Service. When necessary, persons are referred for further investigations either to their own general practitioner or directly to a hospital consultant.

Medical examinations are carried out to determine the fitness of new employees for their posts. This refers to the officer grade, and certain other specified grades such as home helps or cooks, who might otherwise constitute a health hazard. Those classed as manual workers are examined prior to entry into the superannuation scheme. Following a period of sick leave personnel are seen to determine whether they are fit to continue in their present employment, or, whether they may be considered fit for some other less demanding employment. If not, they are to be retired on medical grounds. Some examinations are also conducted at the request of other local authorities.

The Department also acts in a consultant capacity to the Liverpool and Bootle Constabulary and the Liverpool Fire Brigade. This work involves the examination of cadets and adult recruits on appointment and the continued medical supervision of police cadets at six-monthly intervals. Sickness and accident cases also undergo continued medical supervision from the Department. In both the Police and the Fire Brigade, examinations are conducted for pension purposes and the assessment of permanent disabilities. Within the orbit of the police examinations are to be included those of Traffic Wardens and School Crossing Patrols. Fire Brigade personnel attending Breathing Apparatus Courses are also examined to determine their fitness to undertake the course.

Certain other special examinations are carried out by the Department. These include examinations under the terms of the Travel Concessions Act, 1964, to determine whether applicants for concessionary travel passes are entitled to them. According to the Act there must be a minimum degree of permanent leg disability of 35 per cent. Mersey Tunnel workers are given six-monthly examinations due to the nature of their work inside the tunnel with exposure to exhaust fumes, etc. Labourers undertaking work underground in the construction and repair of sewers and water mains are also given periodical examinations due to the hazards of their employment. Laboratory specimens are obtained from this group of workers and

also from contractors' employees engaged in digging new water mains, in order to eliminate the dangers of enteric and other water borne infections.

During 1969 the work of the Department again showed an increase over the previous year; in 1969 a total of 5,416 examinations was carried out which may be sub-divided as at Table I.

In relation to Corporation employees, 323 were found to be unfit for their employment and were retired on medical grounds, 121 manual workers were found unfit for entry to the superannuation scheme and 41 new employees were found unfit to take up their posts. This total of 485 classed as unfit represents approximately 10·7 per cent of those examined. Of this total, 88 were found unfit for other than primarily pathological causes, for example failure to reach required physical standards, poor sickness records and the like. Table II represents an analysis of the 397 cases where sickness was the primary cause for retirement or unfitness.

It will be noted that cardiovascular and respiratory conditions together represent 46·4 per cent of all causes of permanent unfitness. The largest single condition was chronic obstructive pulmonary disease which, together with its cardiac complications, accounted for 20·6 per cent of the total. The second largest single condition was ischaemic heart disease (11·1 per cent). Also a high figure was found in various musculo-skeletal diseases such as osteoarthritis.

TABLE I
ANALYSIS OF EXAMINATIONS CONDUCTED

CORPORATION EMPLOYEES	
Medical examinations on appointment:	2,482
Examinations for superannuation:	1,147
Examinations for extension of sickness pay:	11
Examinations for suitability for continued employment:	760
	<hr/>
Examinations for other authorities:	4,400
SPECIAL EXAMINATIONS	43
Under Travel Concessions Act, 1964	534
Mersey Tunnel workers:	133
Under National Insurance (Industrial Injuries) Act, 1946.	
(Pneumoconiosis):	137
Fitness of Firemen for Breathing Apparatus courses:	143
Private contractors' employees laying new water mains:	26
	<hr/>
	973
	<hr/>
	TOTAL: 5,416
	<hr/>

TABLE II

CLASSIFICATION OF PATHOLOGICAL CONDITIONS CAUSING EARLY RETIREMENT,
AND UNFITNESS FOR EMPLOYMENT OR SUPERANNUATION

DISEASES OF THE CARDIOVASCULAR SYSTEM

Ischaemic heart disease (including 13 cases of myocardial infarction)	44
Hypertension/Hypertensive Heart Disease ...	26
Cor pulmonale (secondary to obstructive pulmonary disease)	6
Valvular disease of the heart	8
Myocarditis (viral)	1
Peripheral arteriosclerotic vascular disease ...	6
Varicose veins (with or without phlebothrombosis or thrombophlebitis)	10
	<hr/>
	101 (25.4%)

DISEASES OF THE RESPIRATORY SYSTEM

Chronic obstructive pulmonary disease	76
Pulmonary tuberculosis	2
Sarcoidosis	1
Interstitial pulmonary fibrosis	1
Bronchogenic carcinoma	3
	<hr/>
	83 (20.9%)

DISEASES OF THE DIGESTIVE SYSTEM

Chronic gastritis	3
Gastric ulcer	2
Duodenal ulcer	7
Hiatus hernia... ..	2
Ulcerative colitis	2
Carcinoma of stomach	2
Carcinoma of colon	2
Secondary carcinoma of liver (primary sites unknown)	2
	<hr/>
	22 (5.5%)

DISEASES OF THE HAEMOPOIETIC SYSTEM

Chronic microcytic anaemia	2
Chronic myeloid leukaemia	1
Lymphosarcoma	1
	<hr/>
	4 (1.0%)

DISEASES OF THE UROGENITAL SYSTEM

Chronic pyelonephritis	5
Chronic cystitis	1
Polycystic disease of the kidney	1
Renal carcinoma	1
Benign prostatic hypertrophy	3
Menorrhagia	1
	<hr/>
	12 (3.0%)

DISEASES OF THE ENDOCRINE SYSTEM

Thyrotoxicosis	2
Myxoedema	1
Diabetes mellitus	6
	<hr/>
	9 (2.3%)

DISEASES OF THE MUSCULOSKELETAL SYSTEM

Osteoarthritis...	...	...	...	...	23
Rheumatoid arthritis	...	...	...	...	11
Lumbar intervertebral disc lesions...	...	...	...	...	15
Cervical spondylosis	...	...	...	...	4
Ankylosing spondylitis	...	...	...	...	2
Chronic idiopathic myositis...	...	...	...	...	3
Frozen shoulder syndrome	...	...	...	...	4
Post-traumatic sequelae	...	...	...	...	16
					<hr/>
					78 (19.6%)

DISEASES OF THE SKIN

Chronic allergic dermatitis	...	...	...	...	1
Congenital ichthyosis	...	...	...	...	1
					<hr/>
					2 (0.5%)

DISEASES OF THE EAR, NOSE AND THROAT

Chronic otitis media	...	...	...	...	3
Menière's disease	...	...	...	...	3
Acquired perceptive deafness	...	...	...	...	1
Carcinoma of larynx...	...	...	...	...	3
					<hr/>
					10 (2.5%)

DISEASES OF THE EYE

Senile cataract	...	...	...	...	3
Chronic glaucoma	...	...	...	...	3
Detachment of retina	...	...	...	...	1
Retinitis pigmentosa...	...	...	...	...	1
					<hr/>
					8 (2.0%)

DISEASES OF THE CENTRAL NERVOUS SYSTEM

Cerebral vascular disease	...	...	...	...	8
Epilepsy	...	...	...	...	5
Migraine	...	...	...	...	2
Hereditary spastic paraplegia	...	...	...	...	1
Paralysis agitans	...	...	...	...	1
Multiple sclerosis	...	...	...	...	1
Intracranial neoplasms	...	...	...	...	3
					<hr/>
					21 (5.3%)

MENTAL DISORDER

Schizophrenia...	...	...	...	...	8
Schizo-affective psychosis	...	...	...	...	1
Manic-depressive disorder	...	...	...	...	15
Anxiety neurosis	...	...	...	...	18
Deviate behaviour	...	...	...	...	2
					<hr/>
					44 (11.1%)

MISCELLANEOUS CONDITIONS

Incisional hernia	...	...	...	...	1
Carcinoma of breast	...	...	...	...	2
					<hr/>
					3 (0.8%)

TOTAL 397

TUBERCULOSIS

STATISTICS

The number of new cases found during the year decreased to 214, consisting of 186 pulmonary and 28 non-pulmonary cases. These figures represent a reduction of 38 compared with 1968 and give an incidence of 0.27 per 1,000 for cases of pulmonary tuberculosis, and 0.04 per 1,000 for cases of non-pulmonary tuberculosis. The figures for 1968 were 0.32 and 0.05 respectively.

During the year 289 cases were removed from the Register consisting of 283 pulmonary and six non-pulmonary. These included those who had recovered during the year. The number of cases on the Register at the beginning of the year was 2,570 comprising 2,311 pulmonary and 259 non-pulmonary and excluding a total of 16 cases where diagnosis had not been completed. This gave a prevalence rate per 1,000 population of 3.41 pulmonary and 0.38 non-pulmonary, with an overall tuberculosis prevalence rate of 3.79 per 1,000 at mid-year.

The total number of cases remaining at the end of the year was 2,367 comprising 2,102 pulmonary and 265 non-pulmonary and excluding a total of eleven cases where diagnosis had not been completed. Thus it may be seen that the overall reservoir of cases is continuing to decrease. The number of new cases found as the result of illness was 173 which is nine less than the previous year. The number of new cases found by examination of apparently healthy persons has shown a marked decrease from the previous year.

Of the new cases of pulmonary tuberculosis, 120 were male and 66 female, 64.5 per cent of the total being male and 35.5 per cent female. Details of age and sex distribution are given in the statistical section. The total of 27 tuberculosis deaths in 1969 comprises 24 from pulmonary tuberculosis and three from non-pulmonary tuberculosis. These figures represent death rates of 0.0354 per 1,000 for pulmonary tuberculosis and 0.0044 per 1,000 for non-pulmonary tuberculosis making an overall rate of 0.0399 per 1,000 for all forms.

AFTER CARE AND PREVENTION

The number of tuberculosis visitors at the end of the year was thirteen. The policy of concentrating visits on cases of greatest need and on re-visiting cases where social and housing conditions were affecting the disease was continued throughout the year. The aim has again been to spend a greater amount of time on fewer cases in an attempt to remove sources of infection, thereby hastening the progressive eradication of tuberculosis. In addition, increasing attention is being paid to other lung conditions such as bronchitis, bronchiectasis, emphysema, carcinoma of the lung and post-operative conditions.

USE OF SECTION 169 OF THE PUBLIC HEALTH ACT, 1936

During the year it was found necessary to invoke Section 169 of the above Act to enforce admission of a patient to hospital. This action was taken as a last resort, since all other methods of persuasion had failed. Details are as follows:— The patient, a man aged 64 years, who had been in hospital for treatment on two previous occasions, had several sputum tests in July and October and all were reported positive. He was examined at the Clinic in September and found to have advanced active disease. The position was explained to him and he was informed that a further period of hospitalisation was imperative. However, he steadfastly refused to enter hospital on a voluntary basis. He was visited by the Assistant Medical Officer (Tuberculosis Welfare) and the Tuberculosis Visitor concerned and was made aware of the urgent necessity of entering hospital for further treatment. Unfortunately he remained adamant and refused to consider re-admission to hospital. A Magistrate's Order was therefore obtained under which he was admitted to hospital on the same day.

Although the use of legal powers was found to be necessary in this particular case, it is true to state that in almost all cases where an infectious patient refused to enter hospital it is sufficient to acquaint the person concerned of the existence of these powers to ensure co-operation on his part.

B.C.G. VACCINATION

During the year B.C.G. vaccination of new-born babies continued in the maternity wards of the Sefton General, Walton, Mill Road, Broadgreen and Liverpool Maternity Hospitals. The total number of babies vaccinated throughout all these units in the City was 330. In addition 68 university students were given B.C.G. vaccination at Walton Hospital.

B.C.G. VACCINATION OF SCHOOL CHILDREN

Vaccination was offered to 12,287 school leavers and 11,875 parents signed the consent form. The number Heaf-tested in schools was 11,333 (number read 10,123), and the number of positive Heaf tests was 2,202. This number included 1,256 (11 per cent of total tested) who had previously had B.C.G. vaccination. The number of children given B.C.G. vaccination was 7,921 being 69·8 per cent of the total number tested and 64·4 per cent of the number to whom vaccination was offered. The corresponding percentages in 1968 were 72·9 and 50·2 respectively.

No students at Teacher Training Colleges received B.C.G. vaccination during the year, although facilities were offered.

MASS RADIOGRAPHY

Mr. C. C. Warmer, Senior Administrative Officer, Liverpool Regional Hospital Board writes:—

"The Mass Radiography Service, administered by the Liverpool Regional Hospital Board, moved from its Hood Street premises in December, 1969, to new headquarters in Kingsway House, Hatton Garden, Liverpool, 3. The Service was reduced by one mobile unit during the year thus leaving the static unit and one mobile unit to cover the whole of the Board's area. On centralisation at the new headquarters the Service was redesignated The Liverpool Central Chest Service. Arrangements were in hand for the Service to undertake the work, early in 1970, of the Central Chest Clinic which would be transferred from the Liverpool Clinic, Myrtle Street, to Kingsway House, Hatton Garden.

During the year the static unit X-rayed 31,521 people. Of these, 8,040 were referred by general practitioners.

The mobile units X-rayed 51,739 people, making a grand total of 83,260 examinations.

All prospective employees of the City Nursing Service are X-rayed by the static unit before their employment, as are candidates for employment in the Education Service, and recruits to the City Police Force. The entry medical examination of Corporation employees and superannuation medical examination includes a chest X-ray, and these are also carried out by the Central Chest Service.

In co-operation with the Health Department, the mobile unit visits factories and other premises in the City whenever an active case of pulmonary tuberculosis is discovered.

During the year, 27 cases of active pulmonary tuberculosis were discovered by the static unit, of whom eighteen were Liverpool residents. A further eight active cases resident in the City were discovered by the mobile section making a total of 26 Liverpool cases brought to light by the Central Chest Service."

TUBERCULOSIS WELFARE

Under the Ministry of Social Security Act, 1966, the special scale of allowances for tuberculosis patients was abolished and replaced by a fixed allowances of 13s. 6d. per week in addition to the standard social security benefit. The Ministry constantly reviews persons in receipt of allowances and requests confirmation that individuals are still receiving treatment or are under the supervision of the Chest Physician. The Health Department co-operates fully and supplies the necessary information. In addition, constant liaison is maintained with the Department of Employment and Productivity Rehabilitation Unit in order to assist in suitable cases.

During 1969 two patients have had occupational therapy at home and one has attended an occupational therapy unit.

WORK OF THE CHEST CLINICS

An analysis of the work done during 1969 at the four Chest Clinics is given in the statistical section. The Chest Physicians have kindly contributed the following reports:—

Dr. F. E. Crawley, Consultant Chest Physician of the South Liverpool Chest Clinic writes:—

"The past year has shown a continuation of the trend of the past several years in a reduction in the number of patients on the tuberculosis register. This year the reduction in numbers has been smaller and in the main due to the removal as cured of a smaller proportion of our patients than usual, but no inference can be drawn from this since in 1968 we had a critical assessment of all patients on the register and now see only those whose supervision is still required for strict medical and social reasons related to their past tuberculosis infection.

The number of new cases dropped to the figure one would anticipate from the general trend of reduction of the incidence of disease throughout the country—the 1968 figure was quite atypical.

In comparison with the figures of twenty years ago, the death of five patients appears to require little comment, but in a disease in which one can anticipate complete cure these fatalities must be regretted, and are often due to a neglect of treatment or to failure to appreciate the significance of symptoms before seeking treatment too late.

The general work of the clinic and of the tuberculosis visitors attached to the clinic continues as usual without significant variation."

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

"The number of new cases notified as suffering from tuberculosis in 1969 has this year increased by three as compared to 1968 to a total of 54 new cases of tuberculosis, 45 of whom were suffering from respiratory disease. Three of these new cases came from the examination of 164 new contacts. The figures for this year are therefore a bit disappointing and there is no room for complacency, as we do not seem to be rapidly approaching the eradication of tuberculosis from Liverpool.

Two hundred and fifty-two children and adults were vaccinated with B.C.G. during the year, 128 of them being children who were contacts of adult cases of tuberculosis. Four hundred and twenty-nine tuberculin tests were performed. Thirty tuberculosis patients on the register died, 25 from tuberculosis and five from other causes, and, on the other hand, 74 patients were removed from the register as recovered. The register has diminished from 788 last year to 715.

Follow-up of all children found to be tuberculin-positive by the School Medical Officers remains policy at this clinic and in the case of strongly positive reactions, prophylactic chemotherapy is given and the other members of the family examined as contacts.

Out of a total number of 5,046 attendances, two-fifths were on account of, or relating to tuberculosis and the remainder were non-tuberculous. This clinic is taking part in a current trial on the effects of the latest anti-tuberculous drugs and it is to be hoped that they will be found to be effective in further reducing the pool of infection in the community."

Dr. S. Kalinsky, Consultant Chest Physician from the Central Chest Clinic writes:—

"The following are the figures for patients seen at the Central Chest Clinic during 1969:—

NEW CASES EXAMINED FOR THE FIRST TIME			
Contacts ... ..	...	184	
Tuberculosis notifications		37	
Other chest conditions ...		105	
		—	326

OLD CASES SEEN			
Tuberculosis ... ..	...	348	
Other chest conditions ...		40	
Old contacts ... ..	...	24	
		—	412
Total patients seen			738

B.C.G. Vaccinations			
Central Chest Clinic ...	...	36	
Liverpool Maternity Hospital ...	...	69	
		—	
Total			105

Dr. L. H. Harris, Consultant Chest Physician from the East Chest Clinic writes:—

"There was a slight reduction in the year's work as a result of (a) the transfer of the clinic with all its furnishings, records and x-rays to Newsham General Hospital; and (b) the high sickness rate of nursing staff from influenza which necessitated cancellation of out-patients clinics.

The slow but steady reduction of the number of cases on the tuberculosis register has continued. The figures are now down to 383 (466 in 1968) which includes new cases. New cases occur at much the same rate as in the past few years (75 in 1969, 73 in 1968). About 20 per cent of the new cases are found to sputum-positive on diagnosis.

The two new powerful anti-tuberculous drugs, Ethambutol and Rifamycin, are proving most valuable. Not only are they highly effective,

but side effects are minimal and patient-acceptance is very good. This is a very different picture from that of only a few years ago when we were limited to therapy with unpleasant and sometimes serious side effects and low patient-acceptance.

The numbers of contacts tuberculin-tested and the number given B.C.G. vaccination have again fallen. This is probably just fortuitous, depending on the size of family and number of friends any active case happens to have.

Respiratory medicine (non-tuberculous) now represents 75 per cent of the clinic work, and this proportion will undoubtedly rise when a second Consultant Chest Physician commences duty in March, 1970.

These figures lend strong support to the concept that a Chest Clinic and supporting beds should be an integral part of a General Hospital. This has now been achieved to some extent by the transfer of the East Liverpool Chest Clinic to Newsham General Hospital—although some of the supporting beds are still situated in Fazakerley Hospital, Aintree Unit.

Basic respiratory function studies are performed on nearly every patient, and more detailed studies on selected subjects, thus adding to the understanding and management of patients. This means that the out-patient service given is greater than measured by numbers alone.

The tuberculosis visitors continue to play an active and essential role in the functioning of the clinic, and would be irreplaceable."

RE-HOUSING ON MEDICAL GROUNDS

The following table gives details of cases of tuberculosis re-housed on medical grounds during 1969:—

1969	Special Priority Cases	Transfer Cases	Totals
Number of Applications Rec'd	47	134	181
Number Recommended	28	44*	72
Number re-housed	13	9	22
Number refused offers	6	—	6
Number still not re-housed	9	35	44

* Excludes 11 cases recommended under Slum Clearance.

EMERGENCY CARE OF THE ELDERLY

REMOVAL TO SUITABLE PREMISES OF PERSONS IN NEED OF CARE AND ATTENTION

These cases are assessed with great care, due regard being given to the medical, social and environmental aspects. Every effort is made to provide adequate support in the home, whatever the need, in order to maintain an independent existence for these elderly persons as long as possible.

Most cases visited, because of illness or general senility, can no longer be cared for at home and require hospital or residential accommodation for recovery or the maintenance of reasonable health. Whenever this situation occurs the medical and welfare problems are fully discussed with the person, and an offer of suitable premises away from home is made. The majority, when discovered in need, can be persuaded to accept admission for care and attention. The remainder, because of their condition, have no insight into their problems, and require firmer measures.

Instances of each type can be given, as follows:—

(a) An elderly lady living in an old tenement flat, with no heating and lighting. She had no relatives, and was dependent on very variable assistance with regard to food. She agreed to admission. This was followed by the cleaning of the accommodation and arrangements for better conditions on her return home.

(b) An elderly man, living in very poor conditions in a ground floor flat. He was in need of medical attention, and his accommodation caused offence to his neighbours. He would not accept any form of assistance, even from relatives. Section 47 of the National Assistance Act, 1948, was invoked, to enable the situation to be eased by his compulsory removal to suitable premises.

VENEREAL DISEASE

INCIDENCE OF SYPHILIS

As in 1968, compared to the preceding year, the total number of early syphilis infections showed a continuing decline with the combined male and female total at 64, representing a fall of 22.9 per cent.

Statistics over the years are as follows:—

Age in years	1946		1963		1964		1965		1966		1967		1968		1969	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Under 15	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15-17	9	15	2	—	2	1	2	—	1	—	4	4	1	1	—	2
18-20	40	71	9	3	18	5	12	3	9	5	12	12	8	5	8	6
21-25	177	111	24	2	36	6	42	14	20	6	18	14	16	7	16	2
26-30	149	57	14	4	20	3	23	2	15	3	20	3	14	8	8	1
31-35	136	41	9	2	9	—	14	1	10	4	12	6	5	1	8	4
36-40	73	23	5	—	3	1	7	—	7	3	11	4	4	1	3	—
41-45	32	5	—	1	5	1	5	1	5	3	16	4	5	2	1	—
46 and over	39	6	3	1	3	—	8	—	7	—	15	4	5	—	3	2
Total	655	331	66	13	96	17	113	21	74	24	108	51	58	25	47	17
Total M & F	986		79		113		134		98		159		83		64	

INCIDENCE OF GONORRHOEA

In spite of intensive efforts by the questioning of patients in regard to the source of infection, and following-up, where possible, contacts (a) through the medium of the patient; or (b) acting upon information when obtained, incidence again shows an increase.

In males, 4.6 per cent, in females, 8.3 per cent.

Re-infection in males occurred in 181 instances—
1,419 infections—1,238 individuals.

Re-infection in females occurred in 72 instances—
567 infections—495 individuals.

Statistics over the years are as follows:—

Age in years	1946		1963		1964		1965		1966		1967		1968		1969	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Under 15	—	4	—	2	—	—	—	—	—	1	1	1	2	—	2	1
15-17	21	17	37	31	49	43	23	21	26	45	27	56	24	55	28	60
18-20	262	79	204	85	228	129	143	94	164	126	176	120	198	140	192	131
21-25	978	141	427	122	541	140	418	149	400	157	392	148	428	168	435	198
26-30	870	88	302	57	377	66	281	59	334	74	383	109	324	82	391	112
31-35	513	53	149	23	170	29	130	19	157	28	123	24	181	41	172	38
36-40	259	29	85	10	91	8	70	10	90	21	89	22	105	20	93	15
41-45	135	5	49	3	70	2	51	7	48	8	64	3	50	8	58	5
46 and over	74	6	64	3	43	5	35	6	59	3	48	5	43	4	48	7
Total	3,112	422	1,317	336	1,569	422	1,151	365	1,278	463	1,303	488	1,354	520	1,419	567

INCIDENCE OF SYPHILIS 1945-1969



INCIDENCE OF GONORRHOEA
1945-1969

CONTACT TRACING

The following table indicates results obtained:—

	Male	Female	Total
No. of reports of alleged source of infection	6	51	57
No. of individual persons	6	48	54
No. of cases traced and interviewed	5	27	32
No. of cases traced but interviews not effected	—	1	1
No. of cases reporting at Clinic following interviews ...	4	25	29
No. of reports passed to other authority	—	4	4
No. of cases untraced	1	16	17
No. of visits made (home, lodging, club, etc.)	11	129	140

RESULTS OF HOME VISITS

	Male	Female	Total
No. of cases visited	372	398	770
No. of visits made	887	976	1,863
No. of cases attending following visits	194	212	406
No. of cases promising to attend but failing to do so ...	38	37	75
No. of cases removed or not known at address given ...	64	88	152
No. of cases not contacted, no access, away from home, etc.	42	40	82
No. of cases who refused to re-attend... ..	11	12	23
No. of cases removed and transferred for follow-up ...	23	9	32

RESPONSE TO LETTERS

	Male	Female	Con- genital	Total
No. of cases written to	1,252	1,485	19	2,756
No. of letters despatched	1,582	3,675	22	4,279
No. of cases reporting in response	621	848	18	1,487
No. of letters returned by Dead Letter Office ...	133	74	1	208
No. of cases traced and transferred	47	21	—	68

CASES REFERRED BY MATERNITY UNITS

A total of seventeen ante and neo-natal cases were referred for further investigation and/or treatment following findings at maternity units—the final diagnoses were as follows:—

Early syphilis	...	...	1
Early latent syphilis	...	...	1
Late latent syphilis...	...	...	3
Congenital syphilis ...	...	...	1
Gonorrhoea ...	...	...	6
Non-venereal	...	...	5
			—
Total ...			17
			—

INFANTILE INCIDENCE

Two infants were found to be suffering from congenital syphilis. In one instance, the mother had not attended for ante-natal care at all, in the second, the early latent case noted above, the patient had defaulted from ante-natal care and came to notice only some days before delivery. Both babies subsequently responded well to anti-specific treatment.

There were seven cases of gonococcal ophthalmia neonatorum—all made full recovery. In each instance the maternal condition was diagnosed after the birth of the child.

MENTAL HEALTH SERVICE

This year's report on the City's mental health service inevitably has a valedictory flavour. The service is being reorganised in a manner designed to benefit the public, but there is a certain sadness in seeing the end, in its present form, of the organisation that has been built up over the past 21 years. It will be appropriate, therefore, to offer some reflections about its growth and future as well as reviewing the year's activities.

The period has seen great changes. Scientific advances have resulted in quicker turnover of hospital patients and consequent need for more help for them within the community, the mentally subnormal are being trained to achieve the higher potential which recent investigations have shown they possess, the former hush-hush atmosphere is gone.

This changed climate was reflected in the Mental Health Act, 1959, and it was this Act, with its emphasis on the needs of the mentally disordered whilst living in the community, which gave local health authorities the impetus to widen the scope of their services.

Much had already been done in Liverpool before the Act; in fact, home visiting, which forms the basis of community care, had been developed to a point where it was perhaps stronger than it is today, for recruitment and retention of staff have in the meantime become a difficult problem.

It is since the passing of the Act, however, that great advances in the care and training of the mentally subnormal have been made and, of course, the acquisition of New Hall was the main jumping-off point for progress in this field.

The decision to develop New Hall entirely for the benefit of the mentally subnormal was undoubtedly a correct one but it must be admitted that it has had the inevitable result of giving the service a one-sided look. The next few years should see increasing emphasis on the needs of the mentally ill. Plans for hostels are already in being, with the first due to be opened in 1970 and intensification of personal contacts by home visits is likely to be the other chief development.

The success of such visits depends, however, on the availability of suitable staff and the past year has seen no easing of the difficulty of getting and retaining mental welfare officers referred to previously.

The service as a whole will be affected not only by the local re-organisation but by likely changes in the national health service and in local government generally and certainly there is still room for improvement in organisation.

With these general reflections we may now consider the first section of the work in more detail, viz., the visiting of people in their domestic atmosphere, the determination of their needs and encouragement of their efforts.

HOME VISITING

At the end of the year there were 1,794 mentally ill and 1,395 mentally subnormal people "on the books" of the service. Visits paid numbered 9,432 to the former group and 7,072 to the latter. Thus on average each mentally disordered person received five effective visits during the year.

In recent years the numbers in the two groups have been changing, mentally ill going up consistently each year from 1,257 in 1963 to the 1,794 of 1969, mentally subnormal reducing from 1,627 in 1963 to 1,395 in 1969. This is probably due to the quicker turnover of mentally ill patients at hospitals, together with a lessening number of references of mentally subnormal people from the Education Department.

As has been stated, the work has been hampered by lack of staff. When an officer leaves (and ten experienced officers left during the year) the relationship with the patient which has taken time to develop is lost. It is discouraging to the patient, and fatal to the image the service needs, if there is no continuity.

A fact which, though obvious from the figures given above, still seems to need re-instatement, is that the service by no means deals with all mentally disordered people. As regards the mentally ill it can provide social support only if given information—mainly by hospitals discharging patients, in a few cases by doctors anxious about their patients and, very rarely, by people who themselves make an approach.

As regards the mentally subnormal it has much more information. The handicap of severe subnormality is so great that the need for help is obvious; in any event the service has the duty (soon to be transferred to the Education Department) of providing training for children of this kind and so there is machinery for their reference. Fifty-one children were so referred in 1969. At school-leaving age further references are made, 63 in 1969, of children who are likely to need support because of their handicap.

Nevertheless there is no compulsion for them to remain under surveillance, however benevolent, when they grow up, and many hundreds are not now in contact with the service.

The visiting officer has a good deal to offer—he can ensure that none of the benefits of the welfare state are lost to people who may not be able to assert their rights to them; he can offer the communal services

which go some way to alleviate anxiety, loneliness and boredom; by judicious encouragement he can get the patient whose illness is controlled by tranquillizing agents to "take their tablets"; and he can offer a personal interest in problems that extend to family matters as well as the patients' health.

It is not surprising that officers are in short supply who possess all the attributes to carry out this work—knowledge of mental disorders, the expertise to enter households and take unwilling people to hospital, familiarity with the social services and, at the same time, the sympathetic understanding without which the rest are wasted.

Some of the older mental welfare officers who have done this work for many years understandably have some anxiety about their future role in the new organisation. I would like at this time to pay a tribute to their work. They bore the burden of pioneer work in the early years, they have given younger colleagues the benefit of their experience and they have been and continue to be towers of strength in a changing scene.

The Department's services at the disposal of the mental welfare officers can now be discussed and the following table can only emphasise what was said earlier—that much of the expansion of these services has concerned the mentally subnormal :—

Places available in mental health establishments :—

<i>Establishments for the mentally subnormal</i>			1949	1959	1969
Children's training centres	...	...	52	159	340
Adult training centres	...	...	21	53	140
Sheltered workshop	...	...	—	—	300
Residential hostels	...	...	—	—	148
<i>Establishments for the mentally ill—</i>					
<i>Occupational Therapy</i>	...	...	—	—	45

TRAINING CENTRES

The chief development during the year has been the building of a special training centre at New Hall. Not inappropriately it has been formed by re-planning what was formerly the sick bay of the old Cottage Homes. It is designed to take 48 children and adults who are physically as well as mentally handicapped and the Regional Hospital Board has agreed to participate in the scheme in so far as some nursing care will be involved.

Children of this kind are at present not very adequately catered for in special classes at ordinary training centres and there is also a waiting list.

Severe mental subnormality is, in fact, very often accompanied by severe physical handicap. A survey of children and adults at training centres undertaken near the end of the year brought this out. It was found that of 305 children, 141 had physical disabilities so severe as to affect their mental progress. Of 160 adults, 47 were similarly affected.

The main object of the survey was to provide non-technical information about attainments and progress in training centres. As most people know, legislation is being introduced to place children's training centres under Education Departments, a decision few will quarrel with—the whole resources of modern educational methods should be available to all children. But the decision has certainly engendered an over-optimistic attitude in some quarters and it is well to recognise the severity of the handicap under which these people suffer—their happiness and well-being are endangered, not increased, by failure to appreciate it.

The section of the survey dealing with reading and writing can be mentioned here. Out of 305 children 240 cannot read at all, 60 can recognise isolated simple words, five can read a short sentence. In writing 195 cannot write at all, 51 can form letters only and 43 can copy words, fourteen can write isolated words and two simple sentences, without supervision.

Turning to the adults, of a total of 160, 74 cannot read, 43 can read isolated words and 20 can read a paragraph with some understanding. It is a striking fact, however, that all of the last group attended Special School up to the leaving age of sixteen and were only then referred to the mental health service; 48 cannot write at all, 61 can form letters or simple words by copying, 30 can write words without supervision and the same Special School group can write a paragraph or story.

These figures do not denote a static condition; on the contrary even those with the severest of handicaps make progress. The teachers were asked the question "what progress has been made in the last twelve months?" and the following samples represent a very large proportion of the answers given :—

More contented; mixing better in group.

Word recognition better.

Speech improved; more concentration.

No longer seeks full time attention—works alone without need for praise for simple activities.

Can tell the hour on the clock and write numbers 1 to 12.

Adult training centres will remain with the new Personal Health and Social Services Department and plans for expansion at Netherley

are already in being. Centralising training at New Hall has been a success. After a period of assessment at the training centres those suitable are transferred to the adjacent workshop, 55 were passed on in this way during the year. Not all settle in at the workshop and parents have even approached the Department to ask for transfer of their son or daughter back to the training centre.

Most, but not all, parents have this sensible and realistic attitude. Adolescence is a particularly difficult time for the mentally subnormal. The parent who opposes every step designed to increase the child's independence is explained as also is the over-confident parent who makes no allowance for limitations. In the latter case the result is all too often that the adolescent is denied the benefit of the Department's facilities.

Special school leavers are particularly vulnerable, of 56 referred to the Department from the beginning of the year up to the summer holiday 30 are no longer being visited.

One expects this "top section" of the mentally subnormal to be more easily assimilated into the community than the children who come through the children's training centres, and it is interesting to see what has happened to some who were referred in 1949 for what was then called "statutory supervision"; 55 such cases have been followed through. Contact had been lost by the end of the first year with fourteen, by the end of four years by another twelve and later all but two disappeared from the Department's books. Subsequently ten have reappeared—four by being admitted to psychiatric hospitals, three by reason of law-breaking and two through admission to the New Hall hostels. Of the two who have remained under surveillance for over twenty years one is a physically handicapped woman who has remained at home and has been continuously visited (by the same officer, it may be noted) the other has been employed as a children's help at one of the Department's training centres for many years.

As has been said so many times in these reports the Department offers its help—it cannot force its acceptance. Looking at the above figures from one angle it may be thought unwise that so many people of limited intelligence should be at risk of exploitation because they are unsupported but from another point of view it may be felt that the Department's temporary support contributes to their successful assimilation in the community.

What is certain is that whenever facilities have been expanded they have been fully used and it does not seem the reasonable limit has yet been reached. Of 863 mentally subnormal adults being visited by mental welfare officers 498 are attending workshop or centre and 100 are employed. The remainder are at home without occupation. Some,

at least, of these will take advantage of the plans now being made to increase workshop and centre accommodation; and, of course, every year a few are reaching the age of sixteen and are ready to accept this service.

Workshop

The New Hall workshop has been filled to capacity over the whole year. The very high standard of attendance is helped by the free transport and meals provided but there is evidence also of the purpose and pleasure of the workers.

It has been a record year for work done, the total amount earned being over £11,000. Among the jobs have been :—

Cable stripping,

Terminal block assembly for electric cookers (using fly press, compressed air tool and hand assembly).

Vent tube assembly for washing machines,

Sorting mixed bolts and nuts into type and size,

Various forms of labelling and packing,

Stamping prescriptions pads,

Testing and soldering of tins,

Laundry work.

Workers seem to enjoy the training provided in the new laundry, where 1,500 articles are now being washed per week.

Hostels

The New Hall hostels scheme has now been completed with the modernisation of the swimming bath and laundry, upgrading of roads and pavements and formation of a recreation area. One hundred and seven people are in residence and the only thing preventing full occupation (148) is the continued shortage of residential staff to which reference has been made in previous reports. The age groups of the residents at the end of the year are as follows :—

Age Group	Men	Women	Age Group	Men	Women
17-20	4	2	41-50	12	4
21-30	10	7	51-60	15	11
31-40	12	11	over 60	8	11

Of these 76 were in mental subnormality hospitals prior to taking up residence and 31 had previously lived at home.

The swimming bath has proved a great attraction and 70 residents have learned to swim. Two have gained life-saving medals. Another interest of residents is gardening and nine of them have become allotment holders, on plots given to them in recognition of their hard work. Such involvements in the affairs of the local community are most welcome.

A week's holiday at Colwyn Bay was much enjoyed as were the usual seasonal festivities; apart from these events the year has been uneventful and perhaps this is as good a criterion of success as any.

The Department's first hostel for the mentally ill, for eight people, is now being built on the Corporation's housing estate at Netherley and will be ready for occupation in the coming year. It will not meet anything like the total need but its progress will provide a pointer to the further developments planned in principle.

It has always been a feature of the Liverpool service that hospital admissions are attended to with utmost promptitude. A 24-hour service is maintained throughout the year, two officers standing by during the day and one at night. The excellent relations which exist between the service and the City's general practitioners (who have the responsibility of initiating action for hospital admissions under the compulsory sections of the Mental Health Act), consultants and hospitals are largely due to this provision.

Hospital Admissions

No clear boundary line can be drawn between the officers "statutory" duties and others. It may well be that a doctor is willing to make a recommendation for compulsory admission under, say, Section 29 of the Act and the mental welfare officer, on visiting the patient, finds that informal admission would be suitable; or the officer, asked to help with an informal admission, finds that a "section" is in fact essential. The officer must use his experience and discretion and, in co-operation with the doctor, act in the patient's best interest. He must be prepared to face not only possible hazards but a momentarily changing situation, a family crisis, a transport difficulty—in other words the officer is by no means merely carrying out easily-observed rules; he (or she) needs judgement, expertise and sympathy.

There was no significant change from last year in the total numbers referred and admitted to hospital. The downward trend in the use of the emergency procedure continued, 225 patients being admitted as against 316 last year.

There are times when the "roster" staff cannot cope with the amount of admissions work. Under the present organisation, in which all mental welfare officers work from a central point, it is possible to deploy additional staff at peak periods, but it would be difficult to do

this, or, indeed, to provide the present standard of service at all if the dispersal of officers to a large number of districts were extended to this branch of the work. Its importance well justifies the priority which has always been given to it.

The development of facilities for mentally subnormal people within the community, fostered by the Mental Health Act, has resulted in a marked reduction in the demand for hospital care for them. Apart from the 100 living at New Hall hostels, who would formerly never have to be in hospital, attendance at the newly opened training centres and workshops with more provision of short-term care have lessened the strain on parents and enabled them to retain the handicapped person within the family. The opening of the Special Care centre at New Hall next year will further this trend.

The co-operation of hospitals in providing short-term care places is acknowledged gratefully; Orchard Dene, the home run by the National Society for Mentally Handicapped Children has also continued to be useful in this connection.

The changes in local government, the National Health Service and the social services generally which are now engaging the Government's attention, will, in due course, all have their effect on the welfare of mentally disordered people. In the meantime the changes in management structure and methods in Liverpool offer the City Council the opportunity to re-define its objectives more precisely and programme future developments within an integrated social service pattern.

The Health Committee, whilst mindful of the gaps in their provisions, have every reason to be satisfied that in the comparatively short time they have had to develop their mental health service they have transformed the lives of many mentally handicapped people and gone some way, at least, to ensuring that mentally ill people have the social support so often needed to supplement medical treatment.

I have every confidence that the needs of those who are mentally disordered will continue to receive the high priority which the Council has given them in the past, they include for the mentally ill, especially, more hostels, training and rehabilitation centres and intensive home visiting. But it has been a salutary experience in the last few years to find that desirable projects have not achieved full potential for want of suitable staff and it will be well to end this report on a note of caution—the value of many services for the mentally disordered depends on a personal relationship between officer and patient or client. Unless sufficient staff of suitable qualifications, experience and temperament can be recruited plans, however well conceived, cannot be successful.

AMBULANCE SERVICE

TRAINING AND STAFF

My previous reports have mentioned the Cadet Training School and it is pleasing to report that for the third year running an ex-cadet has obtained the highest number of marks in the Institute of Ambulance Personnel examinations held in various parts of the country. Seven two-week courses have been held throughout the year for staff with between two and five years' service in accordance with the Ambulance Service Advisory Council's instructions and it is pleasing to report 100 per cent full qualification of all the ambulance staff.

In addition, an ex-cadet was successful in obtaining a merit pass for his instructor's certificate at the Department of Health and Social Security Instructors' Course held at Wrenbury Hall, Cheshire. The service was also successful in winning the Regional Ambulance Competition for the second year running and in the National Finals held in Harrogate gained the best Ambulance Driver award and second place in the Ambulance Crew Team test.

The service is experiencing difficulty in recruitment of both cadets and men suitable for training. The intake is not keeping pace with the staff who are leaving the service for more lucrative employment in industry.

COMMUNICATIONS

Whilst the present communications equipment, both radio and telephone, is able to cope with the demand, its efficiency is marred by the lack of public telephones in some areas caused by vandalism, and this leads to constant delays causing unnecessary suffering and loss of life. The main problems occur during the night hours when persons have to travel long distances to find a public telephone. This situation creates havoc with strangers in the area who are unable to give the location of an accident because it is some distance from where they have found a telephone. This has often necessitated having to send an ambulance to pick up the caller and other ambulances to converge on the possible site of the accident. It is tragic that this type of vandalism should have gone on for such a long period, and the fact that the G.P.O. repairs public telephones to function for emergency purposes only does not stop these vandals from either wrecking the emergency use of the telephones or abusing the service with false calls.

OCCUPATIONAL THERAPY

This section has again had an extremely busy year. All patients are visited initially by domiciliary occupational therapists working from Hatton Garden. The patient may then proceed to one of the rehabilitation units if this is recommended by the occupational therapist and prescribed by the medical practitioner concerned. The final decision rests with a local authority medical officer and up to the end of November, 1969, this was the Deputy Medical Officer of Health.

Students from the local college of occupational therapy have again been attached to the section for practical training.

Details of the work of each unit and the domiciliary service are given below:—

DOMICILIARY OCCUPATIONAL THERAPY

During 1969, 653 new cases have been visited by the four occupational therapists. The Head Occupational Therapist and her assistant are also responsible for the administration of the section, thus only two of the staff are available for full-time visiting. This results in a case load of approximately 500 patients per occupational therapist, leading to a lengthy waiting list of patients and an inability to give the necessary time to each visit. It is hoped that it will be possible to increase the number of staff in the near future.

Much of the initial work of rehabilitation undertaken by this section such as teaching a partially paralysed patient to sit up, get out of bed and move from one surface to another requires regular visits sometimes by two therapists. It is impossible to achieve good results with the present staff, and often after one or two visits by the therapist, patients and relatives have to be left to do the best they can with occasional follow-up visits. Despite these frustrations much valuable work has been done and many people have achieved a greater measure of independence than they had previously hoped for.

Assessment for the provision of aids and training in their use has again been a major part of the work of the Department and has resulted in the provision of nearly 2,000 aids, some ordered through the Welfare Department but many of them made by patients in the rehabilitation units at Rumney Road and Longmoor Lane.

Housing

Many housing assessments have been made to assist the allocation of housing points or special priority recommendations. These have mostly been in the field of the severely disabled when it is anticipated that adaptations and special facilities may be needed. Finding suitable accommodation after a recommendation has been made is becoming increasingly

difficult, partly because of the top priority given to the re-housing of people from slum clearance areas and those living in the path of the new tunnel and its access roads, and partly because of the unsuitability for the disabled of much of the new property being built, in particular the shortage of ground floor accommodation. The utmost co-operation has been received from officers of both the Lettings Department and the City Architect's Department but, in spite of this, many disabled people have waited a very long time for suitable accommodation after receiving medical priority.

The two bungalows which have been specially designed for disabled people have still not been started, but it is hoped a commencement will be made in 1970. There is so much work in the field of housing that the appointment of an occupational therapist who could be seconded to the Housing Department would be a valuable asset to both the disabled people and the Housing Department.

Renal Dialysis

During the year another two kidney machines were installed in houses. Details of adaptations including the lay-out of the rooms were drawn up by the Head Occupational Therapist in consultation with the staff of the Renal Unit in the hospital concerned and the work was carried out by the Works Department. Eight units are now in operation in homes in the City.

Holidays

Holidays were booked for adults at two separate hotels and once more a camping style holiday was arranged for the younger disabled.

The hotel that this section has used for many years, is now under new management, and its present owners do not feel able to accommodate some of the very disabled cases who have been catered for in former years. Nevertheless a number of people were able to enjoy a holiday who could not otherwise have done so.

Another hotel at Barmouth was found to be suitable for handicapped people and the proprietors were keen to co-operate and in this spirit of co-operation about 30 people were welcomed. Only a limited amount of accommodation was accessible for the handicapped and no special provisions were made. Some of the rooms were double-bedded and this made it possible for married couples to have a holiday together—the fit member of the family paying the full price of accommodation. The holiday was very successful and it is hoped that it will become an annual event. However, as no health visitors, male attendants or special transport accompanied the party it was mainly restricted again to the less disabled patient.

A party of eleven physically handicapped young people was again taken to the adapted school premises at Pentre-Llyn-Cymmer, Denbigh-

shire in charge of two occupational therapists and helped by a male ambulance driver. Several of the patients were severely handicapped and it was necessary to take a mechanical hoist, but again an excellent relationship with the resident staff at the school existed and contrivances were accepted without demur. The local staff at Ruthin were also most helpful—visiting to make sure everything was satisfactory and making special arrangements for the party to see "Son et Lumiere" at Rhuddlan Castle. Without doubt the success of this week's holiday is due in a large degree to the common sense way in which rules are "bent" by the staff at Pentre-Lllyn-Cymmer to ensure that patients have a good holiday and it is rewarding to see the way the atmosphere changes during the week, culminating in the last night's outbreak of practical jokes—surely the most "normal" way for a young person's holiday to end. Improvements in lighting and washing facilities are planned for 1970 so firm bookings are not yet accepted but preliminary enquiries confirm that the young people will be made welcome once again.

Outings

Social events have again consisted of day's outings to the Liverpool Show and Trentham Gardens, the Carol Service at the Cathedral, the Christmas shopping evening at Lewis's, the weekly meetings of the Wheelchair Club and the social club at Johnson Street. Christmas parties were also arranged.

Transport

In every aspect of this section, except home visiting and the Mental Health Centre, transport has been a limiting factor. It seems essential that this service be increased.

REHABILITATION UNITS

As in previous years, the Deputy Medical Officer of Health visited prospective patients referred by the domiciliary occupational therapists before admission to units and held regular clinics at the units. Shortage of occupational therapy staff has not been a major difficulty this year but it has been felt that, owing to the severity of handicap of many of the patients, too much staff time is needed in helping patients in the toilet and at mealtimes. It is hoped that, in the future, auxiliary staff may be empowered to fulfil such duties, leaving qualified occupational therapists to carry out rehabilitation.

Rumney Road Unit

Two occupational therapists have worked at this unit but one left for domestic reasons at the end of August. It was not possible to fill the vacancy immediately but, as the period of single-handed staffing corresponded with an acute shortage of handicapped persons vehicle drivers, the disruption of work was not so marked as when the full number of patients were attending.

New activities have included swimming for a selected number of patients at the refurbished baths at New Hall. Gardening activities have increased with the purchase of new tools and the acquisition of more ground. The kitchen work has been restricted by the unreliable condition of the cooker. In use for many years, it is now irreparable and a new cooker will have to be purchased. A table-top electric hot plate has been useful, and as this can be used anywhere where there is electric power it is a practical proposition for patients who are confined to one room.

At Christmas the patients elected to organise their own party with minimum help from the staff. This they did quite successfully, learning incidentally something of the hard work involved in running "social activities".

The following case histories illustrate the work of the unit:—

When he was seven years old P. was unconscious in hospital for a year following head injuries received in a road accident. On first attending the unit he had complete motor aphasia, right hemiplegia, double incontinence, continuous dribbling from the mouth and was unable to maintain a sitting position. He was unable to feed himself and this problem was solved by the occupational therapist supporting his arm in a sling with springs attached to an overhead wire frame. A spoon with a specially thickened handle was provided and P.'s wrist was splinted to put his hand in a good position for grip.

Muscle power, range of movement and hand-eye co-ordination have improved during treatment which has included work on the Oliver Rehabilitation Machine, painting, games such as draughts using cotton reels for pieces, brick building, use of scissors, etc. Support in a "lobster pot" walking aid has enabled legs to be strengthened as also has movement in a special chair, which is propelled by scooting with the feet.

An educational psychologist pronounced his receptive ability to be good but that he was severely handicapped by his aphasia. It is hoped that the inability to communicate will soon be partly overcome by the use of the recently acquired electric typewriter, and it seems likely that this is the main line on which treatment will proceed in the future.

Mrs. A. was unconscious for two weeks after developing tubercular meningitis in February, 1969. Due to a lesion of the cauda equina she became paraplegic and was unable to use callipers due to excessive pain in the legs. She is therefore confined to a wheelchair and treatment has been aimed at making her as independent as possible.

The necessary home alterations are in the hands of a domiciliary occupational therapist and it has been found that she can cook and do other

household tasks quite well from her chair. Some resistance has been encountered however from her husband who has given up work to look after the home and his wife, and this resistance also manifests itself in a reluctance to bring into the unit articles of clothing for adaptation.

Upper limb and trunk exercise has been given by the use of an upright rug loom, and the improvement thus achieved has made it possible to teach Mrs. A. to transfer herself from chair to bed, chair to toilet, etc. Further progress depends on the extent to which home co-operation is forthcoming in the domestic sphere.

Longmoor Lane Unit, New Hall

During the year 50 patients have been admitted to the unit, while 42 have been discharged. A number of patients have been temporarily discharged to undergo further hospital in-patient treatment. The total case load at present is 80. Some attend daily, while others attend for two to four days per week. In addition to those attending for a period of treatment, patients also attend for single sessions, to be assessed for aids and equipment, which it is hoped, will help them overcome physical disabilities in their own home.

The age range is varied and includes all ages except very young children. The patients treated suffer from various disabilities including psychological disorders and physical handicaps. Some are permanently disabled due to illness or injury. The unit staff consists of five occupational therapists and one technician. At the end of the year there was a full complement of staff, although changes had occurred during the period.

The activities used in treatment vary according to the individual needs of the patient and include rehabilitation, recreational, educational and social activities. Facilities are also available for patients, who have no suitable arrangements at home, to bathe themselves while at the unit. This year the services of a bath attendant have been available for one session per week, to assist the severely disabled in bathing. While the bathroom includes adaptations to enable patients to help themselves as much as possible, some still require extra help.

Specific or individual treatments include exercises incorporating machine sewing, sawing, drilling, weaving and hand-press printing to increase or maintain the mobility of patients' upper or lower limbs. Work tolerance is built up by gradually increasing the amount of work in orientated activities such as printing, woodwork, gardening. Group activities such as ball games, quizzes and board games are used as educational and/or recreational activities. Swimming continues to be popular with the patients and this activity has many benefits, including increased mobility in water for those who have severe muscle weakness. Swimming

also increases the general confidence of patients. The improved swimming pool at New Hall has had some features incorporated in it to make it more accessible for the disabled. These features include ramps to the doors, even surfaces and improved changing rooms. A hydraulic hoist can be set up on the edge of the pool to assist the more severely disabled to enter and leave the water. Arrangements have been made for some police cadets to come along to help patients in swimming as part of their voluntary activities. This means more patients can benefit at each session as the cadets can give individual help, whilst the whole session is under the supervision of the occupational therapist.

Cooking and food preparation are always problems for the disabled housewife and independence is encouraged in this field by practice in unit kitchens, where adaptations have been made to equipment. Horse riding which was found to be a beneficial activity for some patients has been temporarily stopped, due to shortage of transport.

The following two case histories illustrate the work of the unit:—

Miss P. contracted poliomyelitis at the age of fourteen years. The disease affected her upper limbs, right leg and respiratory muscles with residual disabilities in these areas.

The patient began attendance at the unit in October, 1967. She had sufficient movement in her right wrist to enable her to write but the left hand and left leg were found to be rather weak and there was great limitation of movement in her left thumb.

Treatment included general walking and balance exercises. With the aid of a ball-bearing arm support on her wheelchair she was able to embroider. Typing was done by holding a stick in her mouth, and by picking up her fingers in her mouth and placing them over the controls, her limited movements allowed her to use the washing machine. Miss P. was taken horse riding as part of her group treatment for one session each week. Over a six-month period her balance improved noticeably, she was able to walk better and did not fall so frequently. Unfortunately she fell frequently at home, particularly when endeavouring to answer the door or telephone. These problems were now seen as limiting her activities at home, and in an attempt to make the patient independent a patient-operated selector machine (Possum equipment) was applied for by the occupational therapy department, this machine now being available for suitable patients through the Ministry of Health.

The Possum was installed by the Corporation Works Department in November, 1969, and the patient is now able to open doors, operate telephones, use the front door intercom emergency bell, and adjust television and lighting from a control switch. It is hoped eventually to get an electric typewriter fitted to these controls with the possibility of some form of home typing employment.

Mr. B. began to have epileptic fits at the age of sixteen years although there had been no previous history of this disease. Since leaving school he had one or two temporary jobs and had attended a Government-sponsored Assessment Centre. At the age of 22 years he was referred to the unit by the hospital consultant and was assessed in the woodwork, and printing sections and also the social activities. No fits occurred during the day and Mr. B. travelled by public transport to and from the unit. He appeared to be overprotected at home, and with the idea of broadening his social life he was encouraged to join the group of young people from the unit on the camping holiday. Here and at the unit he was helpful, sociable and exhibited no "withdrawal signs" as a result of being away from his family. Gaining confidence Mr. B. sought regular employment and has now obtained a job with the Recreation and Open Spaces Department where, it is felt, he will probably do well.

Balliol

In April, 1969, a new occupational therapy unit was opened at "Balliol", Mill Bank, West Derby—a house shared with other health and welfare services. The purpose of this unit is to provide an extended service for Spina Bifida children and also to provide a short-term assessment and rehabilitation service for patients with a recent hemiplegia.

Two days are allocated to the children who are therefore split into two groups; the younger children who attend with their mother; and the older ones who attend alone in readiness for their attendance at school. The objective of the treatment of these children is unchanged; by having general exercise, walking practice, play therapy and guidance the aim is to ensure that each child will have as near normal a childhood as possible, and that when he eventually attends school he will fit in well with its routine and activities. Children from a nearby comprehensive school have taken an interest in the patients and are now producing a combined walking aid and trolley which is excellent for the use of the child at home. This year also books have been obtained which give guidance in the training of young children in visual perception—something which has recently been found to be lacking in physically and mentally handicapped children. This training is referred to as the Frostig programme.

At Balliol patients with hemiplegia are attending for one half day per week. They are referred from various sources and are visited by domiciliary occupational therapists. If the hemiplegia is of recent occurrence and the patient just recovering from the illness he is referred initially to Balliol for assessment of capabilities and initial training in independence and, after approximately three months, when more physically fit, is transferred to one of the other units for more long term rehabilitation. As this is a new side of the work results are not yet obvious but it is hoped that the value of early intensive rehabilitation will be

revealed when these cases are compared with others in which treatment has, through force of circumstances, been delayed.

Children with Spina Bifida and other deformities treated in 1969—36.

Patients with hemiplegia and other deformities treated in 1969—21.

Details of specific cases are as follows:—

Mrs. H. aged 61 with a left hemiplegia was referred from hospital in January, 1969, first attended Balliol in April, 1969, and an initial assessment showed that she had quite good movement in her left side but that the finer movements needed to be developed. She walked with a calliper and used a tripod for support. Without the calliper there was a small degree of foot drop. Treatment aimed at reducing this.

Mrs. H. attended for three months during which time her activities included exercises on pulleys to increase shoulder elevation; small activities to increase fine finger movements and manual strength; exercises in parallel bars to increase mobility and improve balance. She was encouraged to further the exercises at home.

At the end of three months Mr. H. was referred to one of our rehabilitation units for more extensive treatment which she is now carrying out.

A young child, B. aged 23 months attended with Spina Bifida in the lumbar area. She had been operated on at birth and a Spitz-Holzer valve was inserted four weeks after birth. This became blocked at nine months but has been satisfactory since. Full length callipers were fitted at sixteen months. She was referred to this department at seventeen months and on an initial assessment it was found she was unable to sit up without support. She was also having difficulty supporting her head, and her eyes hardly followed any movement. She had no lower limb movement—paralysis was flaccid. In callipers she could stand but made no attempt to walk. She was a very timid little girl who screamed with fear if support was taken away. This child is the second of three children, the other two being a year older and a year younger. It seemed that the mother, due to extra work, was unable to devote as much time to B as she would have liked to and therefore the child was not progressing as well as she might otherwise have done.

Initially the aim was to improve balance whilst sitting. B was too tiny and weak to join in group exercises so all work done had to be individual. This of course helped her to get to know the staff and therefore increased her confidence in them. Ball play and building bricks were used as the main exercises and it not only helped to improve balance but increased hand/eye co-ordination and eye movement. As a baby, doctors thought that her eye muscles were paralysed but this proved otherwise.

Within eight weeks of her first visit B could sit without support, though if she suddenly exerted herself she would topple over. Control over her head was also better. Work continued at this and exercises were started in her callipers. Here she had no balance at all and did not appreciate the reason for holding on to things such as parallel bars or walking aids. In fact she showed virtually no initiative in walking.

These exercises are continuing and the occupational therapists are trying to teach her to pull herself along in a type of crawl. Gradually she is being integrated into the group of children and introduced to educational toys. Mentally she is still behind but she is making progress.

Johnson Street Unit

Now in its eighth year this centre for the mentally ill continues to work at full capacity. It has been found that patients who have had numerous hospital admissions in the past need the support of the centre for a long period, some requiring virtually a permanent place. For this reason the activities carried out are intended to supplement life in the community. The importance of personal appearance, punctuality and good work habits is emphasised—work consisting mainly of hand printing and bib making and chamois leather making (for which the section is a contractor); cooking of a mid-day meal is also part of the treatment.

A variety of recreational activities are provided e.g. swimming, badminton, quizzes, discussions, etc., both during the day and at the Wednesday evening social club. These activities are of use not simply in their intrinsic value, but as a stepping stone into normal community activities.

The annual holiday this year was held in the self-catering chalets of a large holiday camp. The patients appreciated the more commodious premises (especially as the weather was almost continuously wet), and had no difficulty in self-catering. It is felt that this self-catering holiday is more suited to this type of patient for various reasons, viz.:— (i) disturbed patients cause less upset in this environment; and (ii) the activity of self-catering relieves the problem of finding "something to do" during bad weather. The disadvantage is the higher staff-to-patient ratio required.

Two case histories illustrate the problems involved.

Miss A. who has been mentally ill for some years resided with her sister and family in a fairly stable environment. However, the family had to move to a different town and were unable to accommodate her in their new home. She was found a place in a residential hostel but continued to attend the unit daily. Domestic work in a sheltered environment for one morning a week was found by the occupational therapy staff as a bridge to the outside world and this, combined with attendance at the centre for work and social sessions, has helped her over this personal crisis.

Mrs. F. is a young married woman who received head injuries in a road accident. She is now emotionally unstable and highly over-active in spite of medication. When first known to the Mental Health Section she could not be persuaded to visit the centre but the occupational therapist persisted with this problem, first bringing her in by car and eventually persuading her to travel by public transport. She now attends daily and in spite of frequent outbursts and suicide attempts, it is felt that the situation is contained and her husband is able to go to work with some peace of mind.

RE-HOUSING ON MEDICAL GROUNDS

During 1969 a total of 7,592 applications were received for re-housing on medical grounds. Of these 5,024 applicants were already living in Council accommodation which they found unsatisfactory and applied for a transfer to more suitable property, and 2,568 were resident in non-Corporation property and applied for Council accommodation.

The details of each individual application were closely examined and, where necessary, visits were made by a Medical Officer, Health Visitor or Public Health Inspector. An assessment of the medical factors was then made and consideration was given not only to the individual applicant but to the whole of the family as a unit. Special recommendations were made to re-house handicapped people in the type of accommodation most suited to their disability.

Of the applicants in Council property a total of 246 were recommended for a transfer to alternative accommodation and, of these, 52 transfers were affected by the end of the year. In the group living in property owned by private landlords 162 were recommended for special priority allocation, of whom 38 were re-housed by the end of the year. From previous years' recommendations 115 transfers and 77 special priority cases were also re-housed in suitable accommodation during 1969. In addition 203 applicants were awarded points. Details are given in the table below:—

1969	Special Priority Cases	Transfer Cases	Totals
General Medical Cases			
Number of Applications received	2,568	5,024	7,592
Number recommended	162	246	408
Number re-housed... ..	38	52	90
Number refused offers	10	8	18
Number still not accommodated...	114	186	300

Owing to the severe shortage of housing accommodation in Liverpool, only the more serious cases could be considered and, of these only the applicants who had reasonable prospects of being re-housed

could be recommended. The major medical conditions for which recommendations were made were cardiovascular, respiratory disorders and conditions affecting locomotion. Many of the recommendations were given for re-housing into accommodation without the use of stairs enabling applicants to lead fuller lives. A breakdown of the recommendations made, may be seen in the table below :—

Diagnosis	Number awarded Points	Number recommended for Special Priority	Number recommended for Transfer	Totals
Cardiovascular	39	33	51	123
Conditions Affecting Locomotion	38	36	54	128
Respiratory Disease	54	40	70	164
Psychiatric Cases	34	6	25	65
Malignant Disease	9	18	14	41
Debilitating Diseases	18	23	22	63
Blindness or Deafness	5	4	8	17
Broken Families	6	2	2	10
Totals	203	162	246	611

The following are detailed examples of some of the families assisted :—

1. A couple and their five children under seven years of age occupied an old two-bedroomed house, tenanted from a private landlord with no bathroom or hot water facilities, only an outside toilet. One child was mentally defective and a baby of a few weeks had a gastrectomy for Oesophagal Atresia; conditions were totally unsuitable for the adequate care of this young child. A recommendation was made for a house and garden and, within three months, this family were re-housed to suitable accommodation.

2. A man and his wife with a young baby lived in one room with no hot water, the bathroom and toilet being on the upper floor and the coal had to be brought from the basement. The husband had a leg amputated at the pelvis and used crutches so was unable to manage the stairs. His wife, who had recently had two kidney operations, found the exertion of carrying the coal from the basement very tiring. This family were re-housed to a parlour-type house with garage facilities, as an invalid car was essential to enable the husband to continue in full-time employment.

3. A husband, wife and brother-in-law were living in an old dilapidated house which was very damp, and illuminated by gas. The water pressure was insufficient for domestic purposes. The husband suffered from severe Chronic Bronchitis and this family was recommended for accommodation without stairs. Within a month re-housing was accomplished to a multi-storey flat accessible by a lift.

4. A couple of pensionable age lived alone in a three-bedroomed house with an upstairs bathroom and toilet. The husband had a bilateral amputation of the legs and his wife was very unsteady following a stroke. To help this couple cope with their disabilities a medical recommendation for a transfer was made. Within a month this couple were re-housed in a ground-floor flat suitable for a wheelchair with a garage for their invalid car.

5. An elderly lady living alone developed severe cardiac failure after living in an older type tenement flat for 30 years. The flat was reached by 68 stairs which she could only manage to climb once a week. She was almost housebound. A medical transfer was recommended to accommodation without stairs. This lady was re-housed to a low-level multi-storey flat, accessible by a lift and is now able to lead a fuller life.

ENVIRONMENTAL HEALTH

The work of slum clearance has required a considerable amount of time to be devoted to this important aspect of environmental health, and although the number of houses, namely 1,441, which were represented as unfit for habitation was lower than for several years, twenty Public Inquiries were held involving 4,977 houses, and during the year twenty Compulsory Purchase Orders involving 4,181 houses, and two Clearance Orders involving 56 houses were confirmed. The details are included in the statistical appendix.

Investigations were continued into working conditions in premises to which the Offices, Shops and Railway Premises Act applies, and it is evident that, in general, employers are now aware of their responsibilities under this Act, as the conditions found in most premises were reasonable, and it has not been necessary to take legal proceedings against any person for offences under the Act. A total of 38,246 general and additional inspections have been made since the Act came into operation in 1964, and a total of 27,940 infringements have been reported.

Prevention of atmospheric pollution is still a very important duty, and during the year the work was concentrated on completing the conversions in the No. 22 Area which became operative on the 1st September. Work in a further four confirmed areas has been programmed to be carried out over the next five years.

The number of detailed inspections and observations of vehicles being used for street trading in food was 1,516 resulting in 32 prosecutions being taken against traders in connection with infringements, under the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966.

Details of Visits

Inspectors visit houses to make enquiries following notifications of certain infectious diseases. The number of visits amounted to 1,439 and the number of enquiries regarding contacts was 251.

Investigations have continued in connection with ingestion disease enquiries and inspectors obtained information about contacts and modes of infection. The number of specimens submitted for bacteriological examination amounted to 7,421 from 5,852 persons of which 2,327 from 896 persons proved positive.

Lodginghouses

One lodginghouse was closed during the year and there are now eleven registered common lodginghouses in the City, ten providing accommodation for 838 males and one providing accommodation for 95 females. The public health inspector made 229 visits both day and night,

resulting in notices being issued in respect of byelaw infringements and on five occasions it was necessary to give the keepers a verbal warning. The recent statistics show that there is a decrease in the demand for this type of accommodation which has resulted in approximately 40 per cent of the total beds available, being vacant at any one time.

A total of 2,068 beds were examined and 206 beds or articles were found to be verminous and subsequently cleansed by the local authority. During the year it was found necessary to cleanse 94 persons living in these houses.

Seven seamen's lodginghouses exist in the City, five of which are unlicensed and two licensed, under byelaws. These houses provide satisfactory accommodation for British seamen and other nationalities. The total accommodation available is 645 beds, and public health inspectors carried out a total of twenty inspections.

Special Sub-Committee

The weekly meeting of the Special Sub-Committee has again enabled emergency action to be taken for the remedying of urgent defects and where occupiers were suffering severe discomfort due to outstanding items of disrepair, arrangements were made for the work to be carried out in default of the owners, to remedy unsatisfactory conditions affecting 382 houses. The work included the clearing of 55 drains, the restoration of water supply to 262 houses provided with joint supply pipes; the remainder of the work was mainly in connection with repairs to roofs. The cost of the work will be recovered from the owners of the premises. During the year it was necessary for 46 prosecutions to be taken and penalties and costs imposed amounted to £230 5s. 0d.

A total of 54,581 requests was received for inspectors to visit premises and altogether a total of 262,612 visits and inspections were carried out under the various enactments and 11,942 notices were issued under the Acts and Regulations.

Defective Drains

Defective drains cause rodent infestation, flooding and subsidence. Drainage systems tested to remove these problems numbered 1,508 and notices were issued in respect of 629 drainage systems which were found to be defective. In addition, choked or defective public sewers were referred to the City Engineer's Department for action under the provisions of Section 24 of the Public Health Act, 1936.

Under the terms of faculties or licences issued from the Home Office, inspectors supervised the exhumation of 289 bodies during the year and the remains of three persons were shipped abroad.

Other departments have co-operated by forwarding references in respect of matters requiring the attention of inspectors and 6,758 references were forwarded to other departments.

Canal Boats

During the year the Port Health Authority have carried out 30 inspections of canal boats within the Port Health Area. One contravention of the Public Health Act was found and this was remedied satisfactorily. As a result of changes in transport which have taken place in recent years canal boats are not now operating within the City area.

Sewerage

The following details in connection with the sewerage and sewage disposal systems of the City were kindly provided by the City Engineer.

A scheme is about to be submitted to Committee for the sewerage of Bailey's Lane, Hale, and if this is carried through only one small area within the City boundary will not be served by main drainage. It is anticipated that a scheme for draining this area will be submitted for approval by 1971/72. The City's sewerage system functions efficiently and the conversion to the separate system progresses favourably.

Sewage Disposal

The flow reaching the North Sewage Disposal Works is approximately 1 m.g.d. in excess of the treatment capacity provided. Due to proposed developments within the drainage area it is estimated that this flow will reach 14 m.g.d. by 1975 and accordingly extensions are to be provided to raise the works treatment capacity from 9 to 14 m.g.d. It is anticipated that the first stage of the extensions will be completed by early 1972.

At the South Sewage Disposal works the available treatment capacity is in excess of the flow to the works and the effluent meets with the River Authority's requirements. A comprehensive sludge de-watering scheme for the works has been designed but the implementation of this scheme requires Ministry of Housing and Local Government approval. This approval depends on whether the Ministry sanction the scheme for "sludge disposal at sea", proposed by a consortium of authorities from South Lancashire.

HOUSING AND SLUM CLEARANCE

The detailed inspection of substandard housing accommodation has continued throughout the year resulting in 1,409 houses in clearance areas being classified as suitable for demolition, having regard to the standard of fitness laid down in the Housing Act, 1957. The 1,409 houses were included in 21 clearance areas. Since the programme recommenced in 1947, a total of 38,962 houses have been represented as unfit for habitation and included in clearance areas or dealt with individually.

Houses, to the number of 3,936 in 47 clearance areas were made the subject of fifteen compulsory purchase orders. Thirteen compulsory purchase orders were submitted to the Minister of Housing and Local Government for confirmation and one clearance order in respect of twelve houses was also made and submitted for confirmation.

Twenty Public Inquiries were held involving a total of 4,977 houses in 22 Orders, and during the year, twenty compulsory purchase orders involving 4,181 houses, and two clearance orders involving 56 houses were confirmed. Families re-housed from houses included in confirmed orders numbered 3,217.

The Demolition and Closing Orders Sub-Committee dealt with a number of individual unfit houses under the provisions of Part II of the Housing Act, 1957, a total of 32 dwellinghouses being represented to the Sub-Committee as unfit for human habitation. These premises were occupied by 69 families.

The Sub-Committee considered the condition of 38 houses which included a number which had been represented the previous year. Of these, it was resolved that a demolition order be made in respect of one house and closing orders in respect of 36 houses. In the remaining case an undertaking to carry out the necessary repairs was accepted from the owner of the property. In addition, 22 representations in respect of rooms and parts of premises occupied as separate dwellings, considered unfit for human habitation were dealt with and, in each case, it was decided that a closing order should be made.

Following upon the re-housing of the occupants in premises subject to operative orders, 92 houses were demolished and 32 were closed and sealed. In addition, 17 dwellings being parts of premises were also closed.

Premises were re-inspected when owners had carried out works as required to make them fit for habitation. As a result of the works undertaken, the Committee during the year rescinded one closing order.

Rent Acts, 1957/1968

A total number of 33,287 visits has been made by public health inspectors to dwellinghouses, under the provisions of the Rent Acts, 1957/1968, since the 6th July, 1957, when the 1957 Act became operative, and 9,271 applications for certificates of disrepair have been received. Some 3,278 tenants have applied for certificates as to the non-remedying of defects specified in undertakings given by landlords and 2,672 applications have been received from owners for certificates as to the remedying of defects in undertakings which they have given to tenants.

Figures in 1969 were :—

Total number of applications for certificates of disrepair	69
Number of notices served on landlords of the Local Authority's intention to issue certificates of disrepair (Form J)	69
Number of undertakings to carry out repairs received from landlords (Form K)	38
Number of certificates of disrepair issued to tenants (Form L)	19
Number of landlords who completed the repairs within the statutory period following the service of Form J	12
Number of applications (Form O) from tenants who have applied after owners have failed to comply with undertakings given (Form H or K)	6
Number of certificates (Form P) issued to tenants ...	6
Number of applications (Form O) from owners who have completed their undertakings	27
Number of certificates (Form P) issued to owners ...	27
Number of applications (Form M) received from owners for a cancellation certificate	7
Number of objections to cancellation received from tenants	1
Number of cancellation certificates issued	6

If the landlord is not satisfied that all the defects as listed on the certificate of disrepair are reasonable he has a right of appeal to the County Court. Similarly, the tenant can appeal if he does not accept the decision of the local authority regarding the cancellation of the certificate on the application of the owner.

Where premises are subject to a certificate of disrepair the tenant has a legal right to reduce the rent payable in respect of a dwellinghouse until all the works as specified on the certificate have been remedied satisfactorily. Likewise, if the owner fails to carry out the works as listed on the undertaking, within the statutory period of six months, the tenant is also entitled to reduce the rent payable until such time as the defects have been remedied to the satisfaction of the local authority.

Housing Act, 1969

This Act, which received the Royal Assent on the 25th July, 1969, sets out a fresh and self-contained code for the grant-aided improvement of houses. It also provides local authorities with additional powers to bring about the repair of houses by encouraging owners to make use of the grants offered, and to assist in maintaining privately-rented property in a reasonable standard of repair having regard to its age, character and locality.

The Act also introduces a new system governing the rents of privately rented dwellings which have been brought up to a satisfactory

standard. Controlled tenancies can be converted to regulated tenancies where the qualifying standard is attained; the rent will be determined under the Rent Act, 1968, but it will be subject to phasing under the Housing Act, 1969.

If the owner of a rented dwelling wishes to obtain an improvement grant and subsequently obtains a higher rent for the property, he must apply before commencing any work for a certificate of provisional approval. When this is issued he applies to the rent officer for a certificate of fair rent.

When the premises have been converted and approved by the local authority a qualification certificate is issued which converts the controlled tenancy to a regulated tenancy. The landlord then applies to the rent officer for the registration of a fair rent in accordance with the certificate of fair rent previously issued.

If the owner of a rented dwelling, which is provided with all the standard amenities, applies to the local authority for a qualification certificate, a copy of the application is forwarded to the tenant who is allowed 28 days to contact the local authority, if they wish to object for reasons that the premises are not in good repair, or that one or more of the standard amenities are not provided.

If the dwelling, when inspected by the public health inspector, is found to be fit for human habitation and in good repair together with all the standard amenities, a qualification certificate would be issued to the owner.

However if the dwelling does not conform with the requirements of the Act, the application would be refused until such time as the owner has completed all the necessary repairs or replacements to the satisfaction of the health inspector.

The following statistical information is in respect of applications received during the period 25th August, 1969 to 31st December, 1969:—

Improvement Cases

Number of applications for qualification certificates under Section 44(2) under consideration	...	...	...	19
Number of certificates of provisional approval issued	...	...	...	3

Standard amenities already provided

Number of applications for qualification certificates under Section 44(1)	...	...	...	...	...	425
Number of qualification certificates issued under Section 45(2) in respect of:—						
(1) dwellings with rateable value £60 or more	...	...	...	...	...	27
(2) dwellings with rateable value £40 to less than £60	...	...	...	...	...	1
(3) dwellings with rateable value less than £40	...	...	...	...	...	1

Improvement Grants

During the year 1,156 houses were inspected following enquiries regarding improvement grants.

Compulsory Improvement of Houses

During the course of the year a number of representations were received from tenants of houses requesting the Council to exercise its powers under the provisions of the Housing Act, 1964, to secure improvements.

Nine houses were represented to the Demolition and Closing Orders Sub-Committee and in eight cases it was decided to serve preliminary improvement notices on the owners. In one case it was resolved to take no further action. Following the service of preliminary improvement notices the Committee considered five houses and in two cases accepted undertakings from the owners to carry out the necessary works of improvement within a specified period, and in one case resolved to take no further action. In the remaining two cases the Town Clerk is to obtain further information from the owners.

Loans on Mortgage

During the course of the year, the City Council again considered applications for loans on mortgage from prospective owner/occupiers and 766 houses were inspected for this purpose.

SHOPS ACTS, 1950 to 1965

This section has observed its responsibility for the enforcement of these enactments and carried out duties connected with complaints and routine visits to the various shopping areas of the City on Sundays, early closing days and in the evenings.

The law has not been amended to deal with the many anomalies and problems which have attained prominence in recent years, and, therefore, in the absence of such an important and necessary change, the appropriate duties have been carried out as effectively as is possible under the circumstances.

Extension of trading beyond the normally accepted closing hours observed by the majority of tradesmen, usually about 5.30 p.m., or of trading after the closing hours prescribed in the Act has not been noted during the year. Illegal trading at night and on Sundays has been of the same character and conducted in the same areas of the City as formerly experienced. Complaints from shopkeepers regarding Sunday and late-night trading have been few in number and similar in substance to those received in previous years, and in all cases full enquiries and observations have been carried out in order to deal with any contravention.

As a result of these duties, often carried out under unpleasant and difficult circumstances, 482 contraventions were dealt with by warning letter, and in ten cases court proceedings were successfully instituted but the fines imposed totalled only £29 10s. 0d. A total of 9,579 shops were entered during these special duties at night and on Sundays, and, where necessary, advice was given to shopkeepers not only in regard to the various requirements of the Shops Act, but also for the purposes of the Offices, Shops and Railway Premises Act, 1963, and the Food Hygiene (General) Regulations, 1960.

Matters relating to the employment of young persons (under eighteen year of age), the weekly half-holiday for shop assistants and the prescribed intervals for meals, also received the fullest attention, especially during inspections under the Offices, Shops and Railway Premises Act, and the Food Hygiene Regulations. Certain records are required to be kept for a number of the purposes connected with the above requirements and these were checked and appropriate action taken in the event of any failure to keep the prescribed records. Assistants required to work on a Sunday serving customers in shops must be given a compensatory holiday during the week in addition to their statutory half-day, and suitable records must be kept for this purpose.

Hairdressers and Barbers

The number of registered hairdressers at the end of the year was 816. Fifteen new businesses were registered and twelve transfers to new owners dealt with during the year under review. In connection with this aspect of the work, which is regulated by the Liverpool Corporation Act, 1955, Section 42, there are opportunities for dealing with the provisions of the Offices, Shops and Railway Premises Act, 1963, where persons are employed, and for advising hairdressers of the Shops Acts requirements, together with other relevant matters.

The standard of hygiene in hairdressers' premises is generally well maintained and complaints concerning the businesses carried on in shops have not been received. However, complaints are received regarding such businesses conducted in dwellings, and these are investigated as well as being referred to the City Planning Officer for his consideration. It is not usual for planning approval to be granted in these cases, but if such approval was obtained by the person concerned the same standards of hygiene required for shops would have to be observed, and unless the business activity was adequately separated from the domestic functions of the premises approval would undoubtedly be withheld.

There are special problems related to persons employed in hair-dressing establishments, and to certain provisions concerning the observance of a weekly early closing day.

From time to time complaints or enquiries by public health inspectors during their inspections of premises reveal that assistants are sometimes deprived of the requisite lunch interval or a full statutory half-holiday, usually because of pressure of work. There are also instances where the arrangements for the taking of meals on the premises by employees are unsuitable or not provided. These matters are brought to the attention of the employers concerned for their immediate action.

Fifty-six infringements of the Hairdressers Byelaws were recorded and dealt with during the year, arising out of inspections connected with applications for registration with the local authority or for the purposes of routine visits or inspections under the Offices, Shops and Railway Premises Act, 1963.

Pet Animals Act, 1951

There appears to be a decline in the trade of the sale of pets, if the reduction in the number of pet shops is an indicator. Only 21 businesses were licensed during the year compared with 34 in 1967 and 50 in 1964. A total of 51 visits were made to these premises, and eleven matters were directed to the occupiers for their attention. The licence fee has been increased to two pounds from ten shillings.

The Liverpool Fire Service also inspect these premises and recommendations by that department concerning fire prevention and the appropriate action to be taken in the case of fire are incorporated in the licence as special conditions.

Animal Boarding Establishments

Four licences were issued during the year in respect of premises where dogs and cats are boarded, compared with five in the previous year. The requirements of this enactment and the duties and procedures affecting the Fire Service Department and this department are similar to those for the Pet Animals Act. Periodical inspections of the premises and records were made and three infringements were dealt with appropriately.

FOOD HYGIENE

Inspections under the Food Hygiene (General) Regulations, 1960, and the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966, were made, in connection with normal routine work, for the purposes of dealing with complaints of unsatisfactory conditions in food premises and of street traders stalls and vehicles, unhygienic food handling, or with regard to contaminated or unsound food.

Premises

The total number of inspections was 17,334 which resulted in the recording of 4,022 infringements of the Food Hygiene (General)

Regulations. Most of these contraventions were dealt with satisfactorily by warning letter, but it was necessary to take court proceedings in respect of fourteen informations, and fines totalling £161 were imposed by the Magistrates.

In food premises where persons are employed, inspections were linked with the duties under the Offices, Shops and Railway Premises Act, 1963, and the Shops Act, 1950. Certain types of food businesses, such as cafés, restaurants and snack bars, are given as much additional supervision as is possible and particular attention is given to those premises which are the subject of complaints. Hotels, canteens, industrial and local authority kitchens, and milk and ice-cream treatment premises also receive routine attention together with such special visits as may be necessary.

Whilst hygiene standards are generally well maintained, there are certain premises and personnel requiring much more detailed supervision. A considerable need exists for the organised training of staffs by the owners of food businesses, and for an improved approach to the ways and means for ensuring clean food handling, preparation and storage, together with the satisfactory maintenance of clean premises and equipment.

In order to assist the food industry and to provide for food handlers and others a suitable and informative source of instruction, a series of lectures are held annually by this department, in co-operation with the Royal Society of Health, at the University School of Hygiene. These are certificated courses in the hygiene of food retailing and catering, and have proved invaluable in providing accurate and practical teaching for personnel in all sections of the food trade. Many employers have shown a readiness to co-operate with this department by encouraging their staffs to attend and by paying the course fees.

Invitations from firms and interested organisations, including technical and further education colleges, are accepted by this department to give lectures and talks on food hygiene and other public health matters to their employees, members or students.

Regulations 16 and 19

The provision of hand-washing facilities and sinks for washing utensils, equipment and food in premises to which the Food Hygiene (General) Regulations, 1960, apply, is a matter which is given the fullest attention during the course of periodical inspections, and appropriate action is always taken to ensure compliance with the relevant requirements of Regulations 16 and 19. Whilst it is not possible to give the number of food premises in the various classes of trade which comply with these specific measures it is recorded that there is some

form of washing facility in all such premises, although it is anticipated that modifications will be required to a number of them, and these will be dealt with in due course.

Street Trading

Since the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966, became operative on the 1st January, 1967, special attention has been given to the whole practice of street trading and problems of hygiene associated with it. After the formulation of a programme based on considerations of the many factors involved, surveys were carried out in the City centre, along the Dock Road, and in the suburbs of the City to ascertain the number and types of stalls and vehicles used for the sale of food.

These number 106 barrow traders, 63 mobile shops and ice-cream vehicles and three hot-dog firms, and 94 informations have been laid against 61 persons since 1968 with fines totalling £171 imposed by the magistrates. Of these, during 1969, 32 traders were prosecuted and fines totalling £96 were imposed, following 1,516 inspections and observations.

The difficulties of dealing with those persons who trade only on occasions, usually during the soft fruit season, were considerable. Some of them used very dilapidated barrows, sometimes gave false names and addresses when dealt with by a public health inspector, and invariably changed their trading locations several times during the day according to the frequency with which an inspector or a police constable was seen to be approaching.

It is appreciated, however, that most of the regular traders are anxious to improve their trading units, that is, within the small limits of their resources. Many barrows have been improved and painted, but all of them fall short of the standard necessary to adequately fulfil all the requirements of the hygiene regulations.

Special attention has also been given to the sale of wet fish by itinerant traders on the Dock Road and outside certain industrial premises. All contraventions have been dealt with appropriately.

Complaints are received from time to time regarding the various aspect of street trading, including its operation in direct opposition to traders in shops. It should be understood that the questions of trading competition, fair or otherwise, the obstruction of roadways, or the use of cleared sites as "markets" by groups of traders, are matters outside the scope of the powers operated by this department.

OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963.

This is the sixth annual report since this enactment came into operation in August, 1964, and it outlines the work of the department

to secure the safety, health and welfare of persons employed in offices, shops and certain railway premises.

There are now 10,906 premises registered under the Act and the number of new registrations during the year was 223 compared with 389 in 1968.

Since inspection under this enactment commenced in the second half of 1964 a total of 38,246 general and additional inspections have been completed and 27,940 infringements have been brought to the attention of employers, occupiers or owners of buildings by written intimation. These recorded contraventions do not include any minor matters which have been dealt with in an advisory manner by inspectors.

These measures have been encouragingly successful and so much satisfactory work has been completed by employers and owners of premises that it has not been considered necessary to initiate court proceedings in any particular case during the year.

The contraventions recorded involved the maintenance of clean premises; the reduction of overcrowding of rooms in which people work; the control of heating, ventilation and lighting; the maintenance of satisfactory sanitary conveniences, washing facilities, drinking water, accommodation for outdoor and working clothes, facilities for the taking of meals by shop assistants; the repair and cleanliness of floors, passages and stairs; the guarding of open staircases, hatches and openings in floors; the protection of workers who have to use and clean dangerous machines; the provision and maintenance of suitable first-aid materials, the investigation of accidents to employees; and defects reported by engineers following their examinations of passenger and goods lifts in shops and offices.

Other aspects of the work included the measuring of all newly registered premises for the purpose of recording data to assess the suitability and adequacy of working accommodation; the recording of information to maintain a complete central records system, and to supply relevant information to the City Planning Department in respect of proposed redevelopment areas. All this work is carried out by qualified public health inspectors assisted by technical assistants.

Whilst the number of general inspections 2,334 was 1,055 fewer than the previous year the number of follow-up visits to check outstanding infringements was 6,391 an increase of 801 visits on 1968. Therefore the overall total of visits under this enactment during the year was 8,725 compared with 8,979 for the previous year.

The work under this enactment is also linked with duties under certain other legislation, especially the Shops Act, 1950, which still retains certain staff welfare clauses. A total of 28,274 inspections of shops and other workplaces have been made for these purposes, and it

will be appreciated that these inspections have been complementary to the work under the Offices, Shops and Railway Premises Act, and, consequently, have secured further improvements in conditions which benefited those who work in those premises.

The total number of persons employed in all establishments registered up to the end of 1969 was 109,278 of whom 59,822 were females.

Notices involving 4,129 infringements have been served during the year in respect of the various sections of the Act for which this department is responsible. This number of infringements was 2,367 less than the previous year, and this decrease is accounted for partly by the reduction in the number of general inspections following the completion of all first-time inspections by the end of 1968. It is also to be expected that a decrease in the number of infringements should occur in premises which have already been subjected to a detailed initial inspection. For example there were 564 less infringements relating to the provision for staff of the advisory booklet (the abstract of the Act) and 316 fewer contraventions in regard to the provision of first-aid materials, a reduction of almost 900 infringements in these two items alone.

The general work under the Act for the year under review has not brought anything of outstanding consequence to our attention. The conditions found in most premises and the co-operation of the many employers have been of the previously satisfactory standard. The desire for consultation with the department by employers, owners of premises, architects and contractors has continued, but this contact has noticeably declined following the completion of the first general inspection. However, many enquiries are still received about certain aspects of the Act.

The continued co-operation and co-ordination between the City Building Surveyor, the Fire Service and this department, and the established inter-departmental arrangements have operated very satisfactorily.

Her Majesty's Factory Inspectorate are responsible for the enforcement of this Act in certain premises, including offices and shops in factories, railway and local authority premises. Many premises affected by the Act are multi-let for a variety of business purposes, and some buildings are used for shop and factory activities by the sole occupier. These varied activities and uses of buildings create occasional problem of enforcement, and the demarcation of responsibility between the factory inspectorate and inspectors of this department is not always clearly defined. These enforcement problems have always been readily solved through a happy and successful liaison between our two departments.

The provisions of the Act which have required more special attention have been those concerned with the cleansing of premises; lighting; conditions of staircases, floors and passages; sanitary conveniences and washing facilities; dangerous machines and the investigation of accidents.

Cleanliness of Premises

With regard to the general standard of cleanliness, the number of infringements recorded has remained proportionately the same. In 3,389 premises given a general inspection in 1968, 1,055 items of unsatisfactory cleansing were recorded. This year there were 801 infringements found as the result of 2,334 premises generally inspected. In addition to these infringements, 1,990 contraventions of the cleansing requirements of the Food Hygiene Regulations were also recorded during the year, thus making an overall total of 2,791.

Views have already been expressed in previous annual reports on the operation of the Offices, Shops and Railway Premises Act, 1963, regarding the inadequate scope of Section 4 of this Act, and nothing has happened to change those earlier views. This concern relates to the absence of a repair and maintenance clause in the section to improve and strengthen the provisions for dealing with dirty conditions in offices and shops. Experience during the year has again brought this weakness in the Act to the fore, and again it is suggested that suitable amendment be made in any future legislation enabling enforcing authorities to require adequate repairs to be made to surfaces, whenever necessary, in order to facilitate satisfactory cleaning.

Lighting

In February the Department of Employment and Productivity published an advisory booklet entitled "Lighting in Offices, Shops and Railway Premises" (SHW New Series No. 39) which is intended for the guidance of enforcing authorities, employers, owners of buildings, architects and other interested persons. It is obtainable from a law stationers, or H.M. Stationery Office, has been issued in place of regulations on lighting standards, and provides a useful and practical guide.

Levels of illumination and types of fittings are matters which are considerably affected by personal tastes and responses to environmental conditions, and inspectors have had occasion to advise managements and employees in cases where poor lighting has been accepted by them without complaint or an awareness of the unsuitable conditions. The inspectors' explanations and perhaps demonstrations of the desirable level of lighting have usually proved sufficient to bring about an immediate improvement. In other instances warning letters have been necessary to achieve the necessary compliance with the Act.

Sanitary Conveniences

Contraventions of Section 9 of the Act, relating to sanitary conveniences totalled 749 compared with 999 in the previous year. Of these,

727 contraventions were in respect of the cleansing and maintenance of the facilities and 22 related to the absence or insufficiency of such conveniences.

Problems affecting the accessibility of sanitary conveniences for use by personnel employed in lock-up premises without direct access from the workplace to the yard at rear, have again required special consideration. Whilst it is difficult, and in some instances impossible, to improve upon these arrangements, work on the enforcement of this section of the Act has resulted in a general improvement in the condition and availability of the facilities in many premises.

Washing Facilities

The provision of washing facilities is carefully dealt with during inspections, and the number of contraventions reported during the year totalled 321. This was 449 fewer than in 1968. Twenty-seven premises were found in which these facilities had not been provided; twelve premises required additional facilities; there were 114 instances where a hot water supply was not provided; 21 cases in which clean towels or soap had not been supplied, and 31 wash basin fittings required repair. Many of these items have been dealt with satisfactorily, and the remainder are receiving follow-up attention.

Floors, Passages and Stairs

The requirements of the Act affecting the maintenance of floors passages, stairs and gangways and keeping them free from obstruction form an extremely important part of the work of enforcing authorities. Staircases must be provided and maintained with suitable handrails or handholds, together with certain other safeguards where necessary, and openings in floors, such as loading or access hatchways, are required to be adequately fenced or guarded, subject to considerations of practicality.

Contraventions of these requirements totalled 886 during the year, compared with 912 in the preceding year. Many of these items were of a comparatively minor character, but there were some serious instances of defective conditions and absences of handrails or guards which gave rise to grave risks of accidents to employed persons. Fortunately such matters are dealt with expeditiously by the responsible persons, but one feels considerable concern that such important safeguards are dealt with, in many instances, only when they are the subject of enforcement action and perhaps the possibility of court proceedings.

Dangerous Machinery

Some indication of the scope of, and the need for the provisions relating to dangerous machines, may be judged by the recorded accidents associated with the use of these machines. This assessment should not be based upon the limited number of such accidents notified to this

authority, but rather upon the potential hazards to which the operators and cleaners of the machines may be exposed.

The accidents notified to this department during 1969, arising out of the use or the cleaning of machines numbered 20 compared with 21 in the previous year. Six of these accidents occurred to young persons under eighteen years of age and two happened while machines were being cleaned, none of them to young persons.

The national figure of reported accidents in this category, as published in the 1968 annual report by the Department of Employment and Productivity, totalled 972, one of them being fatal. A little more than a quarter of these accidents involved young persons.

The machines in general use in shops and offices are usually of standard designs incorporating the necessary safety guards and interlocking devices. Occasionally a breakdown of the safety measures is the cause of accidents, at other times it is the lack of adequate expert training of the operator, or subsequent supervision, which contributes to an accident. All too often, however, the lack of personal caution leads to the mishap. These human factors are the real problem, and whilst manufacturers have done so much in recent years to ensure a high level of safety for persons who operate dangerous machines, some further development of automatic locking apparatus is necessary in order to provide effective means to immobilise a machine when it is not functioning, or is not being used correctly.

Hoists and Lifts

Since the implementation of the Hoists and Lifts Regulations, 1968, which became operative on 28th May, 1969, 46 reports have been received from examining lift engineers or surveyors detailing 266 defects and other matters requiring the attention of the owners of passenger, service and goods lifts and goods hoists. Public health inspectors have made such visits as were considered necessary to the buildings in which lifts or hoists are situated and suitable letters were sent to the responsible persons advising them of the receipt of the examiners report and requesting their intimation as to the action taken to deal with the recommended remedial measures. In certain instances inspectors interviewed representatives of the owners in order to expedite some of the requirements. So far there has not been any resistance, or undue delay in carrying out repairs or modifications.

Accidents

The notification of accidents in offices and shops within the jurisdiction of this department numbered 474 compared with 498 in 1968. I am pleased to report that none of the accidents was fatal. Again the number of notifications has remained at a similar level to those of previous years. In the various groups of causation—a similar comparative

level with those for 1968 also occurred, except that there was a noticeable reduction in the number of persons falling from one level to another, namely from 125 in 1968 to 89 during the year under review, and an increase of injuries arising from persons being struck by falling objects; 76 during the year compared with 44 in the previous year. No apparent reason for these particular variations was revealed, but one may be satisfied, having regard to the degrees of personal contribution to the causes of many accidents, that the incidence of falls on stairs and from ladders decreased mainly because more care has been exercised by personnel, whereas, in the case of injuries caused by falling objects less care by the responsible persons may be the principal factor.

These assessments are based on the causes of certain accidents as revealed on investigations by public health inspectors. In one case a woman fell down some stairs when she was wearing sandals with broken straps held together by safety pins. It has been observed, not only when investigating notified accidents, but also during the inspection of certain kinds of food premises under the Food Hygiene Regulations, that many persons, usually girls or women carrying out cleaning or other domestic tasks, wear old footwear whilst working. Far too often the uppers of the shoes are broken and lack suitable means for secure fastening, and sometimes the soles of the footwear are loose or partly separated from the tops.

Another factor now contributing to this class of accident is associated with the requirement of some managements prohibiting the wearing of stiletto heeled shoes in order to reduce or prevent damage to certain floor surfaces or coverings. Female staffs affected by such restrictions, or for their own personal reasons, are seen to use slippers or mules which are kept on only by a strap over the instep of the foot, and when the person walks or uses stairs or steps the heels of the slippers flap up and down. This insecure fitting of such footwear presents a serious hazard and has been a contributing element in certain accidents.

The investigation of accidents arising from falling objects indicates a certain degree of carelessness, not only in regard to the mishandling of objects, but through the absence, in some instances, of adequate co-ordination of instructions to all personnel likely to be affected by various manual activities going on within working areas.

In a retail and wholesale shop, occupied by a stockist of replacement fittings and equipment which were kept in an extensive stores department, workmen were engaged carrying out certain alterations and installations. An engineer was working at a high level over an open "well" which passed through two lower floors. Storekeepers working on the ground floor, from time to time during each day used a desk placed at the base of the "well". The engineer dropped a hammer which struck a storekeeper on his back causing injuries which, fortunately, were not as serious as could have been expected from such an incident. It would

appear that there was not sufficient warning or information given by those responsible for, or to the personnel affected by this building activity. The failure of proper communication played a vital part in the chain of events which culminated in this "simple" accident, and the incident is related here in order that the various contributory factors described may be a reminder to all who have to share responsibility and exercise care and foresight towards colleagues and other persons.

There are many accidents which arise from lack of care or pressure of urgent duties. An assistant in a departmental store, helping to arrange a new counter display, stepped over a carton containing rubbish. A glass shelf from the counter had been broken and put into the box in such a way as to permit the jagged edge of the glass to stand up above the sides of the container. The girl failed to notice the broken glass and in stepping over the box caught her leg and suffered serious cuts.

It would be of inestimable value if more and specialised instruction was given to staffs on the problems of accidents in places of employment. Many firms employ training staff to teach sales techniques, display arrangements, the use of electronic office and other equipment, catering management, good food hygiene practice, or otherwise send their employees to schools to receive whatever special training is required. However much more is needed to be done to train all personnel in the skills of accident prevention.

Some publicity is used on television to highlight certain types of accidents in factories, but the illustrations usually depict the causes of the more serious and dramatic casualties. The importance of this form of publicity is beyond question, but it is suggested that consideration might be given by the Department for Employment and Productivity to a national programme of films and other visual media, designed to draw serious public attention to the very important subject of minor, as well as serious, accidents.

There have not been any notified accidents to window cleaners during the year.

LICENSED PREMISES AND CLUBS

During 1969, the Clerk to the Justices received fourteen applications under the provisions of the Licensing Act, 1964, for the grant of new club registration certificates and a further 36 applications were received for the renewal of existing certificates. All applications were approved. The Town Clerk notified all departments concerned. The public health inspectors are responsible for enforcing the provisions of various enactments relating to food hygiene and other public health matters.

On receipt of the applications, visits were made to the club premises and consequently, in many cases, specifications were issued. These often involved clubs in considerable expenditure in carrying out works to construct, improve or repair the sanitary accommodation, provide suitable ventilation, lighting and heating, construct dining areas, kitchens, bars, stores, etc., together with suitable fittings, hand-washing and dish-washing facilities and generally maintain the premises in good order and repair. On completion of the work to the satisfaction of the local authority, the Stipendiary Magistrate granted or renewed the Club Registration Certificate. The grant of a Club Registration Certificate is initially for twelve months but after a second or subsequent application the Court may renew the certificate for a period of up to ten years.

At the end of the year the total number of registered clubs was 250 and a further 68 clubs are subject to on-licences under Section 55 of the Licensing Act, 1964.

The total number of off-licensed premises for the sale of beer wines and spirits is 180 and there are 29 restaurants licensed for the sale of intoxicating liquor and six premises with residential and restaurant licences. Prior to the applications for new licences being heard by the Licensing Justices, the premises are visited to ensure that they comply in all respects with the various enactments involved, and also routine inspections of all clubs and licensed premises are made throughout the year.

Entertainment Clubs

The number of entertainment clubs in the city at the end of 1969 was 23. During the year one application for registration and 22 applications for the renewal of registration were received and visits were made to each one to ensure compliance with the provisions of the Liverpool Corporation (General Powers) Act, 1966 relating to lighting, sanitation and ventilation. It was necessary to issue specifications in eight cases and when all work had been carried out satisfactorily the premises were approved so far as this department was concerned.

THE ADULTERATION OF FOOD AND DRUGS

A total of 3,455 samples of Food and Drugs was submitted to the Public Analyst for examination, of these, 191 or 5.53 per cent were found to be "Not Genuine" or otherwise irregular. Milk occupies an important part in any sampling programme and 55 formal and 2,122 informal samples of milk were procured for analysis, an informal sample being one taken without carrying out the statutory division of the sample. The milk from one farm supplying a dairy in the city was found to contain added water and legal proceedings were taken against the farmer. Fines totalling £50 and £13 10s. 0d. costs were imposed.

During 1969, a legal minimum standard for the meat content of sausages came into force, and during the year, 56 samples of sausage were submitted for analysis, of these, ten were found not to comply with the minimum legal standard. In each case the manufacturers were cautioned and further samples were found to comply with the standard. Statutory action was taken in respect of four samples of unsatisfactory fish cakes and fines totalling £34 and £17 5s. 0d. costs were imposed.

Ice Cream

A total of 268 samples of ice cream were submitted for bacteriological examination, 160 were found to be in Grade I, 27 in Grade II; 20 in Grade III and 61 in Grade IV. Samples in Grades III and IV are considered unsatisfactory. Appropriate action was taken in respect of unsatisfactory samples which included daily visits to one factory to ensure that cleaning and sterilisation of the plant was being carried out in a correct manner.

Examination of Milk

Routine samples of milk were taken regularly from the five processing plants within the City and from shops selling milk processed outside the City. The standard of cleanliness and efficiency of heat treatment continued to be satisfactory. A total of 1,403 milk samples were submitted to the Public Health Laboratory for examination, of these, 1,386 were heat-treated and seventeen untreated.

None of the 1,084 pasteurised milks submitted for examination failed the Phosphatase test for the efficiency of pasteurisation, however, ten samples failed the Methylene Blue test for bacterial quality. Four of the ten were traced to inadequate sterilisation of the churns used for storage of the milk and the dairymen were cautioned regarding the use of under-strength sterilants. Of the 194 samples of sterilised milk examined two failed the turbidity test, the cause was traced to plant failures. A total of 108 samples of Ultra Heat Treated milk, all of which is processed outside the city were examined and all satisfied the colony count test. No Methylene Blue test failures were reported from the seventeen untreated milk samples submitted for examination.

The milk supplied to schools, hospitals, and Corporation establishments is sampled regularly both bacteriologically and chemically and all samples proved satisfactory.

A total of nineteen new registration certificates in respect of milk distributors and their premises, and licences for the sale of designated milk were issued. In addition 503 visits were made to premises registered for the sale of milk to ensure compliance with the Milk and Dairies (General) Regulations 1959.

Visits made to milk processing plants for the purpose of sampling numbered 267. These visits were made at times when the installations were in operation and each visit was utilised for a routine check of the plant, special attention being given to the temperature records and the functioning of the recording and indicating instruments.

The Liverpool Corporation Act empowers the local authority to grant licences to all persons keeping cattle or pigs subject to the premises being of the required standard, and there are now twelve cowsheds and thirteen piggeries in the city registered for the keeping of "cattle". The milk from one of the herds in the city is sold to the public without heat treatment, this is a small herd consisting at present of eighteen cows and the milk is regularly examined for tuberculosis and *Brucella Abortus*, the latter being a bovine disease which is transmissible to man. One sample taken during the year was found to be positive for *Brucella Abortus*; the milk was heat treated, until the infected animal had been isolated and removed from the herd.

In addition to the bacteriological examination of ice cream and milk, 80 routine samples and 23 special samples of other foods were examined for their suitability for human consumption. The routine samples were selected from foods which are normally consumed without further treatment, such as meat pies and pasties, shellfish, cakes and sandwiches, and the results were generally satisfactory. The 23 special samples were items submitted by members of the public (or similar items where the original was not available) as suspected of having caused food poisoning. These were all examined for food poisoning organisms and in each case the results were negative.

Liquid Egg

During the year, this department co-operated with the Public Health Laboratory Service in the examination of samples of pasteurised liquid egg. A total of 65 samples were examined using the statutory Alpha Amylase test and for *Salmonella*, all samples proved satisfactory.

Cream

This department also co-operated with the Public Health Laboratory Service in assessing the effectiveness of the heat treatment of cream. A total of 76 samples were submitted and examined by the Methylene Blue test and 30 were found to be unsatisfactory. In each case the manufacturers were informed of the result and advised on the correct method of heat treatment and storage of cream.

Supervision of Food Supply

The food supply of the City has been closely supervised throughout the year. Public health inspectors have made daily visits to the

Wholesale Fish Market and to the Wholesale Fruit, Vegetable and Flower Market, which during the year was transferred to new premises completing the juxtaposition with the Fish and Meat Markets.

Poultry and game on sale at the Wholesale Market is inspected prior to sale to the retail trade; 8,378 pounds being rejected and destroyed as a result of these inspections. The main cause for condemnation was decomposition.

The Wholesale Fish Market is visited daily and all fish on sale inspected. These inspections resulted in the rejection of 20,944 pounds of fish and 2,828 pounds of shellfish.

The daily inspection of fruit and vegetables at the Wholesale Market and warehouses throughout the City resulted in the rejection of 140,245 pounds of fruit and 262,587 pounds of vegetables as being unfit for human consumption.

A variety of food premises, wholesale warehouses, cash and carry premises have been visited for the purpose of the inspection of canned goods and grocery sundries and retail shop stocks are inspected on routine visits. These inspections resulted in the rejection of 92,240 pounds of foodstuffs as being unfit for human consumption. In addition 25,431 packets of frozen foods were rejected due to breakdown of refrigerator cabinets. The various types of canned goods, etc., rejected were:—

	<i>lbs. wt.</i>
Canned Meats	42,462
Canned Fruit and Vegetables ...	31,627
Canned Fish, Milk and Soups ...	9,164
Dry Groceries, etc.	8,987

The Merchandise Marks Act, 1926, has now been revoked, but the Orders in Council requiring an indication of origin on certain imported foods have been retained and to ensure compliance with the Orders, visits were made to provision merchants, butchers and greengrocers. Any infringements observed were brought to the attention of the responsible person and rectified before the public health inspector left the premises.

During the year a total of 482 consumer complaints were received from members of the public concerning items of food purchased within the City which were regarded by the complainants as being unfit or as containing extraneous foreign matter. Thirty-one of these complaints, i.e., 6·4 per cent concerned dirty milk bottles or foreign matter in the milk bottles. This is usually traced to misuse of the returnable container which could be completely obviated in all cases by the use of disposable containers, but there is, however, a certain amount of consumer resistance to their use. All consumer complaints were thoroughly investigated and any steps which could be taken to prevent a similar complaint were

pointed out to the responsible vendor or manufacturer and the complainants were generally re-imbursed for any loss and were satisfied by the action taken by the department.

Containers

Since the implementation of the Imported Food Regulations 1968, it is legal for the inspection of imported foodstuffs in sealed containers to be deferred until the consignment reaches its final destination. This has resulted in a considerable number of consignments of foodstuffs which were previously examined at the port of entry being delivered to wholesale premises in the City where they are now inspected on arrival by the public health inspectors.

During the period August to December, 1968, a total of 62 unexamined containers were delivered to premises in the City. In 1969, a total of 878 containers arrived in the City requiring examination by public health inspectors and the trend is for this type of importation to increase.

Poultry Processing Premises

There is only one poultry processing premises in the City and this is operated under the control of the Shecita Board for the ritual slaughter of poultry. A total of 60,000 birds were slaughtered during the year, comprising 30,000 hens, 29,000 capons, 500 turkeys and 500 ducks. The birds are slaughtered and New York dressed, i.e., plucked but not eviscerated and then distributed to the Kosher butchers throughout the Merseyside area. There were 200 visits made to these premises which resulted in the rejection of 250 pounds as being unfit for human consumption, i.e., 0.1 per cent of the birds slaughtered. The standard of hygiene regarding the poultry and the premises has been maintained at a satisfactory level throughout the year.

MEAT INSPECTION

As from 1st January, 1969, the local authority ceased to operate the slaughterhouse which is now under the control of a private company. The work necessary to modernise and improve the premises is now in progress.

Tuberculosis

Eleven cows were sent in for slaughter by the Ministry of Agriculture, Fisheries and Food, under the Tuberculosis eradication scheme. Several had tubercular lesions in the hind and fore shins. Three carcasses had tubercular lesions in the bronchial and mediastinal glands, also in the prescapular gland.

Brucellosis

Seventeen cows and one bull were passed after inspection, the udders and uterus and genitalia were condemned and taken away for a Ministry inspection.

Calves

The conditions in calves condemned were Acute Enteritis, Umbilical Pyaemia, and immaturity. The number condemned in the past twelve months was 126. This was below the normal average.

Pigs

The causes of condemnation of carcasses were Tuberculosis, Arthritis, Acute Arthritis, and septic Arthritis, also Pyaemia and Swine Erysipelas.

Sheep and Lambs

This year sheep and lambs were above the normal average by more than 4,000, being mostly Scottish lambs. They were of good quality until the end of the season, the number killed being 174,419.

Cysticercus Bovis

This year thirteen bullocks were affected. The cysts were found in the cheek muscles. The heads were destroyed, and the thirteen carcasses plus the offal were frozen and kept at temperatures below 20° F. (-7c) for three weeks or 14° F. (-10c) for two weeks according to the necessity of the owners.

After removal from the refrigerator the carcasses were inspected and stamped.

Cattle

The number of beef carcasses (whole) condemned this year was 47, together with part carcasses totalling 1,061.

The weight of organs and livers condemned was 146 tons, 10 cwt.

Animals Slaughtered

Details of the number of animals slaughtered during the year are as follows:—

Calves	Pigs	Sheep & Lambs	Steers	Heifers	Cows	Bulls	Total
343	99,265	174,419	11,345	8,070	19,170	289	312,901

Pigs

The amount of pigs inspected was 11,130 more than last year. The price of pork was cheaper than beef and lamb, the price of which remained steady.

Condemned Meat—Details are as follows:—

	Part	Whole	Weight
Cattle	420	9	12 Tons
Sheep and Lambs ...	3,902	1,311	15 „
Pigs	2,547	318	28 „
Cows	641	38	20 „
Calves	2	126	2 „

Imported Meat

The Irish beef which arrived in quarters, was well dressed and in good condition. In two cases skin tuberculosis was found in hind and fore shanks. The beef from Finland, most of which was cow beef, was not of the usual standard for “export” beef. Further imports were received from Yugoslavia and Uruguay, also chilled and frozen beef from New Zealand. Two imported pigs were found to be infected with Erysipelas and were condemned.

Meat Market—Details are as follows:—

Imported Meat		Fresh Meat	
Beef	75,719 lbs.	Beef	102,288 lbs.
Mutton and Lambs ...	68,168 „	Mutton and Lambs ...	136,666 „
Pork	7,288 „	Pork	137,466 „
Calves	Nil	Calves	3,107 „
Packages of Meat ...	462,233 lbs.		

Poultry and rabbits were also inspected as were canned goods, ten tons, six cwt. of which were condemned. In addition 69 tons, eight cwt. of livers and various organs were collected and sent for processing for medicinal use.

Slaughtering Licences

This year 81 licences were granted by the City Council to slaughterers and ritual slaughters. In addition 24 Mohammedan slaughtermen were granted licences to slaughter in Stanley Abbatoir.

Training Courses

The training courses for Meat Inspection and Food Hygiene and Public Health Inspection were well attended this year.

Specimens for Examinations

Specimens were provided for the Royal Society of Health and the Public Health Inspectors Education Board.

Specimens for Teaching Purposes

Requests for supply of blood, hearts, eyes and cysts and any other specimens for hospital laboratories and the University, schools and training colleges were met.

FACTORIES INSPECTION

Inspections under the provisions of the Factories Act, 1961, and the Offices, Shops and Railway Premises, Act, 1963, have continued to be made to the various trade and business premises throughout the City.

In addition to the communications forwarded to this department by H.M. Factories Inspectorate and infringements found by the inspector during his inspections of factories, a number of complaints were received from residents living in close proximity to factory premises. These were dealt with in a satisfactory manner.

Food Factories

Special attention is given, when visiting food factories, canteens, warehouses and other food premises, to the various aspects of the Food Hygiene (General) Regulations, such as:— personal hygiene, food handling, packing and storing of food under suitable conditions prior to distribution from the premises and close attention to the vehicles in the course of loading, etc.

Outworkers

The twice-yearly return of outworkers under the provisions of Section 133 and 134 of the Factories Act, 1961, was completed and the premises visited were in a satisfactory condition.

The return of outworkers during the current year is as follows:—

(1) Number of outworkers during the year...	...	...	126
(2) Number of returns received from other authorities	...	...	—
(3) Number referred to the Medical Officer of Health of districts outside the City	...	...	15

Rag Flock and Other Filling Materials Act, 1951

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

(1) Licensed to manufacture rag flock...	...	1
(2) Licensed to store and sell rag flock	...	5
(3) Registered for use of filling materials	...	51

Under the powers given to take samples of filling materials for the purpose of testing by a prescribed analyst, and the regulations laid down to govern the standard of cleanliness to which the materials must conform, fourteen samples were submitted to the analyst and all samples were found to conform to the requirements of the Act.

Agriculture (Safety, Health and Welfare) Provisions Act, 1956

Visits made throughout the year to pig farms, small holdings and market and nursery gardens amounted to 144.

No infringements were reported under the above enactment.

Dust and Dirt Nuisances

With the experience gained from the problems which have arisen during the construction of the second river tunnel crossing, nuisances, arising from the demolition of blocks of buildings in the congested central area and in other areas of the City due to road widening schemes, have been minimised by prompt attention and quick co-operation between the main contractors and the Cleansing Section of the City Engineer's Department.

Noise

Complaints have continued to be received especially in connection with activities in factories where work is carried on during the night, and investigation has required inspectors to spend a considerable amount of time, both late at night and into the early hours of the morning, carrying out observations to ascertain the level of the noise in dwellinghouses where the comfort of residents was claimed to be affected. In general managements make every effort to keep noise to a minimum, but employees on night work in factories, sometimes fail to realise that such action as their failure to keep windows and doors closed, or the revving of vehicle engines causes annoyance and distress to local residents. During the day-time many noise complaints have been made in connection with the use of compressors and pneumatic tools used during road works or building construction, the resulting noise has mainly affected workers in offices and shops. The level of noise from this type of work can be very disturbing and the only action that can be taken is to ensure that silencers

are affixed to the tools and that compressors are properly maintained. Complaints have also been dealt with following investigations about the level of noise from extraction fans, music from entertainment clubs and excessive barking of dogs.

Industrial Nuisances—Offensive Trades

Regular inspection of each offensive trade is maintained to ensure that any accidental emission of offensive vapour caused by mechanical breakdown or error of judgment on the part of the operator is detected and brought under control as quickly as possible.

Offensive Smells and Industrial Effluvia

The cause of offensive smells in premises was confined in the main to dead rodents found under floors and behind equipment and fittings in both business premises and dwellinghouses. A number of complaints in offices of offensive odours were traced to electric fittings which when overheated gave off an odour similar to the smell of fish. Ventilation systems to cooking ranges or processing plants required adjustment to prevent fumes entering adjoining premises. One interesting case is still proceeding, i.e., occupiers of a large nine-storey office block complained about fumes from a coffee-roasting plant in an adjoining three-storey building. The firm concerned realised the difficult problem it would have to rectify and carry fumes above a building of this height and alternative experiments are still in process to find a solution to the problem.

ATMOSPHERIC POLLUTION

Smoke Control Orders

There are now 25 confirmed Smoke Control Orders covering approximately 19,000 acres of the City involving some 96,000 dwellinghouses and 10,000 other buildings. Four of the orders are not yet operative and following detailed investigation as to the amount of financial expenditure involved, the Minister of Housing and Local Government agreed to the request of the City Council to postpone the operative dates of these orders. The new dates of operation are now as follows:—

Area 23 Gillmoss ...	...	1st May, 1971
Area 24 Clubmoor ...	...	1st May, 1973
Area 25 Pirrie ...	...	1st July, 1974
Area 26 Fazakerley ...	...	1st October, 1974

The dates of operation of future orders will be subject to the amount of financial assistance which can be made available, and also, to the additional availability of the smokeless fuels to replace bituminous

coal. It is in the interest of everybody that the programme be completed as soon as possible. Further control of premises in operative smoke control orders is now possible under the provisions of the Clean Air Act, 1968, which became operative on the 1st April, 1969, as it is now an offence to buy or sell any solid fuel, other than an authorised fuel, for use in a smoke control area. Fuel merchants are now aware of these provisions and this means that they cannot sell coal for burning in domestic premises in smoke control areas.

Special observations have been made by the inspectors during other duties so as to ensure that coal was not being delivered in contravention of the new provisions, as it is essential to prevent unauthorised fuels being available for burning during the hours of darkness, when it is more difficult to establish the emission of smoke from chimneys.

Observations have continued to be made on chimneys serving furnaces in industrial or commercial premises and also on shipping in the river and docks within the Port of Liverpool. There have not been any major problems as the engineers in charge of such installations are anxious to ensure that their appliances are being operated not only in an efficient manner, but also that every effort is made to burn the fuel as economically as possible, and as the emission of smoke usually indicates unsatisfactory combustion, prompt remedial action is taken whenever the emission of smoke is reported.

Measurement of Atmospheric Pollution

There are now five stations in Liverpool where volumetric instruments are installed measuring the amount of smoke and sulphur dioxide in the atmosphere. These stations are situated at Croxteth Hall, Hatton Garden, Green Lane Stoneycroft, Lark Lane and Woolton Street, Woolton. In addition, there are two standard deposit gauges measuring the amount of total solids deposited in the areas where they are sited, namely, Hatton Garden and Aigburth Vale. The results of these measurements are forwarded to the Ministry of Technology, Warren Spring Laboratory, to provide information for the monthly summary of observations which are published by the Ministry in connection with the "National Survey of Smoke and Sulphur Dioxide Recordings".

New Installations

Plans deposited with the City Building Surveyor which indicated that new chimneys were to be constructed, were examined and approval was given in 70 cases, and in six of these it was found necessary to increase the height of the chimney before the necessary approval could be given. Notification to instal new boilers or furnaces was received in respect of 79 installations, of which 59 detailed specifications were submitted and the necessary certificate of approval was issued in all cases.

RODENT CONTROL

Duties of Local Authorities and Occupiers

It is the statutory responsibility of every local authority under the Prevention of Damage by Pests Act, 1949, to take steps to secure as far as is practicable that their district is kept free from rats and/or mice and to enforce the duties of owners and occupiers under its provisions. In Liverpool dwellinghouses are disinfected free of charge and tenants are keen to report any evidence they have seen or heard.

Practical assistance is also given to owners and occupiers of business premises and land, and this proves helpful because to rely solely on the enforcement of the provisions of the Act could lead to an increase in the rodent population. Where assistance is provided at places other than dwellinghouses a charge is made for the service rendered.

The demolition of many buildings in the City centre contributed to the number of complaints received, but due to the continuous treatments of the sewers very few brown rat infestations were found in this area.

Systematic Survey

The rodent control staff examined 12,941 sites during the year in connection with routine survey and investigation of complaints and a further 72,246 visits were made entailing operational work and re-examination of buildings and lands during or following treatments. The public health inspectors also made, in connection with other matters 141,499 inspections under the Act.

Rodent Infestation

During the year 3,580 sites were found to be infested, 1,560 by rats, 58 by rats and mice, and 1,962 by mice only and the majority were only slightly infested. Details are shown in the statistical appendix.

Development of agricultural land for new housing estates disturbed rats from their customary habitats causing them to infest buildings under construction.

Complaints relating to rats and/or mice to the total of 14,501, a decrease of 1,208 over the previous year, were received and promptly investigated. Of the 815 dwellinghouses affected by rats, 652 infestations were solely confined to the external parts of the premises.

Rodent Disinfestations

During the year 3,219 buildings and lands were disinfested from rats and/or mice. The demand for assistance from occupiers of business premises remains appreciable and 1,645 requests were received.

Of the 3,219 infestations and re-infestations remedied during the year, 2,998 were treated by the department's operators and of these, 2,952

were cleared by the use of poisons and the remaining 46 were remedied by trapping only. There were 221 infestations remedied by the occupiers or their contractors under the guidance and supervision of the rodent control inspectors.

It is estimated that at least 10,583 rats in buildings and on lands were destroyed during the year as a result of poisoning treatments, 995 dead rats were actually collected during operations and 134 were caught in traps.

The species of rats collected were 562 *rattus norvegicus* ("brown" or "common" rats) and 433 *rattus rattus* ("black" or "ship" rats).

Of the rodents collected 26 were sent to the Public Health Laboratory for examination and the remainder were burnt.

Although there is no reliable formula available for calculating the kill in relation to the poisoning of mice there can be no doubt that the number destroyed by this method is quite considerable when taking into account the large amount of poison actually consumed by mice, namely 13,860 ounces.

Rat Destruction in Sewers

There are some 26,500 manholes providing access to the whole of the sewerage system in the City and the entire sewerage system has been treated by the direct poisoning method. A total of 60,116 poison baits were laid in manholes and there is no doubt that as the result of the continuous and systematic treatment of sewers, the breeding and migration of rats through sewers and drains has been greatly reduced. The majority of infestations on the surface are due to brown rats having escaped from defective sewers or drains and it is, therefore, essential to ensure that treatments are continuously applied. A follow-up test after the poison treatment was applied to a proportion of the manholes previously treated, and activity was only recorded in 396 out of a total of 5,320 manholes re-tested, which is an indication of the effectiveness of the treatment. A further poison treatment was applied in the areas where these manholes were situated.

During the year it was considered necessary to refer to the City Engineer, 1,111 items of work which required attention in order that maximum benefit could be had from the work entailed in this branch of the work of the department. The items included the removal of rubbish from baiting points and clearing of choked or partially choked sewers.

Preventive Measures

During the year 481 drain tests were held in connection with infestations, which resulted in 133 premises being found to have defective drainage systems and the necessary action was taken to have the drains

repaired. Fifty-one notices were served under the provisions of the Prevention of Damage by Pests Act, 1949, relating to premises for non-structural work.

Once again it is pleasing to note that during the year it was not necessary to institute legal proceedings under the Prevention of Damage by Pests Act, 1949.

Pigeon Control

Feral pigeons do considerable damage to the fabric of buildings where they roost and they also foul the facade and approaches to premises. The owners of business premises and the occupiers of dwelling-houses co-operated with the staff to reduce the feral pigeon population. The operational work carried out resulted in many pigeons being trapped and humanely destroyed and some feral pigeons were destroyed as a result of work carried out by private firms.

A total of 23,414 visits were made which resulted in 78,175 pigeons being humanely destroyed and 7,454 eggs were destroyed. The number of birds caught by the department's staff was 73,860 and 4,315 with help from private firms. Since the inception of the sub-section in January, 1966, a total of 251,964 feral pigeons and 26,640 eggs have been destroyed.

The most serious infestations are found near to docks, mills and warehouses, where grain is exposed during loading and unloading of vehicles, and constant action is required as large flocks of pigeons appear to travel considerable distances to feed at those locations. Pigeons have also created problems by roosting in the roofs of domestic premises and every assistance has been given to householders when a complaint has been received. There is still the difficulty to be overcome of misguided persons placing food on the highway to feed pigeons and this aspect of the problem is proving very difficult to resolve, as numerous pigeons are attracted to these locations but as they do not roost in the area, there is little that can be done to prevent a nuisance to residents in the locality.

DISINFECTION AND DISINFESTATION

The services provided for disinfection following infectious disease, and the disinfestation treatment for verminous conditions have continued to function in a similar manner to previous years.

INSPECTION OF PREMISES FOR VERMINOUS CONDITIONS

The number of inspections performed during the year in connection with re-housing of families was 4,897. As a result of these inspections 2,725 dwellinghouses and furniture or effects of 66 families were treated for verminous conditions.

Disinfestation of Other Verminous Premises

The full use of the services provided by the department for treatment of verminous premises has resulted in 6,989 inspections and 5,180 treatments being carried out, together with treatment of 337 business premises.

In addition the department was called upon to render assistance to families in distress due to flooding in two blocks of flats. An infestation of lice in a section of a residential establishment was quickly abated. The modernisation of blocks of older flats has revealed infestations which had been previously concealed.

Disinfestation and Disinfection Station

The one station now in use at the Smithdown Road depot dealt with the following articles during the year:—

8,656 Verminous articles disinfested.

5,080 Infectious articles disinfested.

10,591 Articles for precautionary treatment.

619 Tons of miscellaneous goods for precautionary disinfection.

98 Male persons cleansed.

Disinfection of Infectious Premises

Following the incidence of infectious disease at home 229 premises were dealt with in the manner prescribed for terminal disinfection.

MISCELLANEOUS SERVICES

Incontinent Laundry Service

This service, which is continuing to expand, dealt with 36,760 calls during the year for the purpose of collecting or returning laundry to or from chronically ill persons in cases where, because of the nature of the illness, no other laundry arrangements could be made.

Home Nursing Equipment

This is another rapidly expanding service which is administered by this section and during the year 15,650 visits were made for the purpose of issuing or collecting items of equipment.

City Mortuary

This service works in close liaison with the office of the City Coroner. During the year two attendants assisted at 557 post mortems and 604 bodies were received.

OTHER ACTIVITIES

Other activities of the section include:—

- (a) Collection, repair and delivery of day nursery equipment and other items of furniture, etc., belonging to the department.
- (b) Transport of equipment on behalf of other sections of the Health Department.
- (c) Provision of transport for Port Health personnel.

STAFF

The staff employed consisted of:—

1 Chief Inspector	1 Shift Leader
1 Senior Inspector	17 Drivers
5 Inspectors	10 Disinfectors, etc.
2 Depot Assistants	1 Joiner
1 Foreman—Disinfecting Station	1 Boiler Attendant
1 Foreman—Depot	2 Mortuary Attendants
1 Storekeeper	

Vehicles

The vehicles used by the section covered 158,344 miles during the year and consumed 9,049 gallons of petrol.

CREMATION

The Medical Officer of Health continues to act as medical referee to the Liverpool Crematorium. The Deputy Medical Officer of Health and the Principal Medical Officer (Mental Health) and Principal Medical Officer (Epidemiology) acted as deputy medical referees. The documents, which are statutory, are scrutinised at the central offices of the Liverpool Health Department before authority is given to cremate.

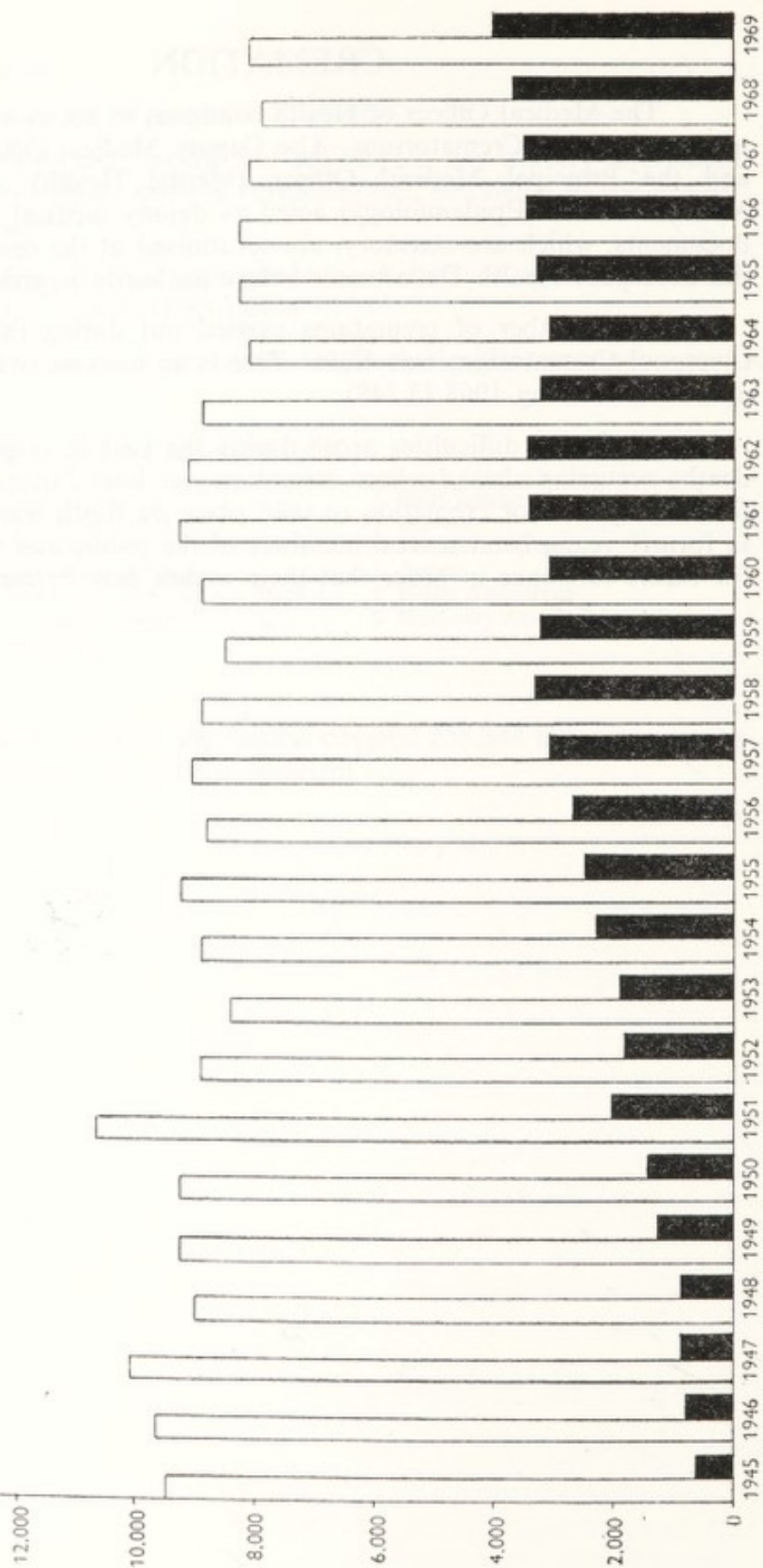
The number of cremations carried out during the year at the Liverpool Crematorium was 4,046. This is an increase over the number undertaken during 1968 (3,748).

No undue difficulties arose during the year in respect of sudden deaths occurring abroad where cremation was later carried out. Written formal requests for cremation to take place on death were received, as in former years, from several members of the public and these are filed for future reference in order that their wishes may be met.

DEATHS (LIVERPOOL RESIDENTS) AND CREMATIONS LIVERPOOL CREMATORIUM, 1945-1969

□ DEATHS

■ CREMATIONS



WATER SUPPLY

The water supply in the area during 1969 was satisfactory both in quality and quantity. There has been no form of contamination in which unusual action (i.e. other than the usual methods of treatment and distribution) has been taken.

The number of dwellinghouses, flats and shops with domestic living accommodation supplied from the public water mains in Liverpool was 201,867. None was supplied by a standpipe. The population of the City estimated by the Registrar General for the 30th June, 1969, was 677,450.

Five samples of water from the aqueducts and distribution systems were examined for fluoride content. The average amount of fluoride, expressed as F, in the samples was 0.07 p.p.m. the range being from 0.04 to 0.10 p.p.m.

During the year 1969, bacteriological examinations were made on 3,811 samples of water from aqueducts, wells, storage reservoirs, trunk mains and the distribution system. Of the 3,811 samples 571 were taken within the City from the two wells and from sampling points on the mains other than the trunk mains. Of the 571, 93 per cent were free from B.Coli in 100 ml. and 60 per cent were free from coliform organisms in 100 ml. Also, of the 3,811 samples 1,911 were taken from the trunk mains which serve the City and other parts of the area of supply. Of the 1,911, 95 per cent were free from B.Coli in 100 ml. and 72 per cent were free from coliform organisms in 100 ml. Also 72 chemical analyses were made and the results were satisfactory.

For plumbo-solvency 284 analyses were made. The average amount of lead absorbed in those samples (excluding those taken from houses by Public Health Inspectors) of water that had passed through test lengths of lead piping was .06 parts per million. The supplies from both Rivington and Lake Vyrnwy were treated with hydrated lime in order to raise the pH value.

Lead in Water Supply

For many years, the Liverpool water supply has been tested for plumbo-solvency at the Prescott reservoirs and found to be satisfactory. All soft upland waters have a tendency to dissolve lead from service pipes, because of the slight acidity of such waters. It is therefore necessary to control this acid tendency and as far as possible maintain the hydrogen ion concentration around the neutral level.

Whilst the water in the Liverpool mains supply is constantly below the World Health Organisation's recommended standard of 0.05 mgm. of lead per litre, it was decided to continue to take tests of the

lead in a number of the oldest dwellinghouses in the City—most of them being in Slum Clearance Areas. It is well known that old lead service pipes are most liable to plumbo-solvency.

During the year a total of 396 samples were submitted from these old houses with lead service pipes and gave the following results:—

Samples of water held overnight	198	Average lead content 0.10 mgm/l.
---	-----	----------------------------------

Samples of water after discharge of contents of service pipe by running the tap for one minute	198	Average lead content 0.05 mgm/l.
---	-----	----------------------------------

The figures in 1969 were 0.14 and 0.07 respectively.

In all the old houses which the inspectors visited the family was advised to run the tap for about a minute first thing in the morning.

This only occurs in older property with lead service pipes. In newer houses with copper pipes, no plumbo-solvency can occur, so with domestic urban renewal proceeding apace, this potential health hazard is on the way out.

Although the amount of lead in water standing overnight in service pipes is undesirable, there is no evidence of it causing the slightest harm to health, and it is a condition which has existed for many years in many urban areas throughout the country. Lead, of course, is absorbed into the body through other articles of the diet, and although it is a cumulative toxic element, there is no evidence that the minute amounts of lead ingested in the normal diet cause any ill health. I can give the assurance even to those families living at present in old property with lead service pipes, that provided they discard the first running from the tap in the morning, no harm will come to them from drinking Liverpool water.

It should be remembered that the W.H.O. recommended standard is based on the assumption that water constantly containing more than 0.05 mgm. of lead per litre is the only source of dietetic fluid which would be consumed over a very long period of years. This hypothetical requirement does not exist in Liverpool.

STATISTICAL SECTION

VITAL STATISTICS

BIRTH STATISTICS—1946-1969

1969	LIVE BIRTHS			STILLBIRTHS		
	Males	Females	Total	Males	Females	Total
Legitimate ...	5,177	4,801	9,978	83	71	154
Illegitimate ...	654	636	1,290	7	7	14
Total	5,831	5,437	11,268	90	78	168

Year	Live Births	Birth Rate	Registered Stillbirths	Total Births	Stillbirths per 1,000 Live and Stillbirths	Illegitimate Live Births	
						No.	% of Live Births
1946	18,528	25.2	539	19,067	28.3	1,351	7.3
1947	19,904	26.4	514	20,418	25.2	1,151	5.8
1948	17,695	22.3	479	18,174	26.3	1,009	5.7
1949	16,551	20.7	358	16,909	21.2	943	5.7
1950	16,110	20.1	375	16,485	22.7	968	6.0
1951	15,593	19.9	396	15,989	24.8	859	5.5
1952	15,839	20.0	400	16,239	24.6	876	5.5
1953	16,022	20.3	394	16,416	24.0	873	5.4
1954	15,742	20.5	400	16,142	24.8	847	5.4
1955	15,268	19.6	408	15,676	26.0	785	5.1
1956	15,944	20.6	394	16,338	24.1	801	5.0
1957	16,044	20.9	409	16,453	24.9	854	5.3
1958	15,662	20.5	413	16,075	25.7	799	5.1
1959	15,615	20.6	375	15,990	23.4	815	5.2
1960	15,961	21.1	377	16,338	23.1	868	5.4
1961	16,492	22.1	380	16,872	22.5	946	5.7
1962	16,479	22.1	333	16,812	19.8	1,020	6.2
1963	15,775	21.3	351	16,126	21.8	1,095	6.9
1964	15,625	21.4	283	15,908	17.8	1,199	7.7
1965	14,553	20.2	269	14,822	18.1	1,197	8.2
1966	13,557	19.0	277	13,834	20.0	1,250	9.2
1967	12,583	17.8	223	12,806	17.4	1,296	10.3
1968	11,847	17.2	219	12,066	18.2	1,310	11.1
1969	11,268	16.6	168	11,436	14.7	1,290	11.4

PERCENTAGE OF ILLEGITIMATE LIVE BIRTHS TO
TOTAL LIVE BIRTHS

COMPARISON OF LIVERPOOL RATES WITH RATES FOR ENGLAND AND WALES

	England Liverpool and Wales			England Liverpool and Wales	
1930	4.6	4.6	1950	6.0	5.1
1931	4.6	4.4	1951	5.5	4.8
1932	4.5	4.4	1952	5.5	4.8
1933	4.3	4.4	1953	5.4	4.7
1934	4.4	4.3	1954	5.4	4.7
1935	4.3	4.2	1955	5.1	4.7
1936	4.4	4.1	1956	5.0	4.8
1937	4.4	4.2	1957	5.3	4.8
1938	4.8	4.2	1958	5.1	4.9
1939	4.4	4.2	1959	5.2	5.1
1940	4.6	4.3	1960	5.4	5.4
1941	6.2	5.4	1961	5.7	6.0
1942	6.3	5.6	1962	6.2	6.6
1943	7.1	6.4	1963	6.9	6.9
1944	8.3	7.3	1964	7.7	7.2
1945	10.7	9.3	1965	8.2	7.7
1946	7.3	6.6	1966	9.2	7.9
1947	5.8	5.3	1967	10.3	8.4
1948	5.7	5.4	1968	11.1	8.5
1949	5.7	5.1	1969	11.4	8.4

DEATHS FROM PRINCIPAL CAUSES—1969

Class	Cause Group No. (List A)*	Cause	Male	Female	Total	Rate per 1,000 Popula- tion	Percent- age of Total Deaths
II	45-49, 52-61	Cancer (except respi- ratory system) ...	566	713	1,279	1.89	15.4
II	50, 51	Cancer (respiratory system) ...	447	99	546	0.81	6.6
VII	81, 83, 84	Heart Diseases ...	1,309	1,166	2,475	3.65	29.8
VII	85	Cerebrovascular Disease ...	347	556	903	1.33	10.9
VII	80, 82, 86-88	Other Circulatory Diseases ...	187	239	426	0.63	5.1
VIII	91, 92	Pneumonia ...	359	391	750	1.11	9.0
VIII	89, 93	Bronchitis ...	434	188	622	0.92	7.5
IX	97-104	Digestive Diseases ...	84	117	201	0.30	2.4
XIV & XV	126-135	Congenital Anomalies and Certain Causes of Perinatal Mortality ...	89	67	156	0.23	1.9
E XVII	138-150	Accidents, Poisonings and Violence ...	179	179	358	0.53	4.3
Various	Remainder	All other causes ...	250	351	601	0.89	7.2
Totals		All causes ...	4,251	4,066	8,317	12.3	100

* The code numbers in this and other mortality tables are from the 8th Revision, W.H.O. Manual, published 1967.

DEATHS FROM CANCER 1969

Cause Group No. (List A).	Organs affected	Male	Female	Totals
45	Buccal cavity and pharynx	7	10	17
46-49	Oesophagus, stomach, intestines and rectum	259	249	508
50, 51	Larynx, trachea, bronchus and lungs	447	99	546
54	Breast	*1	138	139
55, 56	Cervix and uterus	—	55	55
52,53,57,58	Other and unspecified sites	238	203	441
59	Leukaemia	23	15	38
60	Lymphatic and haematopoietic tissue ...	22	22	44
61	Benign and unspecified neoplasms	16	21	37
	Totals	1,013	812	1,825

*Sex has been checked for this case, and is correct.

TRENDS OF MORTALITY 1947-69

	<i>Deaths from Cancer of the Respiratory System</i>	<i>Deaths from Tuberculosis of the Respiratory System</i>
1947	235	599
1948	252	630
1949	320	532
1950	331	481
1951	334	406
1952	346	269
1953	432	258
1954	383	232
1955	408	185
1956	448	137
1957	448	123
1958	399	109
1959	444	102
1960	457	81
1961	525	80
1962	484	74
1963	483	54
1964	527	38
1965	493	42
1966	528	46
1967	503	44
1968	575	39
1969	546	25

MATERNAL MORTALITY—1930-1969

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
1955	15,268	408	15,676	9	0.57
1956	15,944	394	16,338	7	0.43
1957	16,044	409	16,453	7	0.42
1958	15,662	413	16,075	4	0.25
1959	15,615	375	15,990	5	0.31
1960	15,961	377	16,338	5	0.31
1961	16,492	380	16,872	2	0.12
1962	16,479	333	16,812	5	0.30
1963	15,775	351	16,126	4	0.25
1964	15,625	283	15,908	3	0.19
1965	14,553	269	14,822	1	0.067
1966	13,557	277	13,834	—	—
1967	12,583	223	12,806	1	0.078
1968	11,847	219	12,066	1	0.083
1969	11,268	168	11,436	4	0.35

INFANT MORTALITY 1969

Deaths from stated causes at various ages under one year.

Cause of Death	Cause Group No. List A	Under 1 week	7-27 days	1-6 months	7-11 months	Total Deaths under 1 year
Meningococcal Infection ...	19	—	—	1	—	1
Measles	25	—	—	—	—	—
Pneumonia	91, 92	1	—	28	2	31
Bronchitis	89, 93	—	1	15	1	17
Enteritis	5	—	—	6	2	8
Congenital Anomalies ...	126-130	30	9	13	2	54
Injury at Birth	131, 132	14	2	—	—	16
Other Diseases of Early Infancy	133-135	67	2	—	—	69
Other causes	—	7	6	18	—	31
Totals		119	20	81	7	227

Live Births in the year ...	Legitimate	9,978	Deaths ...	Legitimate Infants	202
	Illegitimate	1,290		Illegitimate Infants	25

CAUSES OF DEATH—1969

(This table relates to underlying primary causes of death, as in previous annual reports).

Class	Male	Female	Total	Rate per 1,000 Population	Percentage of total deaths
I—Infective and Parasitic Diseases	33	27	60	0.09	0.72
II—Neoplasms	1,013	812	1,825	2.70	21.94
III—Endocrine, Nutritional and Metabolic Diseases	34	71	105	0.15	1.26
IV—Diseases of Blood and Blood-forming Organs	12	23	35	0.05	0.42
V—Mental Disorders... ..	20	14	34	0.05	0.41
VI—Diseases of the Nervous System and Sense Organs	46	41	87	0.13	1.05
VII—Diseases of the Circulatory System	1,843	1,961	3,804	5.62	45.74
VIII—Diseases of the Respiratory System	829	622	1,451	2.14	17.45
IX—Diseases of the Digestive System	84	117	201	0.30	2.42
X—Diseases of the Genito-Urinary System	47	53	100	0.15	1.20
XI—Complications of Pregnancy, Childbirth and the Puerperium	—	4	4	0.01	0.05
XII—Diseases of the Skin and Subcutaneous Tissue ...	2	4	6	0.01	0.07
XIII—Diseases of the Musculo-skeletal System and Connective Tissue	6	30	36	0.05	0.43
XIV—Congenital Anomalies ...	38	33	71	0.10	0.85
XV—Certain Causes of Perinatal Mortality	51	34	85	0.13	1.02
XVI—Symptoms and Ill-defined Conditions	14	41	55	0.08	0.66
E XVII—Accidents, Poisonings and Violence (External Cause)	179	179	358	0.53	4.30
Totals	4,251	4,066	8,317	12.3	100

ANALYSIS OF CAUSES OF INFANT MORTALITY IN SUCCESSIVE QUINQUENNIA 1896-1965, AND THE YEARS 1966, 1967, 1968, AND 1969.

(A)—Recorded Deaths

Years	1 Total Live Births	2 Total Deaths Under 1 Year of Age	3 Infectious Diseases (excluding Tubercu- losis)*	4 Tubercular Diseases	5 Nervous Diseases	6 Respira- tory Diseases	7 Digestive Diseases	8 Malforma- tions Premature Birth, Maras- mus &c.	9 External Causes
1896/1900	111,700	21,160	1,508	698	2,476	3,575	6,376	5,698	811
1901/1905	118,801	20,353	1,546	644	2,516	3,484	5,187	5,732	568
1906/1910	118,313	17,739	1,613	465	2,052	3,146	3,902	5,520	538
1911/1915	111,872	15,458	1,309	345	1,432	2,916	3,635	4,953	426
1916/1920	99,451	11,510	1,116	202	1,083	2,821	1,872	4,107	179
1921/1925	104,217	10,497	1,066	200	573	2,776	1,786	3,764	126
1926/1930	95,701	9,002	978	109	401	2,553	1,670	2,981	88
1931/1935	88,644	7,904	902	82	368	2,050	1,184	3,125	67
1936/1940	80,936	6,226	573	74	519	1,457	698	2,691	84
1941/1945	71,648	5,512	341	71	403	1,704	548	2,193	131
1946/1950	88,788	5,034	311	47	213	1,109	963	2,226	111
1951/1955	78,464	2,626	83	10	28	480	132	1,792	62
1956/1960	79,226	2,149	31	—	24	384	82	1,576	36
1961/1965	78,924	2,006	19	2	20	409	83	1,406	52
1966	13,557	308	1	—	5	61	17	210	11
1967	12,583	277	1	—	6	55	16	189	10
1968	11,847	262	14	—	7	55	10	167	9
1969	11,268	227	13	—	3	48	6	149	8

* Since 1968 this column has included cases of Enteritis and other Diarrhoeal Diseases, previously included in column 7.

(B)—Death Rates

Years	1 Birth Rate per 1,000 population	DEATH RATES PER 1,000 LIVE BIRTHS							
		2	3	4	5	6	7	8	9
		All Deaths Under 1 Year of Age	Infectious Diseases (excluding Tubercu- losis)	Tubercular Diseases	Nervous Diseases	Respira- tory Diseases	Digestive Diseases (including Diarrhoea)	Malforma- tions Premature Birth, Maras- mus &c.	External Causes
1906/1900	33.4	189	12.7	6.2	22.1	32.0	57.1	51.0	7.3
1901/1905	33.4	172	13.0	5.5	21.2	29.3	43.7	48.1	4.7
1906/1910	32.2	149	13.6	3.9	17.4	26.6	33.0	46.7	4.6
1911/1915	29.3	137	11.6	3.1	12.8	26.1	32.6	43.1	3.8
1916/1920	24.9	116	11.1	2.0	10.9	28.4	18.8	42.0	1.8
1921/1925	25.1	100	10.2	1.9	5.5	26.6	17.1	36.1	1.2
1926/1930	22.1	94	10.2	1.1	4.2	26.7	17.4	31.1	0.8
1931/1935	20.5	89	10.1	0.9	4.2	23.1	13.4	35.3	0.8
1936/1940	19.4	77	7.0	0.9	6.4	17.9	8.8	32.9	1.0
1941/1945	21.3	78	4.8	1.0	5.6	24.1	7.7	30.7	1.8
1946/1950	22.9	56	3.4	0.5	2.3	12.3	10.5	25.1	1.2
1951/1955	20.1	33	1.0	0.1	0.3	6.1	1.7	22.8	0.8
1956/1960	20.7	27	0.4	—	0.3	4.9	1.1	19.9	0.4
1961/1965	21.4	25	0.2	0.03	0.3	5.2	1.1	17.8	0.7
1966	19.0	23	0.1	—	0.4	4.5	1.3	15.5	0.8
1967	17.8	22	0.1	—	0.5	4.4	1.3	15.0	0.8
1968	17.2	22	1.2	—	0.6	4.6	0.8	14.1	0.8
1969	16.6	20	1.2	—	0.3	4.3	0.5	13.2	0.7

POPULATION, BIRTH RATES, DEATH RATES, INFANT AND MATERNAL MORTALITY

	Birmingham	Bradford	Bristol	Cardiff
Registrar-General's estimated population for 1969	1,086,400	293,210	427,230	285,860
Comparability factor—				
(a) Births	0.99	1.04	1.03	0.99
(b) Deaths... ..	1.15	0.96	0.95	1.10
Crude birth rate per 1,000 population	17.49	19.5	15.1	15.3
Birth rate as adjusted by factor	17.3	20.3	15.6	15.1
Illegitimate live births as a percentage of all live births	11.1%	12.0%	10.6%	10.0%
Crude death rate per 1,000 population	11.56	13.9	12.7	11.6
Death rate as adjusted by factor	13.3	13.3	12.1	12.8
Infant mortality rate per 1,000 live births	21.16	29.3	16.2	19.0
Neonatal mortality rate per 1,000 live births	13.74	17.1	10.2	12.6
Stillbirth rate per 1,000 total births	13.50	12.4	12.2	16.2
Perinatal mortality rate per 1,000 total births	25.63	27.3	20.5	26.6
Maternal mortality rate per 1,000 total births	0.21	0.68	0.15	0.23
Tuberculosis rates per 1,000 population				
(a) Primary notifications—				
Respiratory	0.42	0.67	0.14	0.24
Non-respiratory	0.13	0.36	0.04	0.05
(b) Deaths—Respiratory	0.02	0.03	0.009	0.01
Non-respiratory	0.00	0.007	0.012	0.017
Death Rates per 1,000 population from—				
Cancer (all forms)	2.35	2.49	2.563	2.21
Cancer of Lungs and Bronchus	0.63	0.59	0.707	0.56
Meningococcal infections	0.00	0.003	0.002	0.004
Whooping Cough	—	—	—	—
Influenza	0.10	0.057	0.101	0.06
Measles	—	—	—	—
Acute Poliomyelitis and Encephalitis	—	—	—	—
Diarrhoea (under 2 years)	0.01	0.037	0.005	0.004
Diarrhoea (under 2 years) (per 1,000 live births)	0.7	1.91	0.31	0.23

Kingston upon Hull	Leeds	Leicester	Liverpool	Manchester	Newcastle upon Tyne	Nottingham	Sheffield
292,600	503,720	278,470	677,450	593,770	240,340	303,090	528,860
0.97	1.00	1.04	0.98	1.05	1.00	0.99	1.02
1.2	1.11	0.98	1.15	1.08	1.10	1.07	1.05
17.5	16.1	18.38	16.6	16.84	13.8	18.0	16.0
17.0	16.1	19.12	16.3	17.68	13.8	17.8	16.3
11.4%	13%	13.09%	11.4%	17.95%	13.2%	16.7%	9.0%
12.0	12.3	13.01	12.3	12.70	14.52	12.8	12.6
14.4	13.7	12.74	14.1	13.72	16.0	13.7	13.2
24.8	21.0	24.42	20.1	29.01	10.0	22	17.0
16.4	13.0	14.07	12.3	18.21	15.0	14	11.0
17.0	16	14.25	14.7	16.53	22.0	16	12.0
31.5	27	26.00	25.0	32.86	—	27	21.0
—	0.12	0.39	0.262	—	0.345	0.18	0.23
0.25	0.40	0.41	0.275	0.30	0.071	0.28	0.219
0.04	0.05	0.25	0.041	0.12	0.025	0.08	0.061
0.03	0.04	0.02	0.037	0.04	0.008	0.01	0.025
0.01	0.008	0.03	0.004	0.03	2.804	0.02	0.006
2.7	2.64	2.5	2.695	1.60	0.89	2.58	2.52
0.8	0.68	0.57	0.806	0.82	—	0.64	0.787
0.001	—	0.003	0.004	—	—	0.009	0.006
—	—	—	—	—	0.042	—	—
0.13	0.03	0.12	0.043	0.07	—	0.008	0.10
—	—	—	—	0.00	—	—	—
—	—	—	—	0.00	0.008	—	—
0.02	0.008	0.01	0.012	0.04	0.604	0.006	0.019
1.2	0.48	0.6	0.710	2.20	12.0	0.036	1.18

ANALYSIS OF ALL DEATHS BY AGE AND SEX, 1969.

Age Group				Male	Female	Total
Under 1 year	...	...	...	134	93	227
1	...	...	...	5	6	11
2	...	...	...	8	3	11
3	...	...	...	7	2	9
4	...	...	...	3	3	6
5 —	...	...	...	13	1	14
10—	...	...	...	9	6	15
15—	...	...	...	25	9	34
20—	...	...	...	23	14	37
25—	...	...	...	27	6	33
30—	...	...	...	30	11	41
35—	...	...	...	32	20	52
40—	...	...	...	61	52	113
45—	...	...	...	137	78	215
50—	...	...	...	231	138	369
55—	...	...	...	381	245	626
60—	...	...	...	621	332	953
65—	...	...	...	693	442	1,135
70—	...	...	...	647	560	1,207
75—	...	...	...	547	698	1,245
80—	...	...	...	347	659	1,006
85—	...	...	...	207	455	662
90—	...	...	...	58	183	241
95—	...	...	...	5	50	55
Totals	...	...	...	4,251	4,066	8,317

ANALYSIS OF INFANT DEATHS BY AGE AND SEX, 1969

Age Groups	Male	Female	Total	
Under 1 day	36	19	55	
1 day	14	11	25	
2 days	8	8	16	
3 days	3	5	8	
4 days	5	2	7	
5 days	1	3	4	
6 days	3	1	4	
Total under 1 week ...	70	49	119	(A)
1 week (7-13 days) ...	3	5	8	
2 weeks (14-20 days)...	4	6	10	
3 weeks (21-27 days)...	1	1	2	
Total (7-27 days) ...	8	12	20	(B)
Total under 28 days ...	78	61	139	(A+B)
1 month	20	7	27	
2 months	11	6	17	
3 months	8	5	13	
4 months	6	5	11	
5 months	5	3	8	
6 months	4	1	5	
Total 1-6 months ...	54	27	81	(C)
7 months	—	1	1	
8 months	—	—	—	
9 months	—	2	2	
10 months	2	1	3	
11 months	—	1	1	
Total 7-11 months ...	2	5	7	(D)
Total under 12 months	134	93	227	(A+B+C+D)

(N.B. Numbers relate to causes, not to individual deaths).

			Cause	Male	Female	Total	Totals expressed as percentage of all causes.
Underlying Primary...			1	4,251	4,066	8,317	56.2%
Other Primary	...		2	1,866	1,876	3,742	25.3%
"	"	...	3	255	338	593	4.0%
"	"	...	4	11	7	18	0.1%
Total Primary	...			6,383	6,287	12,670	85.6%
Secondary	...	...	2	565	547	1,112	7.5%
"	...	...	3	414	413	827	5.6%
"	...	...	4	75	119	194	1.3%
Total Secondary	...			1,054	1,079	2,133	14.4%
Total all causes	...			7,437	7,366	14,803	100%

EXPLANATORY NOTE

The coding procedure employed allows of the coding of up to four causes of death.

"Underlying primary" is defined as "(a) the disease or injury which initiated the train of morbid events leading directly to death, or (b) the circumstances of the accident or violence which produced the fatal injury". In the above table it is given as Cause 1, but is not necessarily the first entry on the death certificate.

"Other primary" includes any other causes in Part I of the death certificate, and "secondary" includes any causes in Part II of the death certificate.

At least one cause, the underlying primary, must be primary, but the other causes (if any) may be either primary or secondary, or any combination of the two. The numbers 2, 3 or 4 indicate the order of these causes, as categorised for tabulation, not necessarily as they appear on the death certificate.

1969—SUMMARY OF DEATHS FROM CARDIOVASCULAR AND RESPIRATORY CAUSES FOR
CERTAIN OCCUPATIONS

(The following codes of causes of death (W.H.O. 8th Revision Intermediate List of 150 Causes) are included: A81-84, 86-93, 95-96. Underlying causes only.)

Age Group	Chefs, Cooks and Kitchen Staff		Cleaners, Charwomen, etc.		Salesmen, Shop Assistants	
	Male	Female	Male	Female	Male	Female
35-39	—	—	—	—	1	—
40-44	—	—	—	—	—	1
45-49	1	—	—	—	2	—
50-54	—	—	1	—	1	1
55-59	—	1	—	—	2	—
60-64	1	2	—	2	5	—
65-69	6	2	1	1	6	—
70-74	3	2	2	—	5	2
75-79	1	4	—	3	5	3
80-84	2	4	—	1	3	3
85-89	—	2	1	—	7	1
90-94	—	—	—	—	3	—
Totals	14	17	5	7	40	11
Deaths from <i>all</i> causes in these occupations	31	28	12	23	62	22

DETAILS OF THE BROAD GROUPS OF CAUSES USED IN THE SUMMARY BY AGE GROUP OF DEFINED CAUSES OF DEATH 1969.

Code numbers relate to the Intermediate List of 150 causes (List A) in the W.H.O. Manual (1967 edition).

Infectious and Infective Diseases.

A 1-44, A 72, A 80, A 81, A 89-93, A 99,
A 100, A 105, A 106.

Congenital Anomalies, etc.

A 126-132, A 134, A 135.

Neoplastic Diseases.

A 45-61.

Trauma.

A 138-150 inclusive.

Degenerative Diseases.

A 82-85, A 98, A 102, A 109,
A 136, A 137.

Other causes.

All remaining causes in List A, viz.:—
A 62-71, A 73-79, A 86-88, A 94-97, A 101, A 103, A 104,
A 107, A 108, A 110-125, A 133.

SUMMARY BY AGE GROUPS OF DEFINED CAUSES OF DEATH—1969 (N.B.—Numbers relate to causes not individual deaths).

AGE GROUPS	0-4 yrs		5-14 yrs		15-24 yrs		25-34 yrs		35-44 yrs		45-54 yrs		55-64 yrs		65 yrs & over		Totals		Sex ratio as percentage		Total	Per- cent- age Total Causes
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F				
Infectious/Infective	38	31	4	1	2	4	8	3	13	16	60	35	189	93	588	544	902	727	55%	45%	1,629	11.0%
	9	10	1	1	6	4	4	3	6	12	31	27	109	43	368	351	534	451	54%	46%	985	6.7%
	5	3	1	—	—	—	1	2	4	2	28	7	74	23	153	120	266	157	63%	37%	423	2.9%
	Totals	52	44	6	2	8	8	13	8	23	30	119	69	372	159	1,109	1,015	1,702	1,335	56%	44%	3,037	20.5%
Neoplastic	5	1	5	3	9	4	7	3	24	27	86	90	321	212	556	472	1,013	812	56%	44%	1,825	12.3%
	—	—	1	—	—	1	—	1	8	12	18	33	74	59	107	116	208	222	48%	52%	430	2.9%
	—	—	—	—	—	—	—	—	—	3	4	5	18	8	73	75	95	91	51%	49%	186	1.3%
	Totals	5	1	6	3	9	5	7	4	32	42	108	128	413	279	736	663	1,316	1,125	54%	46%	2,441	16.5%
Degenerative	5	4	—	—	6	3	16	2	35	14	178	49	402	202	1,118	1,564	1,760	1,838	49%	51%	3,598	24.3%
	6	8	1	3	2	3	10	1	14	9	94	46	194	155	572	746	893	971	48%	52%	1,864	12.6%
	2	—	1	—	—	—	1	1	3	4	23	9	80	27	258	315	368	356	51%	49%	724	4.9%
	Totals	13	12	2	3	8	6	27	4	52	27	295	104	676	384	1,948	2,625	3,021	3,165	49%	51%	6,186	41.8%

[illegible]

Occasional discrepancies in totals in the final percentage column are caused by rounding of final digits to one decimal place.

ANALYSIS OF CAUSES OF MORTALITY

Deaths from certain Groups of Diseases in each decade from 1871 to 1960, and during the separate years 1961-1969

Years	(a) Infective diseases (less Influenza and Tuberculosis)	(b) Tubercular diseases	(c) Respiratory diseases (including Influenza)	(d) Digestive diseases	Total Deaths from (a), (b), (c) & (d)	(e) Cancer	Total Deaths from all causes
1871-1880	27,205 (19.2)	19,869 (13.5)	29,763 (20.2)	14,747 (10.0)	91,584 (62.9)	2,015 (1.4)	147,005
1881-1890	19,748 (14.1)	17,870 (12.7)	32,507 (23.2)	13,186 (9.4)	86,311 (59.4)	2,820 (2.0)	146,195
1891-1900	13,515 (9.3)	16,714 (10.8)	35,819 (24.6)	18,491 (12.7)	84,539 (57.4)	4,223 (2.9)	145,522
1901-1910	13,967 (8.6)	16,054 (10.6)	32,995 (21.8)	18,163 (12.0)	81,179 (53.0)	6,480 (4.3)	150,962
1911-1920	10,417 (7.9)	14,946 (10.9)	36,480 (27.3)	12,282 (8.9)	74,125 (55.0)	7,603 (5.5)	137,323
1921-1930	7,831 (6.6)	12,664 (10.7)	29,447 (25.0)	8,184 (6.9)	58,126 (49.4)	9,852 (8.4)	117,756
1931-1940	6,473 (5.6)	9,413 (8.1)	18,196 (15.7)	5,987 (5.2)	40,069 (34.7)	12,619 (10.9)	115,632
1941-1950	2,645 (2.6)	6,987 (7.1)	15,728 (15.9)	4,328 (4.4)	29,723 (30.1)	13,265 (13.7)	98,347
1951-1960	621 (0.7)	2,063 (2.2)	15,315 (16.8)	2,570 (2.8)	20,569 (22.5)	15,986 (17.7)	90,642
1961.....	25 (0.3)	86 (0.9)	1,888 (20.4)	229 (2.5)	2,228 (24.1)	1,708 (18.4)	9,262
1962.....	29 (0.3)	81 (0.9)	1,774 (19.4)	205 (2.2)	2,089 (22.8)	1,719 (18.8)	9,162
1963.....	31 (0.3)	58 (0.7)	1,641 (18.4)	224 (2.5)	1,954 (21.9)	1,573 (17.7)	8,908
1964.....	22 (0.3)	41 (0.5)	1,368 (16.7)	171 (2.1)	1,602 (19.6)	1,720 (20.9)	8,191
1965.....	17 (0.2)	43 (0.5)	1,288 (15.5)	194 (2.3)	1,542 (18.6)	1,727 (20.8)	8,300
1966.....	12 (0.1)	51 (0.6)	1,360 (16.4)	204 (2.5)	1,627 (19.6)	1,657 (20.0)	8,295
1967.....	28 (0.3)	49 (0.6)	1,332 (16.3)	213 (2.6)	1,622 (19.9)	1,706 (20.9)	8,148
1968.....	35 (0.4)	44 (0.6)	1,220 (15.3)	196 (2.5)	1,495 (18.8)	1,772 (22.3)	7,958
1969.....	32 (0.4)	28 (0.3)	1,451 (17.4)	201 (2.4)	1,712 (20.6)	1,825 (21.9)	8,317

Figures in parenthesis indicate the percentage of total deaths from all causes (Proportionate Mortality).

Since 1962 the columns have included the following classes:—

Column (a)	Class I less Tuberculosis
" (c)	Class VIII.
" (d)	Class IX.
" (e)	Class II.

MATERNITY AND CHILD HEALTH
MIDWIFERY SERVICE—HOME CONDITIONS—1969

Hospital Requests	Suitable for Early Discharge	No Contact	Not Suitable for Early Discharge
3,149	2,476	177	496

MIDWIFERY SERVICE — HOSPITAL DISCHARGES—1969

Hospital	Number of Days									Pre-mature Births	Total
	2	3	4	5	6	7	8	9	10 & over		
Liverpool Maternity	107	167	431	517	430	276	153	84	115	138	2,418
Mill Road ...	407	146	99	120	286	1,049	145	38	75	226	2,591
Broadgreen...	252	122	31	36	343	398	114	37	25	73	1,431
Wazakerley ...	133	108	21	348	420	67	34	20	36	76	1,263
Wedgefield General ...	177	148	64	66	210	452	245	102	78	156	1,698
Others ...	4	10	8	14	25	25	17	4	0	2	109
Total ...	1,080	701	654	1,101	1,714	2,267	708	285	329	671	9,510

WEIGHTS OF PREMATURE BABIES
CARED FOR BY SPECIALLY TRAINED MIDWIVES—1969

	Babies born at home and cared for by the Premature Baby Team	Babies born at home and transferred to hospital	Babies born in hospital and discharged to the care of the Premature Baby Team
Less than 3 lb. 4 ozs.	—	—	—
3 lb. 5 ozs. to 4 lb. 6 ozs.	3	2	—
4 lb. 7 ozs. to 4 lb. 15 ozs.	1	—	31
5 lb. to 5 lb. 8 ozs.	13	—	409
5 lb. 9 ozs. and over	3	—	231
Totals	20	2	671
Sets of twins	—	—	33
One of twins	—	—	6
Sets of triplets	—	—	1

PATIENTS TRANSFERRED TO HOSPITAL—1969

Mothers

Malpresentations	41
Postmaturity	36
Ante-partum haemorrhage	26
Premature rupture of membranes	18
Pre-eclamptic toxæmia	13
Prolonged labour	14
Multiplicity	11
Rh. incompatibility	8
Disproportions	6
Foetal distress	5
Anæmia	5
Glycosuria	5
Bad obstetric history	5
Retained placenta or products	5
Premature labour	4
Multiparity	4
Domestic reasons	4
Urinary infection	3
Abortion	4
Post-partum haemorrhage	2
Placenta prævia	2
Pseudo-Syesis	2
Others... ..	7
	230
Total	241

Babies

Prematurity	3
Respiratory distress	2
Haemolytic disease	1
Jaundice	1
Blood-stained vomit... ..	1
Convulsions	1
Sticky eyes	1
Malformation... ..	1
	11

REASONS FOR MIDWIVES
CALLING IN MEDICAL AID—1969

<i>Mothers</i>					<i>Babies</i>				
Pyrexias	...	...	...	27	Sticky eyes	...	...	...	10
Perineal repairs	...	...	...	14	Septic spots and rashes	...	...	...	9
Malpresentations	...	...	...	11	Pyrexias	...	...	...	6
Prolonged labour	...	...	...	9	Oral thrush	...	...	...	6
Postmaturity	...	...	...	9	Cord infection	...	...	...	3
Premature rupture of membranes	...	...	...	8	Jaundice	...	...	...	2
Retained placenta and products	...	...	...	6	Vomiting	...	...	...	2
Foetal distress	...	...	...	6	Congenital malformation	...	...	...	2
Pre-eclamptic toxæmia	...	...	...	5	Others...	...	...	...	7
Ante-partum hæmorrhage	...	...	...	2					—
Anaemia	...	...	...	2					47
Acute abdominal pains	...	...	...	2					—
Others...	...	...	...	13					
				114					
Total	...	...	...	161					

Of these, 82 were for patients discharged from hospital before the tenth day, and 79 were patients delivered at home.

Patients on Doctors' Maternity Medical List	...	...	...	...	...	156
Patients not on Doctors' Maternity Medical List	...	...	...	...	...	5

TUBERCULOSIS RATES
INCIDENCE, PREVALENCE AND MORTALITY RATES FOR PERIODS 1958-1969 INCLUSIVE.

YEAR	Incidence Rate per 1,000 of population			Prevalence Rate per 1,000 of population*			Mortality Rate per 1,000 of population		
	Pulmonary	Non Pulmonary	Over-all Total	Pulmonary	Non Pulmonary	Over-all Total	Pulmonary	Non Pulmonary	Over-all Total
1958	1.04	0.10	1.15	11.31	1.00	12.30	0.143	0.009	0.152
1959	2.15	0.06	2.22	10.53	0.87	11.40	0.135	0.004	0.139
1960	0.58	0.06	0.64	11.22	0.75	11.97	0.107	0.004	0.111
1961	0.54	0.07	0.62	10.14	0.65	10.79	0.107	0.008	0.115
1962	0.59	0.07	0.65	9.05	0.61	9.66	0.099	0.009	0.109
1963	0.53	0.06	0.59	8.02	0.54	8.57	0.073	0.005	0.078
1964	0.37	0.04	0.41	7.14	0.51	7.64	0.052	0.004	0.056
1965	0.34	0.05	0.39	5.84	0.39	6.23	0.058	0.001	0.060
1966	0.33	0.04	0.37	5.17	0.39	5.56	0.065	0.007	0.072
1967	0.33	0.04	0.37	4.59	0.39	4.98	0.061	0.007	0.068
1968	0.32	0.05	0.37	4.05	0.39	4.44	0.057	0.007	0.064
1969	0.27	0.04	0.32	3.41	0.38	3.79	0.0354	0.0044	0.0398

N.B.—From the 23rd February, 1959 to the 21st March, 1959, a very large Mass Radiography Campaign was held in the City during which 454,286 persons were x-rayed. This produced a temporary increase in incidence and prevalence rates of pulmonary tuberculosis which is reflected in the table above.

* No. of cases on register at beginning of year $\times 1,000$

Population as at Mid-year.

TUBERCULOSIS.

TUBERCULOSIS

NOTIFICATIONS—AGE GROUPS 1969

Age	Male	Female	Total
-1	—	3	3
1-	1	—	1
2-	1	1	2
3-	—	1	1
4-	1	1	2
5-	3	2	5
10-	1	3	4
15-	6	5	11
20-	8	11	19
25-	8	2	10
30-	6	6	12
35-	8	8	16
40-	9	11	20
45-	15	6	21
50-	10	6	16
55-	17	7	24
60-	13	3	16
65-	10	5	15
70-	7	3	10
75-	2	1	3
80+	3	—	3
Age unknown	—	—	—
Totals	129	85	214

HOUSING ON MEDICAL GROUNDS—TUBERCULOSIS CASES

1969	Special Priority Cases	Transfers	Totals
Number of Applications received	47	134	181
Number recommended	28	56	84
Number Re-Housed	13	14	27
Number Refused Offers	4	—	4
Number still not re-housed	11	42	53

TUBERCULOSIS CASES ON REGISTERS OF CHEST CLINICS—1969

Number of persons examined for the first time	3,833	Number found to be free of disease ...	1,5
Number found to be definitely tuberculous as detailed in 'A' below	268	Number found to be suffering from other conditions	1,9

DIAGNOSIS	RESPIRATORY			NON-RESPIRATORY			TOTAL			GRAND TOTAL
	Adults		Children	Adults		Children	Adults		Children	
	M.	F.		M.	F.		M.	F.		
A.—NEW CASES examined during the year	139	74	19	12	24	—	151	98	19	2
B.—CONTACTS examined during the year:										
(a) Definitely tuberculous ...	3	4	13	—	1	—	3	5	13	—
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	—	—
(c) Non-tuberculous ...	270	386	966	—	—	—	270	386	966	1,6
C.—CASES written off the Register as Recovered	155	119	9	3	3	—	158	122	9	2
D.—NUMBER OF CASES on Register on 31st December 1969:										
(a) Definitely tuberculous ...	1,204	774	124	95	145	25	1,299	919	149	2,3
(b) Diagnosis not completed	3	3	5	—	—	—	3	3	5	—

Number of attendances of patients at the Chest Clinics during the year 1969 ...	13,471	Number of patients under medical treatment at home on 31st December, 1969	45
Number of visits paid by the Tuberculosis Medical Officer to the homes of patients during 1969	34	Total number of visits paid to the homes of patients by Tuberculosis Visitors during 1969	12,5
Total number of cases vaccinated with B.C.G. during 1969.		Includes newly born babies in Maternity Ward in Sefton General Hospital, Walton General, M Road and Liverpool Maternity Hospitals.	
Children	951		
Others	184		

NOTIFICATIONS OF TUBERCULOSIS—1928-1969

Year	Children (0-4 years)		Schoolchildren (5-14 years)		Adolescents & Adults (15+ years)	
	Pulmonary	Non-Pulmonary	Pulmonary	Non-Pulmonary	Pulmonary	Non-Pulmonary
1928	93	159	407	244	1968	242
1929	106	164	425	238	1975	269
1930	98	178	470	256	1890	263
1931	88	163	365	267	1805	289
1932	71	125	277	279	1757	268
1933	77	138	262	266	1941	250
1934	56	107	223	234	1624	244
1935	36	93	167	178	1494	231
1936	36	85	185	165	1424	197
1937	30	77	128	159	1397	172
1938	43	82	117	118	1281	186
1939	24	64	72	78	1117	175
1940	26	59	51	67	1234	148
1941	33	68	44	79	1225	158
1942	32	63	54	84	1284	201
1943	47	60	64	107	1368	168
1944	29	45	68	58	1344	147
1945	35	45	60	70	1360	133
1946	35	40	63	72	1380	125
1947	50	37	88	69	1341	128
1948	51	49	79	49	1490	130
1949	63	41	77	63	1479	107
1950	106	32	113	41	1353	91
1951	106	26	101	47	1328	87
1952	90	37	161	35	1318	67
1953	77	18	130	27	1175	78
1954	46	22	114	28	975	97
1955	46	24	82	23	951	71
1956	34	9	88	13	938	81
1957	46	9	79	12	892	80
1958	47	17	61	11	686	48
1959	29	12	54	6	1550	30
1960	17	3	24	5	398	36
1961	19	6	26	6	360	42
1962	24	3	23	2	391	45
1963	35	3	37	2	319	38
1964	16	3	17	2	240	23
1965	9	3	15	3	225	28
1966	12	—	15	4	208	26
1967	6	1	9	3	219	25
1968	7	—	9	3	203	30
1969	8	1	9	—	169	27

B.C.G. VACCINATION SCHOOL CHILDREN—1969

Number of School Children offered B.C.G. vaccination ...	...	...	...	12,287
Number of acceptors ...	...	...	...	11,875
Number Heaf-tested (Number read 10,123) ...	...	...	...	11,333
Number of positive Heaf tests (of these 1,256 were previously vaccinated) ...	...	...	...	2,202
Number of children vaccinated with B.C.G. ...	...	...	...	7,921

B.C.G. VACCINATION OF SCHOOL CHILDREN, HEAF TESTS—1957-1969

Year	Number Tested	Number Positive	Percentage of Number Tested Found Positive
1957	7,224	1,581	21.9
1958	8,587	1,717	20.0
1959	11,313	1,810	16.0
1960	10,569	1,480	14.0
1961	11,542	1,442	12.5
1962	9,777	1,305	13.3
1963	9,247	1,373	14.8
1964	8,456	1,309	15.5
1965	8,601	1,352	15.7
1966	8,356	1,135	13.5
1967	9,213	1,206	13.1
1968	7,394	1,130	15.3
1969	11,333	2,202	16.0

MENTAL HEALTH SERVICE

REFERENCES TO MENTAL HEALTH SERVICE AND ACTION TAKEN 1969.

REFERENCES

Sources of Reference	No. of references
General Practitioners	578
Hospitals for Section 25 action after admission	76
Hospitals for Section 26 action after admission	50
Hospitals—	
Casualty and reception wards	204
After out-patient or day treatment	224
In-patients on discharge	1,620
Requesting reports	63
Education Department—	
Children unsuitable for education in school	43
Special school leavers	69
Other references	2
Police and Courts	89
Relatives, patients, public bodies, etc.	342
Total	3,362

ACTION TAKEN IN ABOVE CASES

Action	No. of cases
Admitted to hospital under Mental Health Act—	
Section 29	225
Section 25	293
Section 26	11
Section 60	15
Informal	*605
Mental Health Act action after hospital admission	
Section 25	76
Section 26	50
Admitted non-psychiatric hospitals	1
Home reports sent to hospitals	63
Escorts to hospital	90
Placed on community care list	1,847
No further action necessary	86
Total	3,362

*This number represents only a proportion of total informal admissions, in many cases the Mental Health Service was not involved in admission

AMBULANCE SERVICE

EMERGENCY CALLS—1969

		(A)	(B)	(C)
Month		Accident/ Emergency Calls	False calls with good intent	Malicious False calls
January	...	1,889	152	15
February	...	1,722	158	8
March	...	1,955	170	19
April	...	1,913	176	15
May	...	2,025	195	25
June	...	2,016	151	18
July	...	2,141	155	22
August	...	2,063	143	17
September	...	2,094	133	17
October	...	1,989	181	15
November	...	1,877	167	24
December	...	2,245	246	11
Total	...	23,929	2,027	206

(1) The totals shown in columns (B) and (C) are to be taken as *being included in column (A)*, but are shown thus for statistical purposes.

INFECTIOUS PATIENTS—1969

Month			Admissions	Hospital to Hospital Transfers	Total	TYPE	
						Sitting Cases	Ambulance Cases
January	...	...	82	19	101	60	41
February	...	...	71	14	85	47	38
March	...	...	87	18	105	62	43
April	...	...	86	24	110	75	35
May	...	...	85	14	99	68	31
June	...	...	72	27	99	49	50
July	...	...	75	19	94	59	35
August	...	...	89	17	106	45	61
September	...	...	96	15	111	62	49
October	...	...	126	8	134	86	48
November	...	...	123	13	136	94	42
December	...	...	124	15	139	102	37
Total	...	...	1,116	203	1,319	809	510

AGE OF VEHICLES IN YEARS—1969

				Under 1	1-	2-	3-	4-	5-	6-	7-
Ambulances				8	16	7	14	12	—	1	1
Handicapped persons transport vehicles				—	2	7	7	10	—	8	2

COMPARATIVE STATISTICS FOR 1968-69

					1968	1969
Diesel Ambulances ...	...	...	...	...	24.05 m.p.g.	23.35 m.p.g.
Petrol Ambulances ...	...	...	...	...	15.2 m.p.g.	14.82 m.p.g.
Dual-Purpose Ambulances...	...	...	...	...	15.1 m.p.g.	14.8 m.p.g.
Sitting-case Ambulances ...	...	...	...	...	18.6 m.p.g.	17.5 m.p.g.
Vehicle Mileage ...	...	...	...	...	982,373	946,698
Fuel—Diesel ...	...	...	...	...	3,128 gallons	2,438 gallons
—Petrol ...	...	...	...	...	59,519½ gallons	59,780 gallons
—Oil ...	...	...	...	...	811 gallons	771 gallons

Average mileage for the fleet was as follows:—

Type of Vehicle	Average Annual Mileage		Percentage increase/ decrease on 1968
	1968	1969	
Ambulances Petrol ...	15,360	16,740	+ 8.9%
Diesel... ..	10,032	10,741	+ 7%
Sitting-case Ambulances ...	13,285	13,051	— 1.8%
Sitting-case Cars	4,477	5,455	+ 22%

Fuel Consumption

Stretcher case ambulances ...	Petrol	14.82 miles per gallon
	Diesel	23.35 " " "
Sitting-case ambulances ...	Petrol	14.8 " " "
Sitting-case cars... ..	Petrol	17.5 " " "

The total petrol consumption during 1969 increased by 261 gallons or 0.44 per cent to 59,780 gallons and the diesel fuel consumption decreased by 690 gallons or 22.06 per cent to 2,438 gallons.

PATIENT REMOVALS—1969

NUMBER OF PERSONS CARRIED	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Non-infectious—													
Out-patients	15,970	14,864	16,730	15,517	16,436	16,231	16,419	13,160	14,715	17,171	15,418	14,446	187,077
Hospital Admissions/ Discharges	3,085	2,672	3,029	2,488	2,684	2,715	2,535	2,302	2,390	2,570	2,437	3,230	32,137
Inter-Hospital Transfers	637	598	654	586	708	602	643	520	573	656	606	514	7,297
Infectious—													
Hospital Admissions/ Discharges	82	71	87	86	85	72	75	89	96	126	123	124	1,116
Inter-Hospital Transfers	19	14	18	24	14	27	19	17	15	8	13	15	203
Accident/Emergency ...	1,889	1,722	1,955	1,913	2,025	2,016	2,141	2,063	2,094	1,989	1,877	2,245	23,929
Other Persons	16	41	21	14	22	196	28	42	21	18	30	28	477
Totals 1969	21,698	19,982	22,494	20,628	21,974	21,859	21,860	18,193	19,904	22,538	20,504	20,602	252,236
Totals 1968	23,803	21,353	24,245	24,573	26,912	20,043	22,169	20,721	19,481	22,613	21,562	19,427	266,902

MILEAGE, PETROL, DIESEL AND OIL PERFORMANCE—1969

AMBULANCE	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Diesel	Mileage	6,777	7,049	6,382	6,109	5,672	7,303	4,623	3,500	2,274	578	461	56,926
	Fuel-gallons	300	309	293	269	250	329	180	129	84	28	21	2,438
	Oil-quarts	14	16½	17	23	11	23	6½	11	11	—	—	151½
Petrol	Mileage	48,928	43,295	48,511	45,247	48,931	49,160	45,832	51,057	45,880	44,929	49,843	570,833
	Fuel-gallons	3,275	3,029	3,220	3,094	3,173	3,192	2,980	3,398	3,316	3,075	3,608	38,482
	Oil-quarts	(13) 138½	203	123½	196	152½	155	(5) 129½	170½	129	(24) 99½	191½	(42) 1,887½
Dual-Purpose	Mileage	25,298	24,240	25,562	22,776	25,128	24,733	19,027	20,214	33,471	29,221	26,524	301,483
	Fuel-gallons	1,681	1,655	1,761	1,538	1,613	1,578	1,244	1,308	2,238	2,035	1,955	20,260
	Oil-quarts	104	54½	53	82	127	76	38½	82	116½	131½	103	1,013½
Sitting Case	Mileage	1,953	1,299	2,010	1,358	1,841	1,440	1,091	793	1,234	1,548	1,313	17,456
	Fuel-gallons	90	84	96	80	100	87	56	68	72	92	83	994
	Oil-quarts	1½	4½	10½	—	½	—	7	5	½	1½	(2) —	(2) 31½

(Oil figures in quarts.) Figures in brackets show fuel obtained from other local authorities.

ANALYSIS

	1968		1969	
	Fuel M.P.G.	Oil M.P.P.	Fuel M.P.G.	Oil M.P.P.
Diesel Ambulances	...	137.5	23.35	187.8
Petrol Ambulances	...	154.5	14.82	151.2
Dual-purpose Ambulances	...	197	14.8	148.7
Sitting-case Ambulances	...	238.5	17.5	277
Vehicle mileage
Fuel—diesel
Fuel—petrol
Oil
	946,698 miles	2,438 gallons	59,780 gallons	771 gallons

MEDICAL EXAMINATIONS—1969

Department	Admission to Super-annuation Scheme		Extension of Sick pay		Fitness of newly appointed officer		Suitability to continue employment		Total
	Fit	Unfit	Fit	Unfit	Fit	Unfit	Fit	Unfit	
Airport ...	6	3	—	—	5	—	—	—	14
Art Gallery ...	8	—	—	—	2	—	1	—	11
Baths ...	20	3	—	—	4	—	3	3	33
Building Surveyor's ...	—	—	—	—	6	—	—	—	6
Central Purchasing ...	1	—	—	—	22	—	1	1	25
Children's ...	—	—	—	—	106	4	2	6	118
City Analyst ...	—	—	—	—	6	—	—	—	6
City Architect's ...	—	—	—	—	13	—	—	—	13
City Engineer's ...	155	23	4	—	202	2	19	31	436
City Estates ...	14	3	1	—	48	—	20	16	102
City Lighting ...	20	2	1	—	9	—	6	11	49
City Planning ...	1	—	—	—	26	—	—	—	27
City Treasury ...	1	—	1	—	122	2	3	7	136
Education ...	84	12	—	—	493	3	53	78	723
Fire Service ...	4	—	—	—	117	16	66	7	210
Health... ...	35	2	—	—	439	6	25	20	527
Housing ...	21	1	—	—	37	—	8	3	70
Libraries ...	1	1	1	—	72	—	1	3	79
Magistrates ...	—	—	—	—	8	—	—	—	8
Markets ...	3	—	—	—	4	—	3	2	12
Mersey Tunnel ...	3	—	—	—	143	1	13	2	162
Museums ...	4	—	—	—	10	—	1	2	17
Parks & Open Spaces ...	52	10	—	—	7	1	9	12	91
Passenger Transport ...	342	28	—	—	44	—	3	19	436
Police ...	16	1	1	—	424	6	31	12	491
Probation ...	—	—	—	—	17	—	—	—	17
Town Clerk's ...	—	—	—	—	71	—	—	1	72
Water ...	78	6	1	1	27	—	10	7	130
Weights & Measures ...	—	—	—	—	6	—	—	—	6
Works ...	115	22	—	—	13	—	138	56	344
Welfare ...	42	4	—	—	75	—	21	24	166
TOTAL ...	1,026	121	10	1	2,578	41	437	323	4,537

Total Fit ... 4,049

Cancelled ... 328

Total Unfit ... 488

Other Authorities ... 43

ENVIRONMENTAL HEALTH CONTROL

SUMMARY OF PROSECUTIONS (CASES HEARD)—1969

Act	Section	No. of Informations or Complaints	Penalties £ s. d.	Costs £ s. d.
SHOPS ACT AND FOOD AND DRUGS ACT, REGULATIONS				
Public Health Act, 1936	Section 94	1	—	—
Shops Act, 1950	Evening Closing Hours	4	6 10 0	—
Shops Act, 1950	Sunday Closing Hours	1	10 0 0	—
Food and Drugs Act, 1955	Food not of quality demanded	4	34 0 0	17 5 0
Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966		29	81 10 0	—
Food Hygiene (General) Regulations, 1960		7	81 0 0	—
		46	213 0 0	17 5 0

FACTORIES ACT, 1961

PART 1 OF THE ACT

1. INSPECTIONS for purposes of provisions as to Health (including inspections made by the Public Health Inspectors). 1969

Premises (1)	Number on Register (2)	Inspections (3)	Number of written notices (4)	Occupiers prosecuted. (5)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by local authorities	51	256	2	—
(ii) Factories not included in (i) in which Section 7 is enforced by local authority	2,882	3,499	49	—
(iii) Other premises in which Section 7 is enforced by the local authority (excluding out-workers premises)	179	155	6	—
Total	3,112	3,910	57	—

2. Cases in which DEFECTS were found.

Particulars (1)	Found (2)	Remedied (3)	Number of Cases in which Defects were found Referred		Number of Cases in which Prosecutions were instituted (6)
			To H.M. Inspector (4)	By H.M. Inspector (5)	
Want of Cleanliness (S.1.) ...	2	2	4	—	—
Overcrowding (S.2.)	—	—	—	—	—
Unreasonable temperature (S.3.)	1	1	—	—	—
Inadequate ventilation (S.4.) ...	—	—	1	—	—
Ineffective drainage of floors (S.6.)	—	—	1	—	—
Sanitary Conveniences (S.7.)					
(a) Insufficient... ..	6	6	—	2	—
(b) Unsuitable or defective ...	54	54	1	10	—
(c) Not separate for sexes ...	1	1	—	1	—
Other offences against the Act (not including offences relating to Outwork)	—	—	5	1	—
Total	64	64	12	14	—

FACTORIES ACTS
PART VIII OF THE ACT
OUTWORK

SECTIONS 133 AND 134

Nature of Work (1)	Section 133			Section 134		
	No. of out- workers in August list required by Section 133 (1) (c) (2)	No. of cases of default in sending lists to the Council (3)	No. of prosecu- tions for failure to supply lists (4)	No. of instances of work in unwhole- some premises (5)	Notices served (6)	Prosecu- tions (7)
Wearing apparel- making, etc. ...	53	—	—	—	—	—
Curtains and furniture hangings ...	1	—	—	—	—	—
Umbrellas, etc. ...	1	—	—	—	—	—
Christmas stockings	69	—	—	—	—	—
Total ...	124	—	—	—	—	—

CLEARANCE AREAS NOT YET CONFIRMED BY THE MINISTER
at 31st December, 1969

<i>Area</i>	<i>Houses</i>	<i>Families</i>
Menzies Street Clearance Area, 1967	764	803
Barry Street Clearance Area, 1967	650	684
Salop Street No. 1. Clearance Area, 1967	137	143
Salop Street No. 2. Clearance Area, 1967	54	55
Salop Street No. 3. Clearance Area, 1967	4	4
Florence Street No. 1. Clearance Area, 1967	10	12
Florence Street No. 2. Clearance Area, 1967	3	3
Tetlow Street No. 3. Clearance Area, 1967... ..	2	2
Walton Lane Clearance Area, 1967	14	16
Freeland Street Clearance Area, 1967	331	375
Fordham Street Clearance Area, 1967	68	77
Langham Street No. 1. Clearance Area, 1967	73	106
Langham Street No. 2. Clearance Area, 1967	14	22
Langham Street No. 3. Clearance Area, 1967	3	3
Netley Street Clearance Area, 1967	56	60
Luton Grove Clearance Area, 1967	9	10
Tetlow Street No. 4. Clearance Area, 1967	4	4
Salop Street No. 4. Clearance Area, 1967	4	4
Crosfield Road No. 1. Clearance Area, 1967	321	337
Cotter Street Clearance Area, 1967	35	47
Ash Street Clearance Area, 1967	104	106
Brasenose Road Nos. 1 & 2 Clearance Areas, 1968	335	370
East Prescott Road Nos. 6 & 7 Clearance Areas, 1968	9	8
Beaufort Street No. 10 Clearance Area, 1968	5	6
Jenkinson Street Clearance Area, 1968	23	26
Claypole Street Clearance Area, 1968	587	614
Cardigan Street Clearance Area, 1968	233	239

CLEARANCE AREAS NOT YET CONFIRMED BY THE MINISTER

at 31st DECEMBER, 1969—*continued*

<i>Area</i>	<i>Houses</i>	<i>Families</i>
Bridport Street Nos. 1 & 2 Clearance Areas, 1968	18	21
Combermere Street Clearance Area, 1968	7	7
Northumberland Street No. 5 Clearance Area, 1968	5	5
Upper Parliament Street No. 8. Clearance Area, 1968	9	21
Anson Street Clearance Area, 1968	5	7
Walker Street Nos. 1 & 2 Clearance Areas, 1968	17	19
East Spekefield Cottages Clearance Area, 1969	31	37
West Spekefield Cottages Clearance Area, 1969	28	28
Railway Cottages (Spekeland Road) Clearance Area, 1969	14	8
Shenstone Street No. 1. Clearance Area, 1969	8	8
Shenstone Street No. 2. Clearance Area, 1969	4	4
Kinglake Street No. 2. Clearance Area, 1969	8	6
Mount Vernon Clearance Area, 1969	17	15
Blenheim Street Clearance Area, 1969	53	55
Harrowby Street No. 1. Clearance Area, 1969	206	243
Harrowby Street No. 2. Clearance Area, 1969	158	192
Harrowby Street No. 3. Clearance Area, 1969	163	197
Harrowby Street No. 4. Clearance Area, 1969	3	3
Lytton Street Clearance Area, 1969... ..	3	4
Cobden Street Clearance Area, 1969	8	8
Agate Street Clearance Area, 1969	9	9
St. Domingo Place Clearance Area, 1969	8	8
Fearnside Street Clearance Area, 1969	638	635
Webster Road No. 1. Clearance Area, 1969	3	3
Webster Road No. 2. Clearance Area, 1969	2	2
Webster Road No. 3. Clearance Area, 1969	3	3
Edensor Terrace Clearance Area, 1969	42	42
	5,322	5,726

COMPULSORY PURCHASE ORDERS CONFIRMED DURING 1969

<i>Order</i>	<i>No. of Houses</i>	<i>No. of Families</i>
Upper Stanhope Street Area, C.P.O.	12	18
Wilbraham Street Area. C.P.O.	36	36
Pickering Street Clearance Area. C.P.O.	608	740
Netherfield Road North No. 5. Clearance Area. C.P.O.	12	13
Maitland Street Clearance Area. C.P.O.	42	43
Bousfield Street Clearance Area. C.P.O.	135	145
Kingsley Road Area. C.P.O.	59	85
Grinfield Street No. 2. Clearance Area. C.P.O.	29	30
Lilly Grove Area. C.P.O.	15	14
Stanfield Road Area. C.P.O.	1,088	1,171
Cupid Street Area. C.P.O.	414	432
Mulgrave Street Area. C.P.O.	47	175
St. James Road Area. C.P.O.	104	195
Toxteth Street Area. C.P.O.	587	655
Cherry Lane Area. C.P.O.	39	39
Raglan Street Clearance Area. C.P.O.	163	178
Celia Street Clearance Area. C.P.O.	323	349
Crosfield Road No. 2. Clearance Area. C.P.O.	173	182
The Elms/Welfield Place Area. C.P.O.	68	124
Kemble Street Clearance Area. C.P.O.	227	234
	<u>4,181</u>	<u>4,858</u>

CLEARANCE ORDERS CONFIRMED DURING 1969.

<i>Order</i>	<i>No. of Houses</i>	<i>No. of Families</i>
Derby Place	45	46
Parkhill Road/Cope Street	11	11
	56	57

CLEAN AIR ACT, 1956

INSPECTIONS, OBSERVATIONS, ETC.

Particulars of Inspections, 1969

Number of Inspections to Secure Smoke Control	...	...	...	...	...	...	...	...	12,989
Incidental Visits	...	...	...	...	...	...	...	...	911
Special Visits	...	...	...	...	...	...	...	...	429
Re-Visits	...	...	...	...	...	...	...	...	5,266
Advisory Visits	...	...	...	...	...	...	...	...	288
Total Number of Appliances Examined	...	...	...	...	...	...	...	...	929

OBSERVATIONS

INDUSTRIAL CHIMNEYS

Routine Observations	...	...	...	...	...	...	...	...	1,096
Special Observations	...	...	...	...	...	...	...	...	144
Total Minutes of Excess Smoke Recorded	91

SHIPPING

Routine Observations	148
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CLEAN AIR ACT, 1956, SECTION 3

Approval of New Furnaces 1969

Notices of Intention to install received...	79
Application for Approval received	...	...	...	...	...	...	...	59
Installations approved	...	...	...	...	...	...	...	59

CLEAN AIR ACT, 1968, SECTION 6

Heights of New Chimneys 1969

Plans examined to Check Chimney Height	...	...	...	...	...	...	...	70
Plans approved	...	...	...	...	...	...	...	64
Plans approved after Chimney Height Increased	...	...	...	...	...	...	...	6

ATMOSPHERIC POLLUTION MEASUREMENT—1969

Smoke and Sulphur Dioxide Volumetric Filter
Measurements are in microgrammes per cubic metre

	SMOKE												SULPHUR											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Value	121	106	94	38	36	23	12	13	20	43	60	101	144	127	162	75	108	115	70	65	78	84	71	69
Highest Value	306	338	332	123	74	51	23	41	87	103	142	255	384	317	381	194	211	762	126	119	158	132	204	314
Lowest Value	34	9	34	14	18	4	1	1	5	8	2	16	35	38	84	43	55	51	33	26	37	30	11	16
Average Value	226	268	242	93	107	68	47	51	85	115	150	284	253	257	287	167	161	136	93	92	113	195	169	248
Highest Value	637	1142	887	208	251	134	67	180	161	218	340	934	527	797	694	1238	250	206	176	280	275	519	332	760
Lowest Value	46	36	119	13	39	28	26	24	41	53	55	82	67	45	140	62	63	68	43	38	59	96	55	100
Average Value	185	197	213	114	93	57	47	43	61	82	92	152	292	324	316	228	181	147	95	125	141	198	166	275
Highest Value	826	632	978	250	171	141	71	107	133	272	256	438	659	641	832	455	334	299	189	219	267	591	350	495
Lowest Value	21	38	50	31	27	1	16	13	17	15	13	69	71	131	92	91	77	34	33	47	68	56	21	115
Average Value	122	187	114	59	47	41	22	22	36	51	81	109*	256	277	256	108	123	116	79	62	91	117	127	177*
Highest Value	486	911	383	170	93	102	50	84	61	128	227	205	510	776	648	257	206	254	160	119	168	266	237	257
Lowest Value	36	41	41	23	25	9	9	8	12	12	33	15	124	101	89	52	51	57	26	30	36	40	45	83
Average Value	125	108	115	46	51	40	27	30	44	50	67	98	220	108	115	128	150	152	104	104	143	172	168	208
Highest Value	347	662	386	143	104	86	48	75	77	109	137	256	468	662	386	285	301	255	210	180	270	332	296	351
Lowest Value	34	25	57	29	23	20	12	7	21	2	20	41	90	25	57	55	57	100	63	48	59	43	84	37

*The station at Lark Lane only operated for 9 days in December.

SUMMARY OF RODENT INFESTATIONS AND DISINFESTATIONS OF BUILDINGS AND LANDS DURING THE YEAR 1969

Description of Premises	Infestations				Reinfestations during the Year				Category		Total infestations and reinfestations	Total infestations and reinfestations
	Premises	Rats	Rats and Mice	Mice	Premises	Rats	Rats and Mice	Mice	Major	Minor		
Shops	632	239	14	379	49	22	—	21	—	681	681	724
Factories	149	85	8	56	9	5	—	4	—	158	158	163
Warehouses	64	39	1	24	2	1	—	1	—	66	66	88
Dwelling-houses	1,805	815	5	985	35	20	—	15	—	1,840	1,840	1,297
Other buildings and lands	930	382	30	518	83	23	2	58	—	1,013	1,013	947
Food premises (included in above)...	(428)	(115)	(9)	(304)	(3)	(1)	(—)	(2)	(—)	(431)	(431)	(480)
TOTAL	3,580	1,560	58	1,962	178	71	2	99	—	3,758	3,758	3,219

CARCASES AND OFFAL INSPECTED AND
CONDEMNED IN WHOLE OR IN PART—1969

	Cattle Excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed 312,901	19,704	19,170	343	174,419	99,265
Number inspected 312,901	19,704	19,170	343	174,419	99,265
<i>All diseases except tuberculosis and Cysticerci</i>					
Whole carcasses condemned	9	38	126	1,311	317
Carcasses of which some part or organ was condemned	407	630	2	3,902	2,213
Percentage of the number inspected affected with diseases other than tuberculosis and cysticerci	2.1%	3.4%	37.5%	2.9%	2.55%
<i>Tuberculosis only</i>					
Whole carcasses condemned	—	—	—	—	1
Carcasses of which some part or organ was condemned	—	11	—	—	334
Percentage of the number inspected affected with tuberculosis	—	0.05%	—	—	0.18%
<i>Cysticerci</i>					
Carcasses of which some part or organ was condemned	13	—	—	—	—
Carcasses submitted to refrigeration	13	—	—	—	—
Generalised and wholly condemned	—	—	—	—	—

QUANTITY OF FOOD CONDEMNED FOR DISEASE
OR FOUND UNFIT FOR HUMAN CONSUMPTION—1969

	Tons	Cwts.	Qrs.	Lbs.
Beef, mutton, veal and pork	314	—	3	18
Offal	215	18	—	—
Fish	10	12	1	—
Poultry	3	14	3	6
Fruit	62	11	2	21
Vegetables	117	4	2	3
Canned goods	37	3	1	9
Sundries	4	—	—	27
	765	5	3	—

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