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**REPORT**

ON THE HEALTH OF THE

**CITY OF LIVERPOOL**

FOR

**1966**


BY THE

**MEDICAL OFFICER OF HEALTH**









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DIABETIC PATIENT—HEALTH VISITOR GIVING INSTRUCTIONS ON DIET





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**REPORT**

**ON THE HEALTH OF THE**

**CITY OF LIVERPOOL**

**FOR THE**  
**YEAR**  
**1966**

**BY**

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

*Medical Officer of Health*

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## HEALTH COMMITTEE—1966-67

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CHAIRMAN:

ALDERMAN IAN ISIDORE LEVIN

DEPUTY-CHAIRMAN:

COUNCILLOR GEORGE ERIC DELOOZE, J.P.

ALDERMEN:

ALFRED NATHANIEL BATES  
CHARLES HENRY BROWNE  
GORDON FREDERICK CATLIN  
ALEXANDER GRIFFIN, J.P.  
(died 18.12.66)

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ALBERT MORROW, J.P.  
JOHN SHEEHAN  
FRANK WOOLFENDEN

COUNCILLORS:

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MARION BROWNE (Mrs.), M.B.E.  
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WILLIAM FRANCIS BURKE  
DANIEL CUMELLA  
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WILLIAM GILBODY  
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BARRY VICTOR GROOMBRIDGE  
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THOMAS LYRIAN HOBDAV  
EDWARD LOYDEN  
FRANCIS JAMES McCONVILLE  
ERIC STANLEY NIXON  
JOSEPH NORTON (resigned 8.7.66)  
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MARY JOSEPHINE POWELL (Mrs.)  
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LENNIE SANDERS (Mrs.)  
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WILLIAM THOMAS

### *Representing the Liverpool Executive Council:*

Dr. S. B. LEVY

W. J. TRISTRAM, Esq., C.B.E., J.P.

### *Representing the Medical Profession:*

Dr. H. DEBSON

Dr. M. SOLOMON



## SENIOR DEPARTMENTAL STAFF

<i>Medical Officer of Health ...</i>	... PROFESSOR ANDREW B. SEMPLE, C.B.E., V.R.D., M.D., D.P.H.
<i>Deputy Medical Officer of Health</i>	J. B. MEREDITH DAVIES, M.D., D.P.H.
<i>Principal Medical Officer (Mental Health)...</i>	... T. L. BEGG, M.B., Ch.B., D.P.H.
<i>Principal Medical Officer (Maternity and Child Welfare)</i>	ESTHER M. E. RAMSAY, M.B., Ch.B., D.P.H.
<i>Principal Medical Officer (Epidemiology) ...</i>	... C. F. W. FAIRFAX, M.B., B.S., D.P.H.
<i>Chief Public Health Inspector</i>	... W. H. WATTLEWORTH
<i>City Analyst</i>	... J. F. CLARK, M.Sc., D.I.C.
<i>Principal Assistant (Admin.)</i>	... A. C. JAMES, Dipl.P.A.
<i>Chief Food Inspector</i>	... A. D. H. JOHNSTONE
<i>Chief Ambulance Officer</i>	... A. GUINNEY
<i>Chief Disinfecting Officer...</i>	... R. C. SYMES



## PREFACE

I have the honour to submit my 15th Annual Report as Medical Officer of Health of the City of Liverpool, and the 119th report in the series. As usual, this report describes the work of the various sections of the Health Department and includes in more detail some recent developments in our activities.

Reference was made in the last annual report to the interesting fall in the birth rate which has been a feature of the vital statistics for the last few years. 1966 was no exception and the number of live births recorded fell by nearly a thousand to 13,557 representing a live birth rate of 19.0. The unwelcome trend referred to in last year's report of a further rise in the illegitimate birth rate continued this year and the figure rose to an all time high level of 9.2 per cent. The illegitimacy rate has risen steadily during the last three years from 6.9 per cent in 1963 to the present figure. There was little change in the infant mortality and perinatal mortality rates.

The number of deaths from cancer of the lung rose to 528.

Once again there was a significant fall in the number of domiciliary births recorded, there being 2,031 compared with 2,726 last year. The speed of fall of this rate is given by comparing the fall over the past five years:—

1962	—	4,768
1963	—	4,096
1964	—	3,648
1965	—	2,726
1966	—	2,031

There was a steady rise to 6,961 in the number of patients discharged early from hospital to the care of midwives, and there is no doubt that the trend in this respect, which has been commented upon in the past, continues. Training schemes for Part II pupil midwives continued satisfactorily during the year.

An interesting feature during the year was the decision in April, 1966, by the City Council to ask the Health Department to provide a family planning service for those persons who required advice for medical reasons. Arrangements were made with the Family Planning Association to hold two of their clinics weekly at Croxteth and Netherfield Road Child Welfare Centres and in November, 1966, direct services by the Health Department were started at four centres in Croxteth, Netherfield Road, Lark Lane and Belle Vale. Attendance at the start was low but it is hoped that the number of people attending will increase when the service becomes better known.



The cancer cytology service which started the previous year has continued very satisfactorily and during the year 3,352 women were examined. As a result of these examinations eight cases of cancer of the cervix were discovered, seven of them at a very early stage. In addition, a number of minor gynaecological conditions were discovered and arrangements made to rectify them. This test has continued to be combined with an examination to exclude cancer of the breast, and during the year 31 neoplasms, mainly benign, were discovered in this way.

During the year continued development took place in improving the liaison between health visitors and general practitioners and six health visitors were attached in some way to practices where they paid regular visits to receive cases and to assist doctors at clinic sessions.

The specialised work undertaken by health visitors with problem families continued during the year and nearly 5,000 visits were made in this connection.

The specialised work undertaken by health visitors in the field of diabetes, neurosurgery, epilepsy, paediatrics and geriatrics continued during the year. There was a further increase in the number of visits paid to elderly people numbering 9,731 compared with 8,190 in the previous year.

The chiropody service continued to develop satisfactorily and 41,068 treatments were given compared with 33,137 and 28,591 in the previous two years. This work, which is so essential for elderly and handicapped people, is carried out at various centres throughout the City and, by special arrangement, at the patient's own home. In December, 1966, a second full-time chiropodist was appointed and it is hoped that this will enable a further rapid development of this service to be undertaken.

The district nursing service continued to increase its scope slightly during the year, there being 388,404 visits paid to patients by the nurses. The trend mentioned previously in the falling off of the number of injections as a percentage of all treatments continued, being 33.1 per cent of all treatments carried out during the year. This compares with a figure of 48.8 per cent in 1961 and 75 per cent in 1957. Developments have continued in the provision of disposable materials and the very valuable soiled laundry service for incontinent patients.

In November a new service was started to provide post-operative care for children suffering from spina bifida and meningocele. It is hoped that this service will help the parents of such children in a most practical way and result in them leading a normal life.



It is satisfactory to report that during May, following a large-scale inspection by the Queen's Institute of District Nursing, a very favourable report on the working of the district nursing service was received.

There was no substantial change in the day nursery provision made by the Department in the City during the year. There was, however, a continued increase in the number of private day nurseries, child minders and play groups registered during the year. There are now 48 of such bodies registered and this represents an increase of ten from the figure at the end of 1965, and fourteen compared with the figure in 1964.

There was a modest increase in the number of home helps employed during the year to 626, equivalent to 437 full-time. This compares with a figure of 583, equivalent to 407 full-time employed in 1965. An estimation of the growth of the home help service during the past six years is given by the following table showing the number of home helps employed:—

Year	No. of home helps employed
1961	234
1962	322
1963	404
1964	458
1965	583
1966	626

During the year, there was an increase in the amount of general and specialised health education undertaken by the Department. This covered specialist subjects in maternity and child welfare, food hygiene, school health and particularly cancer education. In this field, the number of talks provided to groups throughout the City was increased and these covered many subjects including the problems of smoking and lung cancer, cervical cytology, breast cancer and the general problem of cancer control.

There is little dramatic to report about the spread of infectious disease in the City during 1966. Variations did, of course, occur in the number of cases of diseases reported and these included an increase in whooping cough, scarlet fever and dysentery, but a decrease of respiratory tuberculosis, puerperal pyrexia and acute pneumonia. In the text of the report, details are given of various food poisoning outbreaks and the epidemiological work carried out in connection with two cases of Paratyphoid B that were found in a party returning from a holiday in Spain.

The proportion of children immunised against diphtheria, whooping cough, tetanus and poliomyelitis increased during the year. The total number immunised did not show much significant change, but it



must be remembered that with the substantial fall in the birth rate which has occurred in the past three or four years, this gives no indication of the increased proportion of cases protected by immunisation.

Reference was made in last year's report to the welcome fall noticed in the number of cases of gonorrhoea in 1965. Unfortunately 1966 showed an increase in this disease from 1,151 to 1,278 in men and from 365 to 463 in women. However, it is satisfactory to report a significant fall in the number of cases of male syphilis recorded in 1966, there being 74 cases compared with 113 in the previous year. The after-care has continued during the year and a further visitor was appointed.

The mental health field showed continued satisfactory development during the year and undoubtedly the highlight of the year was the opening of the new workshop building at New Hall. This workshop, which is, in fact, a small factory, cost £83,000, covers an area of 200 ft. by 60 feet, and is divided into bays, a storeroom, education room and also a dining room. The accommodation is designed for the employment of 300 mentally subnormal people and by the end of the year was almost full. The increased space available and better facilities have already helped considerably in the industrial work carried out and it is most satisfactory to report that there has been no shortage of sub-contracted work during the year. At present, many different types of jobs are done for various firms, including the stripping of cable for scrap metal, the labelling of cartons, the packing of cups, the inserting of pourers into salt containers, the packing of toy sets in boxes and the cutting out and manufacture of skirts. The standard of work is high and morale has obviously been improved by the better accommodation. Many visitors, both parties and individuals, have been attracted to this new centre and the comments of all of them have been most complimentary. During the year, a total of £6,947 was distributed amongst mentally subnormal people working in the centre.

Of the thirteen hostels planned eventually for New Hall seven are now well established and the size of the waiting list makes it certain that when the remaining six are ready in 1967 they will be fully utilised. At the end of 1966, 67 subnormal persons, 29 men and 38 women, were in residence. The majority of these had come from hospital but a substantial minority had been admitted from the community. In the text of the annual report, full details are given of examples of individual cases to illustrate the type of after-care work undertaken.

The mental health centre at Johnson Street has continued to cater for mentally ill people and about 30 have attended daily. The mornings are spent on contract work as well as on the planning and cooking of the lunch. In addition, the social and recreational side of the unit has been developed and activities such as quizzes, dancing lessons, outings and visits occupy the afternoons. Contacts have been made with other



occupational therapy units in local hospitals and table-tennis tournaments and quizzes have been organised. On Wednesday evenings the social club has continued to meet successfully.

It is satisfactory to report a further reduction in the number of compulsory admissions arranged to hospital during the year, the number of Section 29 emergency cases falling from 777 to 711 and the number of informal admissions rising from 299 to 397.

The developments in the field of rehabilitation of the physically handicapped have continued very satisfactorily during the year with an increased turnover of handicapped persons at the occupational therapy and rehabilitation units at New Hall and Rumney Road. Visits have continued to be paid to the units by the Deputy Medical Officer of Health and this arrangement has assisted in helping the co-ordination between this service, the hospitals and general practitioners.

Transport for the handicapped has continued to be developed and the additional vehicles have helped to increase the pressure on the units. During the year arrangements were made for the administration of this service to be transferred to the Ambulance Service because of economy of administration and this changeover occurred very smoothly. Full details are given in the report of the services carried out for the handicapped and give a good indication of the range of problems assisted.

The ambulance service has continued to develop satisfactorily and full details are given in the main text of the report of the Working Party on Ambulance Training and Equipment. It is clear that the emphasis on the need for appropriate training for all applicants to the ambulance service is similar to the principles already in being in Liverpool with its forward-looking cadet scheme. This scheme, which was the first in the country, has continued to stimulate great interest nationally and has proved, during the year, its effectiveness. Twelve cadets were recruited in September, 1965, and eight finished the full course, sitting the examination of the Institute of Ambulance Personnel in November, 1966, and qualified. They then became fully operational in December, 1966. A further eleven cadets were recruited in February, 1966, and will sit the preliminary examination in April, 1967. It is most satisfactory to report that for the second year running a cadet from Liverpool obtained the highest number of marks in examinations held at various centres throughout the country, by the Institute of Ambulance Personnel.

The case load of patients moved by the service during the year continued to mount and showed an increase compared with 1965 of 18,541 patients.



The demand for housing priority on medical grounds has continued at the same level as in previous years.

A marked increase in the number of medical examinations carried out by the service occurred in 1966 with a total of 4,024 examinations carried out by medical officers working in the Health Department. This compares with the previous highest figure of 3,457 which occurred in 1965. During the year special arrangements were made preparatory to taking over the medical examination of Police and Fire Service personnel as well as arranging for the special medical examinations in connection with the assessment of leg disability cases. Considerable modifications have now taken place in the top floor of the Health Department to arrange for three complete surgery units plus waiting and changing accommodation to be available to enable three doctors to work simultaneously.

The environmental work of the Department has continued at a high level during 1966. Slum clearance work has risen, and over 5,500 houses were represented during the year as unfit for human habitation, in clearance areas or by demolition orders. The present programme envisages that a further 13,000 houses will be represented within the next three years.

Action under the Offices, Shops and Railway Premises Act, 1963, continued with over 13,000 detailed inspections being made and many infringements being discovered and dealt with. The supervision of food hygiene in food premises has continued during the year with full routine inspections and educational work.

Noise is now becoming a major problem in the City, especially on the outskirts, and inspectors from the department have been concentrating on this problem during the year. Some of the most difficult problems occur where factories working a 24-hours shift are situated near to housing areas. Despite one firm spending several thousands of pounds in an endeavour to reduce noise level, it is still a fact that the noise is considerably higher than that which would be reasonably acceptable. It seems as if the only satisfactory solution for such industrial problems is a greater degree of segregation of factory premises from housing areas.

During the year, one further smoke control order became operative and another seven smoke control areas were confirmed by the Ministry of Housing and Local Government. At the present time, seventeen smoke control areas are in operation covering the wards of Aigburth, St. Mary's, Speke, Allerton, Woolton, Childwall, Dovecot, St. Michael's and parts of Church and Arundel. These include over 91,000 houses.



Whilst this report gives an account of the work of the Health Department for which I am responsible, it gives little indication of the many human and social problems which arose and were dealt with during the year. These fall to the lot of every member of the Department's staff and I wish to acknowledge the loyalty, enthusiasm, and steadfast effort of all during 1966. I would also like to record my appreciation to the Chairman of the Health Committee, Alderman Ian Levin and the Deputy-Chairman, for their assistance. I am pleased to express my thanks to all the members of the Health Committee for the efficient way they have considered the reports and recommendations made to them during the year.

I am,

Your obedient servant,

Andrew B. Semple

*Medical Officer of Health.*



# VITAL STATISTICS

	1964	1965	1966
Area (land and inland water)—acres ... ..	27,818	27,819	27,819
Population (Estimated by Registrar-General) ... ..	729,140	722,010	712,040
Deaths (all causes) ... ..	8,131	8,300	8,295
Death rate per 1,000 (unstandardised) ... ..	11.2	11.5	11.6
Live Births ... ..	15,625	14,553	13,557
Live Birth rate per 1,000 population... ..	21.4	20.2	19.0
Percentage of illegitimate live births ... ..	7.7	8.2	9.2
Stillbirths ... ..	283	269	277
Stillbirth rate per 1,000 total (live and still) births ... ..	17.8	18.1	20.0
Total Births (live births and still births) ... ..	15,908	14,822	13,834
Infant Deaths (under one year) ... ..	339	327	308
Infant Mortality rate per 1,000 live births ... ..	21.7	22.5	22.7
"    "    "    "    1,000 legitimate births ... ..	21.9	22.1	22.1
"    "    "    "    1,000 illegitimate births ... ..	19.2	26.7	28.8
Neo-Natal Mortality rate (under 28 days) per 1,000 related live births ... ..	13.1	14.8	15.2
Early Neo-Natal Mortality rate (under one week) per 1,000 related live births ... ..	11.1	13.1	12.8
Perinatal Mortality rate (stillbirths & deaths under one week) per 1,000 total live and stillbirths ... ..	28.7	31.0	32.6
Maternal Deaths ... ..	3	1	—
Maternal Mortality rate per 1,000 total births ... ..	0.189	0.067	—
Deaths from:—			
Pulmonary Tuberculosis ... ..	38	42	46
Death rate per 1,000 population (unstandardised) ... ..	0.052	0.058	0.065
Non-pulmonary Tuberculosis ... ..	3	1	5
Death rate per 1,000 population (unstandardised) ... ..	0.004	0.001	0.007
Respiratory Diseases ... ..	1,368	1,288	1,360
Death rate per 1,000 population (unstandardised) ... ..	1.9	1.8	1.9
Cancer (all forms) ... ..	1,720	1,727	1,657
Death rate per 1,000 population (unstandardised) ... ..	2.4	2.4	2.3

## BIRTHS

During the year, 13,557 live births were registered within the City, which represents a birth rate of 19.0 per thousand of the estimated mid-year population. The number of illegitimate live births was 1,250, this being 9.2 per cent of the total live births. This figure was a further increase in the percentage of illegitimate births, which is higher than it has been for twenty years. The birth rate within the City continued to be higher than the average for England and Wales, which for the year 1966 was 17.7 per thousand.

## STILLBIRTHS

The 277 stillbirths registered in the City during the year represent a stillbirth rate per thousand total (live and stillbirths) of 20.0. The stillbirth rate among illegitimate babies was 17.3 and among legitimate babies was 20.3 per thousand.

## MORTALITY

There were 8,295 deaths registered within the City during the year, 4,224 males and 4,071 females. This gives a general death rate of



11.6 per thousand as compared with a death rate of 11.5 for the preceding year. The number of deaths from cancer of the lung was 528. Deaths from tuberculosis during the year were 51 as compared with 43 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 rose during the year to 22.7 per thousand live births as compared with 22.5 for the previous year. A total number of 308 infant deaths occurred, of which 36 were illegitimate children. This represents a legitimate infant mortality rate of 22.1 per thousand, and an illegitimate infant mortality rate of 28.8 per thousand. The neo-natal mortality rate (under 28 days) increased from 14.8 to 15.2, but the early neo-natal mortality rate (under one week) decreased from 13.1 to 12.8 per thousand related live births. The principal causes of infant mortality are represented in the diagram below.

PRINCIPAL CAUSES OF INFANT MORTALITY—1966

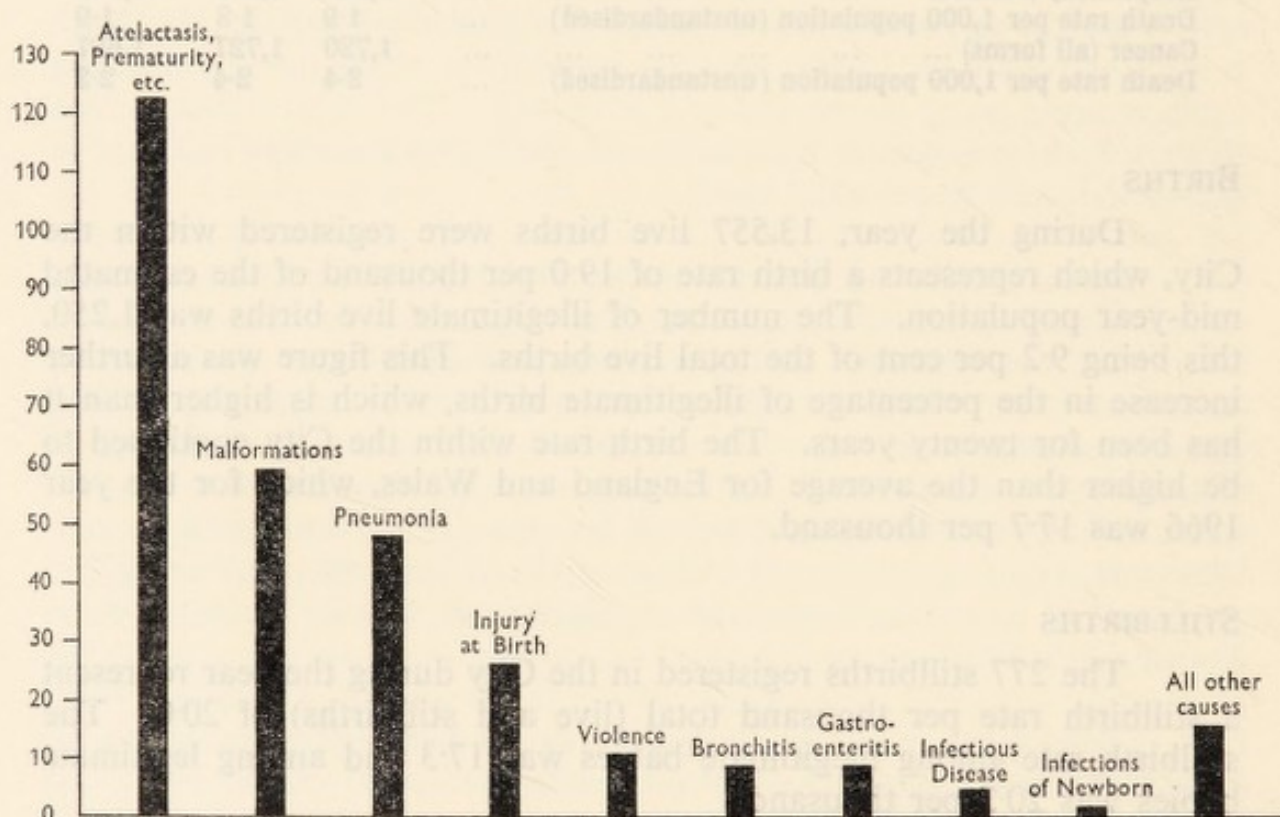
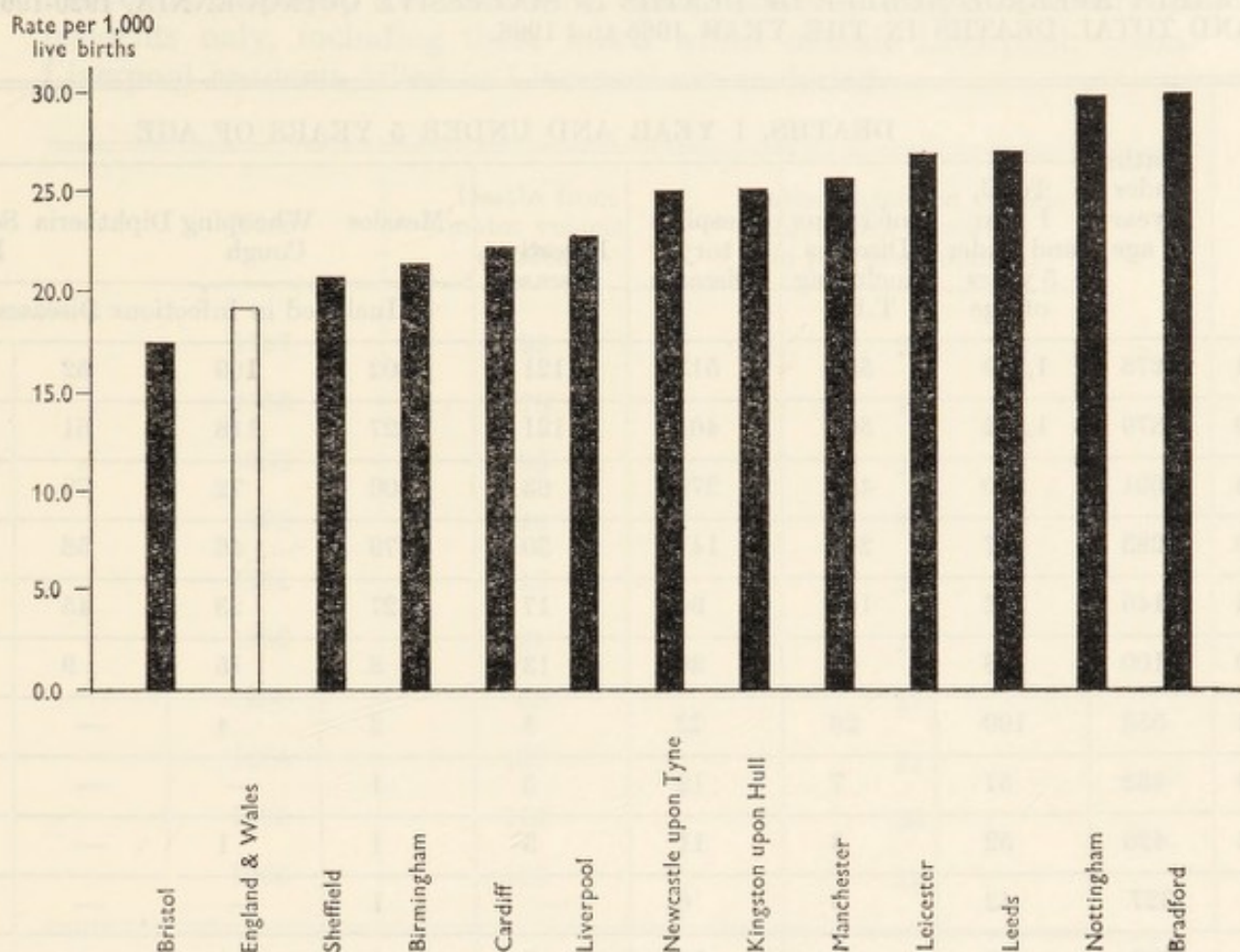




CHART SHOWING INFANT MORTALITY RATE FOR A NUMBER  
OF THE LARGER AUTHORITIES FOR THE YEAR 1966



### PERINATAL MORTALITY

This, rate, which is the number of stillbirths and the number of deaths in infants under one week per thousand births is being increasingly used in statistics and it represents very fairly the hazards of childbirth. During 1966 the rate was 32.6 compared with 31.0 in 1965.



## CHILD MORTALITY

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

YEARLY AVERAGE NUMBER OF DEATHS IN SUCCESSIVE QUINQUENNIA, 1920-1964, AND TOTAL DEATHS IN THE YEAR 1965 and 1966.

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			
20-24	2,278	1,349	557	513	121	202	109	62	2
25-29	1,879	1,252	564	461	121	227	118	61	2
30-34	1,601	890	456	278	63	200	72	79	
35-39	1,283	487	243	147	30	79	46	58	
40-44	1,140	366	160	94	17	27	23	45	
45-49	1,100	168	67	36	13	8	15	9	-
50-54	553	100	26	22	5	2	4	—	-
55-59	432	57	7	12	5	1	—	—	-
60-64	426	52	3	11	3	1	1	—	-
65	327	42	3	6	—	1	—	—	-
66	308	49	2	11	3	1	—	—	-

## DEATHS FROM CANCER

The total number of deaths from cancer during the year was 1,657 as compared with 1,727 in 1965. The number of deaths from cancer of the respiratory tract increased slightly from 493 to 528.



## MOTOR ACCIDENTS

Motor accident deaths form an increasing proportion of annual mortality, and outnumber considerably the total deaths from all the infectious diseases. 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

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



# MATERNITY AND CHILD WELFARE SERVICE

## REGISTER OF CHILDREN AT SPECIAL RISK

The register of children likely to develop a handicapping condition was kept in 1966 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, his name is removed from the register.

The following table shows the number of abnormalities arising in children placed on the register in 1964.

Reason for Admission	Total in each group	Number of abnormalities in each group including deaths	Type of Abnormality
Blood incompatibility	147	5	2 deaths—fibrocystic disease bronchopneumonia 1 Pulmonary Tuberculosis 2 Retarded physical and mental development.
Breech Delivery	82	3	1 Spastic 1 Squint 1 Retarded speech
Perinatal Causes (asphyxia etc.)	511	11	3 deaths—2 within 24 hours 1 acute peritonitis 4 Mental retardation 1 Muscular dystrophy 1 Squint 1 ? S B occulta 1 Pseudoarthrosis
Prenatal Causes (Toxaemia and illness of mother)	255	3	1 died within 24 hours 1 Anaemia and convulsions 1 Slight mental retardation
Poor Family History. (Diabetes, Deafness, etc.)	89	1	1 died within one week—Diabetic mother
Multiple Births	2,384	11	2 died under 3 months 3 Mental retardation 1 Addisons disease 1 Talipes 1 Talipes and diabetes 1 Fibrocystic disease 1 ? Congenital heart disease



Reason for Admission	Total in each group	Number of abnormalities in each group including deaths	Type of Abnormality
Premature Births. (Birth weight below 5½ lbs)	661	21	11 Neonatal deaths 3 Speech difficulties (?mental retardation) 1 Cerebral palsy 1 Coeliac disease 1 Congenital heart disease 3 Mental and physical retardation 2 Cortical atrophy 1 Defective vision 1 Osteogenesis imperfecta

### Handicapped Children's Register

A register of children with congenital abnormalities, or any other handicapping condition, was kept during 1966, as in other years. The Medical Officer of Health was notified of any abnormality obvious at birth by the hospital and domiciliary midwifery services, and an abnormality, or handicap, developing later, was referred from the register of children at special risk, from the health visitor, or from a hospital. A similar register of congenital abnormalities is maintained at Alder Hey Children's Hospital, and there is regular interchange of information on the subject.

During 1966, 463 children were notified compared with 495 in 1965, and the abnormalities occurred in different systems as shown below.

Central nervous system	...	...	...	...	...	66
including: anencephalus	...	...	...	17		
spina bifida	...	...	...	10		
Eye, Ear	...	...	...	...	...	15
Alimentary system	...	...	...	...	...	45
including: cleft lip	...	...	...	5		
cleft palate	...	...	...	4		
cleft lip and palate	...	...	...	2		
Heart and great vessels	...	...	...	...	...	69
including: interatrial septal defect	...	...	...	7		
persistent ductus arteriosus	...	...	...	5		
Respiratory system	...	...	...	...	...	2
Uro-genital system	...	...	...	...	...	36
Limb defects	...	...	...	...	...	142
Other skeletal	...	...	...	...	...	9
Other systems	...	...	...	...	...	40
Multiple malformations	...	...	...	...	...	9
Mongols	...	...	...	...	...	22
Other malformations	...	...	...	...	...	8
Total						463



## Cervical Cytology

This service was made available in Liverpool in May, 1965, when the University Pathology Laboratory was able to examine 100 smears per week. The number of women taking advantage of this examination was small at first; only 185 smears were taken between May and December, 1965. During December, 1965 and January, 1966, however, many inquiries were received from individual women, organised groups and firms within the City who employed large numbers of women. Medical officers talked to these people, and many explanatory letters were provided. As a result of this, the numbers attending the special sessions increased, extra sessions were arranged, and special sessions undertaken for groups of employees, some in the medical sections of the firms concerned.

The variation in the monthly attendance is shown below.

January ...	...	54	
February...	...	286	} including employees of one factory
March ...	...	291	
April ...	...	132	
May ...	...	331	} including 395 Corporation employees and one small firm
June ...	...	397	
July ...	...	317	
August ...	...	334	
September	...	176	
October ...	...	330	
November	...	403	
December	...	301	including one department store
Total for Year ...		3,352	

## Smear Reports

No. of smears which were technically unsatisfactory and were repeated	...	...	6
No. of smears showing some abnormality requiring hospital observation (not thought to be carcinoma <i>in situ</i> )	...	...	11
No. of smears showing carcinoma <i>in situ</i> (hospital treatment in all cases)	...	...	7
No. of frank carcinoma of cervix	...	...	1

In addition, very many women have been referred to their own doctors or to hospital for the treatment of other disorders.

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

Erosion of cervix	...	...	...	...	381
Fibroids	...	...	...	...	32
Cervical polyps	...	...	...	...	82
Vaginal discharge	...	...	...	...	51
Vaginitis (mainly senile)	...	...	...	...	18
Prolapse needing treatment...	...	...	...	...	38
Low haemoglobin reading (anaemia)	...	...	...	...	12
Breast neoplasms—mainly benign	...	...	...	...	32
High blood pressure reading requiring investigation	...	...	...	...	28
Menstrual disorders	...	...	...	...	10
Others	...	...	...	...	87



## Family Planning

In April, 1966, the City Council laid upon the Health Department the duty to provide a family planning service for those persons who required advice for medical reasons, and who could not afford to pay to obtain it elsewhere. Arrangements were also made for the Family Planning Association to use local authority clinic premises free of charge. After much consultation with the Family Planning Association, two of their clinics were held weekly at Croxteth New clinic and at Netherfield Road child welfare centre. The first local authority clinics were held in November, 1966, at four centres in the City, Croxteth New clinic, Netherfield Road centre, Belle Vale child welfare centre and Lark Lane centre. The attendance was low, but it is hoped that the number of people attending will increase as the service becomes better known.

## MIDWIFERY SERVICE

During the year, 371 midwives notified their intention to practise midwifery in the City. This was 28 less than in 1965. Hospital notifications numbered 299, there were 56 from domiciliary midwives, and 16 were in nursing home and private practice.

The number of domiciliary births was 2,031 compared with 2,726 last year. The number of patients nursed at home after hospital confinement was 6,322. In 1965 the number was 5,794. This shows a decrease in domiciliary births of 695 from the previous year and an increase of 528 patients nursed at home after hospital confinement.

A table is given showing the number discharged from each hospital and the day of discharge. The grand total was 6,961, but of these 639 were premature babies who were cared for by three specially trained midwives.

The table below shows how the early discharges between the second and sixth day have increased during the last year.

			2nd day	3rd day	4th day	5th day	6th day
1965	...	...	643	636	589	690	1,166
1966	...	...	881	709	498	729	1,365

## Medical Aid

The midwives called in medical aid for 445 cases for different abnormalities. In 389 a doctor had already been booked for maternity medical service. Of the 445 cases, 64 were for patients discharged early from hospital for domiciliary attendance. Details are given in the statistical appendix.



## Puerperal Pyrexia

During 1966 230 cases of notifiable puerperal pyrexia were notified and of these 223 occurred in hospital and seven in the home of the patient. Full 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
- 46 Full-time Midwives
- 3 Premature-baby Midwives
- 4 Part-time Midwives

During the year, the non-medical supervisor retired and the midwifery tutor was appointed to this post. This left a vacancy for a tutor.

Ten midwives left the staff, four of them due to retirement. Four full-time midwives and one part-time midwife were appointed, and one part-time midwife transferred to full-time employment.

## Training of Part II Pupil Midwives

The training scheme continued with pupil midwives from Sefton General Hospital, Liverpool Maternity Hospital, Mill Road Hospital and Broadgreen Hospital.

An average of 27 pupil midwives each quarter worked under the supervision of their district teaching midwives, and tutorials and practical teaching were given by the tutor and the training superintendent. One hundred and nine pupils took the course and 104 qualified as midwives; one joined the staff. At the end of the year, 30 more were still in training. During 1966, 38 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 26 students every three months spent a morning visiting with a midwife and attended a child welfare clinic in the afternoon.

## Accommodation

Thirty-one midwives occupied 30 corporation houses or flats; eight midwives lived in furnished accommodation.

## Transport

Thirty-nine midwives were car owners and drivers, nine midwives were cyclists, and nine used public transport.





MIDWIFE BATHING BABY





DISTRICT NURSING SERVICE—CARE OF THE ELDERLY PATIENT



## Equipment

No further new inhalational analgesic apparatus was purchased during the year, but the four gas/oxygen machines purchased for trial in the previous year have proved to be very satisfactory.

The scheme for autoclaving pre-packed bowls and instruments for use by the teaching midwives continued to work satisfactorily.

## Ante-Natal Care

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

Midwives attended 1,528 sessions with family doctors, 216 sessions at medical officers' clinics and 2,751 at their own clinics. Visits to homes of patients numbered 19,225.

## Domiciliary Deliveries

The total home confinements were 2,031 which was a decrease of 695 from last year.

Midwives paid 46,276 visits to their own booked cases, and 26,730 to mothers and babies discharged early from hospital.

They paid 9,843 visits to patients referred from the hospitals for the assessment of home conditions, an increase of 3,237 from last year. This large increase in the home assessment figure is due to the temporary agreement to assess the home conditions of all patients booked for confinement at Sefton General Hospital whilst building alterations, which are reducing their bed complement, are in progress, and necessitating a more rapid turnover of patients.

## Post-graduate Courses

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

## Part-time Post-graduate Course held in Liverpool

A part-time post-graduate course organised by this department was held for midwives. This was one of the first of its kind in the country, and it was the first time that such a course had been approved by the Central Midwives Board for the purposes of Rule G.1, which states that all practising midwives must attend a course of instruction every five years.

It has been the policy of the Central Midwives Board that such courses should be resident and that midwives should attend a course in a different part of the country from the area in which they



were working. For various reasons many midwives have in the past found that attendance at these resident courses created difficulties, for example domestic problems.

The course was held on one day a week for six weeks, from 18th February to 25th March. Forty-two midwives attended, and Mr. Fenney, the Secretary of the Central Midwives Board attended for one day to address the students, and to discuss the course with the organisers. Those who attended enjoyed their days in Liverpool, and it would appear that the experiment was successful. It is hoped that the Central Midwives Board will approve a similar course in 1968.

#### The Transfusion Unit

The Emergency Obstetric Flying Squad was called out 23 times to the homes of patients.

Blood transfusion was given in seven cases.

Reasons for calling the unit were :—

Retained placenta ... ..	11
Post partum haemorrhage ... ..	7
Ante partum haemorrhage ... ..	1
Other causes ... ..	4

Eleven patients were transferred to hospital, twelve were able to remain at home.

#### Emergencies

Midwives were called to emergencies by the ambulance service on 38 occasions. These were cases who were booked for hospital, but called the ambulance too late, or patients who had had no ante-natal care at all.

In all, 31 mothers were transferred to hospital in labour or immediately after delivery; seven mothers and babies were nursed at home.

Consultants were called to midwives' cases seven times; on three occasions because of the condition of the mother, and the other four because of concern for the baby.

#### Premature Babies

Of the 28 premature babies born at home, 27 were able to remain there and one was transferred to hospital; 639 premature babies born in hospital were later discharged to the care of the specially trained midwives.

One set of twins was born at home, and among those babies discharged from hospital there were 39 sets of twins and eleven babies who were one of twins.



The midwives caring for premature babies made 506 visits to home deliveries, and 3,136 visits to those discharged from hospital.

They also visited 168 homes before the babies were discharged to advise mothers on conditions suitable for small babies.

Equipment loaned was as follows :—

Hot water bottles and covers	...	31
Cot Blankets...	...	4

### Maternal Deaths

There were two deaths, associated with pregnancy, in 1966. The first was that of a mother of two young children. During this pregnancy she had hypertension and albuminuria, but consistently refused to be admitted to hospital. Eventually she was delivered in hospital of a premature live male child. A month after the birth of the child she was again admitted to hospital, collapsed, and died of cerebral haemorrhage. The cause of death was cerebral haemorrhage due to essential hypertension.

The second death was that of a woman, aged 39 years, who died at home undelivered. Death was due to cerebral haemorrhage and hypertension when six months' pregnant. The woman had not followed her doctor's advice, given repeatedly, to attend hospital. In December, 1966, her husband returned home from night duty to find her unconscious. Her doctor was called in and found her dead.

### HEALTH VISITING SERVICE

Nineteen hundred and sixty-five saw the completion of the much needed centre in Netherfield Road, and 1966 saw the laying of the foundation stone of the equally needed centre at the corner of Lark Lane and Livingston Drive. This centre will replace accommodation in Christ Church Hall, Lark Lane, and latterly, in St. Andrew's Church Hall, Langham Avenue, both of which are old and inconvenient, but for many years have been well used by all the families in the area.

When complete, this centre will be unique in that the young and old will be accommodated side by side. We hope the elderly will get much pleasure watching the young families come and go whilst they are resting at their centre. Building progress is good and all are anxiously awaiting its completion.

The health visiting staff showed a slight though encouraging increase in numbers at the end of the year; 109 compared with 95 at the end of 1965, made up as follows :—

- 1 Superintendent
- 1 Deputy Superintendent
- 1 Assistant Superintendent
- 1 Tutor



- 18 Group Advisers
- 9 Field Work Instructors
- 60 Health Visitors
- 2 Part time Health Visitors
- 4 Full time State Registered Nurses
- 12 Part time State Registered Nurses,  
including 1 employed for V.D. Welfare

More problems of a medico social nature were assigned to the health visitors and as these entailed lengthy and frequent home visits, duties which could be undertaken by less qualified staff were delegated to state registered nurses, so enabling the health visitors to continue the work for which they were trained.

### Training

In September, 1966, 26 students entered training, sponsored by Liverpool county borough and other local authorities in England and Wales. One South African student was sponsored by the United Nations Organisation. The new regulations provide a training of twelve months, not an academic year as previously.

Another course of further instruction, with an emphasis on sociology, for trained health visitors was arranged by Liverpool University. Fifteen health visitors attended this day release course.

### Liaison with General Practitioners

General practitioners continue to make an increased demand on the health visitor services, and many more visits were made at their request. Six health visitors were attached in some way to practices, paying regular visits to receive cases or to assist doctors at their clinic sessions.

### Care of Children

Thirteen thousand, five hundred and fifty-seven babies were born to women residing in Liverpool, a decrease of just under 1,000 from 1965, but this was compensated by a similar number moving into Liverpool shortly after birth, and altogether 14,107 infants were visited for the first time during the year. To children under the age of five years, the total number of visits paid was 182,832. The health visitor is concerned with the maintainance of good health, so it is at these visits that she practices health education and gives social advice and encouragement for the promotion of complete health for all members of the family. It was necessary to seek advice for 509 children who showed some deviation from normal. These were referred to the School Health Department for examination and were classified as follows:—

Mental and physical assessment	...	58
Hearing tests	... ..	24
Educational tests	... ..	24



Speech defects ... ..	21
Eye defects ... ..	266
Orthopaedic defects ... ..	116

The Phenistix test for phenylketonuria was carried out as in previous years on infants between 10 and 14 days old, and again when they were 4 to 6 weeks old. In addition to this, in conjunction with Alder Hey Children's Hospital, 10,230 urine Guthrie tests were made for the same condition.

### Problem Families

During the year, twenty case conferences were arranged at which health visitors attended, to make their contribution to the discussion, and to help by giving relevant information. In addition to this, nearly 5,000 calls or visits were made to other agencies, such as:—

- General Practitioners
- Medical Social Workers at hospitals
- Welfare Department
- Mental Health Service
- Probation Officers
- Ministry of Social Security
- Disablement Resettlement Officer
- Children's Department
- Health Inspectors
- National Society for the Prevention of Cruelty to Children
- Home Help Service

Three families with special problems, two sponsored by the Probation Officer and one by the Children's Officer, went to Brentwood Rehabilitation Centre. One mother and her four children remained at the centre for five months; one with five children and one born during her period of stay, for six months; and one mother with four children was admitted on the 17th November, 1966, and was still there at the end of the year. All three families had deep social problems and needed long periods of supervision and instruction on family and home management. The two families discharged from the centre were accommodated in supervised accommodation provided by the Welfare Department, and are receiving much support and help.

Thirty-two mothers and 64 children were referred for periods of convalescence, ranging from two to four weeks, and this again was arranged through the agency of the Child Welfare Association. We are grateful for this service, which benefits both mother and child. The change from their home environment refreshed them and they returned feeling better in health and more able to manage their responsibilities.

### Care of the Elderly

This work is increasing year by year, and this year 9,791 visits were made to elderly people, compared with 8,190 in 1965. These included 1,374 visits to those who had home nursing equipment on loan.



This is time consuming work, as many of these old people are living alone and look forward to the health visitor calling; so many times do they say "you have made my day, nurse". Many visits were made at the request of the consultant geriatrician, who, because there were no beds immediately available in hospital, asked the health visitor to assess the need for urgent admission, and to arrange all the services available to care for the patients while they remained at home. Five hundred and four of these requests were made and detailed reports were submitted in each case. Altogether 2,848 elderly persons were under surveillance from the health visitors during the year, and 55 were sent away for periods of convalescence.

### Vaccination and Immunisation

During 1966, fewer children received poliomyelitis vaccine than in 1965, though more were immunised against diphtheria, tetanus and whooping cough. Twenty-eight thousand, four hundred and eighty-six doses of poliomyelitis vaccine were given compared with 40,709 in 1965, and 18,453 doses of triple immunisation were given compared with 17,117 in 1965. Vaccination against smallpox increased from 2,523 in 1965 to 3,244 in 1966. Health education regarding the acceptance of immunising procedures is part of the daily work of a health visitor, and continued throughout the year.

### Specialised Work

The health visitor specialising in the after-care of persons suffering from diabetes, has again had a very busy year. As well as attending consultants' clinics in hospital she paid 1,300 visits to 454 patients of all ages in all parts of the City. This is exacting work as many patients find it difficult to understand their diet and treatment. Much time was spent in explaining this and in measuring out items of food necessary for their diet. Work carried out in close co-operation with the disablement resettlement officer resulted in the rehabilitation of many patients.

In addition to her field work, she was often called upon to talk about her work at the William Rathbone Staff College, where courses were held for senior nursing staff, and had accompanying her, students who were interested in the effects of diabetes in society.

The health visitor who is closely associated with the Neurological Unit at Walton Hospital has had an equally busy year, visiting patients in all parts of the City. The nature of the work makes great demands on her time, but she was rewarded by the confidence her patients had in her. She spent much of her leisure time endeavouring to help them make the most of their remaining abilities and to overcome their handicap.

Three health visitors continued to work with paediatricians at Alder Hey and Broadgreen Hospitals, and have been the means of providing much valuable information about patients and their family



relationships. Two health visitors continued in attendance at clinic sessions held in general practitioners' surgeries, to give help and advice to mothers with young children.

Three health visitors paid regular visits to the three Mother and Baby Homes in the City, to give ante-natal and post-natal instruction, and to give advice on any social problems which arose.

### Meetings of Social Workers

These were held in the form of luncheon clubs, and took place regularly once a month, when many types of social workers met to discuss problems affecting the community in their particular area. Guest speakers were invited to talk about their work and much useful discussion took place. These meetings have been most valuable in fostering a friendly relationship between the workers, who now know each other well. The meetings are held at:—

West Derby Community Centre  
Toxteth Domestic Mission  
Victoria Settlement  
David Lewis Club  
Childwall Valley Church Hall  
Speke Community Centre

### V.D. Welfare

The nurse responsible for this work continued to provide after-care for women and children suffering from venereal disease; a service which requires much patience and tact. As can be seen from the following summary, there has been no significant change in the work since 1965.

	1966	1965
Number of cases written to... ..	294	310
Numbers of letters despatched ... ..	459	469
Number of cases reporting after receipt of letter... ..	158	151
Number of letters returned (dead letter office) ... ..	26	17
Number of cases visited ... ..	226	231
Number of visits made ... ..	852	865
Number of cases reporting after visiting ... ..	143	149
Number of cases promising, but failing to attend ... ..	24	16
Number of cases removed or not known at address given	34	31
Number of cases not contacted ... ..	18	24
Number of cases refused to attend... ..	6	9
Number of cases transferred to other clinics ... ..	1	2



## MATERNITY AND CHILD WELFARE CLINICS

The number of centres operating throughout the City in 1966 was 28; at these, 62 child welfare sessions and ten ante-natal sessions were held each week.

In June, 1966, the first hospital consultative ante-natal clinic was opened at Speke. This was a hospital out-patient clinic held in a local authority centre for patients living in the area. It was hoped that this would reduce the amount of travelling for patients during their pregnancies. The number of patients who attended was 24, but it is hoped that more will attend when the clinic is well established and accepted by the local general practitioners.

Attendances of mothers at ante-natal clinics for pre- and post-natal examinations and for blood examinations numbered 1,871. The midwives dealt with 1,400 mothers, who made 7,431 attendances.

The number of mothercraft and relaxation classes conducted weekly by the health visitors throughout the City was nineteen. Sixteen were held in local authority centres; two in Mother and Baby Homes, and one in Mill Road Maternity Unit. Altogether, 920 expectant mothers attended these classes and made 4,150 visits.

Cytology sessions were held at nineteen centres and at the end of the year, 57 sessions were held over a five-week period. Two thousand nine hundred and nine cervical smears were taken at these sessions for examination at the Liverpool University and Broadgreen Hospital.

As 996 fewer babies were born in 1966 than in 1965, fewer babies attended the child welfare clinics during their first year. Nevertheless, 17,146 children under the age of five years made 87,577 attendances during the year.

The following is a summary of the centre activities:—

	1965	1966
Total number of centres at which ante-natal clinics were held ...	9	10
Number of clinic sessions held per week (medical) ...	10	10
Number of cases attending ante-natal clinics (doctors' sessions) ...	1,285	1,354
Total attendances at ante-natal clinics (medical officers' sessions)	2,430	1,832
Total attendances at post-natal clinics ...	54	39
Total number of new cases attending midwives' ante-natal clinics	1,721	1,400
Total attendance at midwives' ante-natal clinics ...	10,042	7,431
Number of centres at which health visitors conducted relaxation and mothercraft classes ...	19	19
Number of mothers attending mothercraft and relaxation classes	830	920
Number of attendances at above ...	3,694	4,412



Number of mothers attending who were booked for hospital delivery ... ..	570	876
Total number of centres at which child welfare clinics were held...	27	28
Number of clinic sessions held per week ... ..	62	62
Number of new cases—under one year ... ..	9,017	8,277
one to five years ... ..	839	838
Total attendances—under one year ... ..	69,031	61,743
aged 1—2 years ... ..	12,651	11,634
aged 2—5 years ... ..	16,321	14,200
Total number of centres at which cytology clinics were held ...	—	19
Total number of sessions held ... ..	—	407
Total number of smears taken ... ..	—	2,909

## CHIROPODY SERVICE

During 1966 the chiropody service continued to provide free treatment to women over 60 years, men over 65 years, expectant mothers, diabetic patients and handicapped persons. Treatment was carried out at sessions held at the Central Foot Clinic, maternity and child welfare clinics and aged persons' clubs.

The number of treatments given rose by 7,931, and the service was appreciated by those who used it. A new chiropody room came into use at the Netherfield Road centre and two more were in the process of construction at Speke and Fazakerley.

A second full-time chiropodist was appointed in December, 1966, and 28 chiropodists worked clinical sessions.

Total number of treatments given ... ..	41,068
At clinics ... ..	39,591
At home ... ..	1,477
Total number of clinic sessions ... ..	5,836
Total number of patients... ..	8,658
Total number of patients over 65 years ... ..	7,053
Total number of patients aged 60-64 years ... ..	637
Total number of disabled patients ... ..	77
Total number of blind patients ... ..	3
Total number of expectant mothers ... ..	9
Patients suffering from diabetes ... ..	12
Number of patients treated in their own homes...	867
Use of Ambulance Service:	
Number of patients ... ..	330
Number of visits ... ..	1,370

## DISTRICT NURSING SERVICE

The district nursing service provides nursing care for patients in their own homes. Some patients have been discharged from hospital



after a surgical operation, and many others have been taken ill and cared for at home. Midwifery patients who suffer from an infectious condition may be nursed by the district nurse.

Nursing visits are made between the hours of 8.30 a.m. and 1.15 p.m. and 3 p.m. and 6.30 p.m. A third round for late night visits is made between the hours of 8 p.m. and 10 p.m. for seriously ill patients requiring sedation and emergency treatment.

During 1966 the district nurses attended 13,219 patients and gave 388,404 nursing treatments; of these, 128,503 were injections, i.e. 33.11 per cent of the total work. In addition, 2,023 ambulatory patients who were fit to attend a clinic received 15,332 treatments.

The following tables show the amount of work undertaken by the District Nursing Service in 1966 compared with 1965:—

					1965	1966
	Patients	...	...	...	13,355	13,219
	Visits	...	...	...	386,442	388,404
Number of patients aged 65 years or over	...	...	...	...	5,604	5,857
Number of visits to such patients	...	...	...	...	206,481	199,556
Number of children under 5 years	...	...	...	...	860	649
Number of visits to such patients	...	...	...	...	4,241	3,942
Number of late night visits	...	...	...	...	4,473	4,427

#### Number of patients attending clinics.

					1965	1966
District Nursing Centres	...	...	...	...	273	234
Toxteth Health Centre	...	...	...	...	1,818	1,789

#### Number of treatments given to above patients.

					1965	1966
District Nursing Centres	...	...	...	...	4,580	4,306
Toxteth Health Centre	...	...	...	...	10,240	11,026

A new Liverpool Health Authority centre in Netherfield Road was completed late in 1965 and commenced to function in January, 1966. Facilities were provided for the district nurse to conduct a daily clinic for patients not requiring domiciliary care. This is the first time this service has been provided in one of the small district centres not used as a health centre.

The pattern of the work remained much the same, the emphasis being on heavy nursing treatments with a further decrease in the number of injections from 36.6 per cent to 33.11 per cent. This is a continuation



of the trend in recent years, as the following table expressing the number of injections as a percentage of all treatments, shows:—

1957	...	...	75%
1961	...	...	48·8%
1964	...	...	42·7%
1965	...	...	36·6%
1966	...	...	33·11%

Auxiliary help was given to district nurses during the year by bath attendants for the chronic sick. The provision of bed linen on loan, and the very valuable laundry service, enabled patients to remain at home who might otherwise have had to enter hospital. During the year, 122,800 disposable pads were supplied to incontinent patients. This was 44,800 more than during 1965.

In November a new service was instituted to provide post operative care for children who had suffered from a spina bifida. It is hoped that this service will assist the parents of these children in a practical way and also assist the children to lead a more normal life. This scheme is in its infancy, but already a great deal of work has been carried out to provide the background information necessary. Visits were made to hospital clinics and special schools, and discussions took place between various interested parties.

### Training

During 1966, fourteen nurses including two male nurses, were trained as Queen's nurses.

- 10 trained for Liverpool
- 2 trained as independent students
- 1 trained for the Isle of Man
- 1 trained for Bootle

Twenty-three students from other authorities attended the three-week lecture blocks, and students from St. Helens, Wallasey and Birkenhead attended the weekly study half-day for theoretical instruction.

During the year, eleven state enrolled nurses attended the ten-week course of instruction.

During May, a representative of the Queen's Institute of District Nursing visited Liverpool to observe district nurse training. The following report was received:

"A well-balanced training was provided. Theory and practice were well integrated and consideration given to the needs of individual students. The practical work instructors were alert to their responsibilities and showed a keen interest in the role assigned to them. The standard of practical nursing was very good and the overall care given showed a marked awareness of the social needs of the patients."



The district nurses also attended a study day arranged by the department, one group visited Walton Hospital and another group attended Sefton General Hospital.

The bath attendants attended two study days arranged by the department at the District Nurses' Lecture Centre, Walton.

During the year, 534 student nurses, post registration students, hospital sisters and tutors accompanied the district nurses on their rounds, an increase of 103 visitors.

Thirty lectures were given in hospitals and lectures were also given to D.P.H. students and students at the William Rathbone Staff College. A number of talks publicising the district nursing service were also given to various organisations.

## DAY NURSERIES

Twelve day nurseries continued to cater for the daily care of approximately 650 children aged from six weeks to five years. These nurseries also provided training for 54 students. A new experimental training scheme was introduced in conjunction with the National Nursery Examination Board. This was a shortened period of training for women over 25 years of age who had considerable experience in nursery work. This course started in 1966 and will continue in 1967.

The health of the children remained good, with occasional outbreaks of measles and chicken pox. Children in two nurseries suffered from sonne dysentery, but the groups were cleared from infection in four weeks.

Illegitimate children and those from broken homes formed the largest number of admissions. With the increase in the illegitimate birth rate during 1966, it is likely that this situation will continue. More children were admitted to the nurseries as the result of a domestic emergency, usually illness in one parent, than in 1965. This led to many staying in the nursery for only four to eight weeks.

## Handicapped Children

During the year, mildly handicapped children were admitted to all the nurseries, and benefited greatly from their contact with normal healthy children. In the nursery climate, these children are able to use their abilities to the utmost, unhampered by over or under protection by their parents, or by unsatisfactory home conditions. One child whose home was cramped physically and mentally, was admitted for a short period until there was a vacancy in hospital. Her progress was such that this is no longer necessary, and she will be able to attend a normal school when she is five years old. Several children with deaf, non-speaking parents or grandparents were admitted, to enable them to learn to speak



normally. None of these children was deaf, and they are all beginning to talk. Handicapped children are accepted well by the other children, who care for them in an unemotional way which benefits both parties.

### Playgroups

During 1966 many applications for admission to a day nursery were received from parents of children with no adequate play space. Some were living in multi-storey flats, some in old condemned property, and some in areas where road traffic had increased, and where young children could no longer play safely. These children could not be admitted to local authority day nurseries, but they were referred to the many registered private nurseries and playgroups. The local authority is responsible for the registration of such groups under the Nurseries and Child Minders Regulation Act, 1948, and much help and advice was given during the year to the people who opened and ran these establishments. Many of the playgroups were run as charities, or by groups of mothers. The Save the Children Fund gave financial help to at least six groups. Medical officers visited these groups and the supervisory matron of the nursery service gave much advice regarding equipment and supervision. A number of the organisers visited local authority nurseries. The number of private nurseries, child minders and playgroups registered at the end of the year was 47. The increase in the number of these groups from 37 in 1965 to 47 in 1966 indicated a need for the provision of supervised play for children under the age of five years.



## HOME HELP SERVICE

A number of administrative and staff problems made 1966 a difficult year in the home help service.

### ADMINISTRATIVE AND ORGANISING STAFF

During the year, there were six changes in organising staff which made continuity difficult.

### HOME HELP STAFF

Because of financial restrictions, the number of home helps in 1966, only rose to 626 compared with 583 in December, 1965. Although this was an increase it was short of the target set, by 20.

### DECENTRALIZATION

District accommodation as forecast in the 1965 report did not materialise. Only one centre was in operation and, though the offices at Wavertree Town Hall and Queens Drive, Walton, will be occupied at some future date neither was ready for occupation. For the remainder of the City no district accommodation was available. Meanwhile, valuable time is lost in travelling to the centre of the City.

### STATISTICS

The case load undertaken during 1966 was 4,972 comprising:—

92 maternity cases (the lowest figure recorded).

3,547 cases aged 65 years and over, and for a variety of ailments.

1,333 cases under 65 years and for a variety of ailments.

The number of cases receiving service on 31st December, 1966, was 2,597. Of these, 498 were paying for service and the remaining 2,099 were given service free of charge.

Sources of reference of new cases in 1966 were:—

Hospitals	...	...	...	...	...	...	...	...	671
Friends, relatives and self	...	...	...	...	...	...	...	...	511
General Practitioners	...	...	...	...	...	...	...	...	495
Welfare Department	...	...	...	...	...	...	...	...	297
Mental Health Service, District Nurses and Health Visitors	...	...	...	...	...	...	...	...	231
Ministry of Social Security	...	...	...	...	...	...	...	...	211
Others (Blind Welfare, Children's Dept. Voluntary Societies etc.)	...	...	...	...	...	...	...	...	201

### POLICY

It has been possible to maintain the usual prompt attention to requests for help and a happy atmosphere is being built up between the



service, medical practitioners, and medical social workers, as the potentialities of the service are better known. Its flexibility to meet all the needs of patients is emphasised and enlarged upon in accordance with the availability of staff.

Whereas a great proportion of applicants for service are aged, many are also sick and this has become increasingly obvious during 1966 with more demand for home helps.

Many requests for assistance to clean dirty accommodation were received. This service is available for those returning from hospital, both general and mental hospitals, and for those who, for a variety of reasons, have allowed their living conditions to deteriorate. This problem has been met by arranging for two home helps to tackle the work together. As from January, 1967, these extra-ordinary duties will be performed by three women called cleaners who will work as a team and will receive additional remuneration in view of the nature of the work performed.

Disinfectant and cleaning materials will be provided by the section and with the help of the City Engineer's Cleansing Department it is hoped that the initial cleansing, followed by home help service will enable the recipients of the service to remain at home in reasonable conditions.

#### CHARGES

The standard charge for service was raised to 5s. 0d. per hour in April, 1966, and the scale of allowances was remodelled on Ministry of Social Security rates. In November, these were amended to conform with Ministry of Social Security rates, thus benefiting financially those patients who applied for a reduction from the standard charge. In six cases it was considered that the charges assessed would cause hardship and the Medical Officer of Health gave authority for either a further reduction of charge or free service.

#### EXAMPLES OF CASES ASSISTED

1. A mother of 36 years, expecting her tenth child in March, 1967. She has cardiac failure and a history of miscarriages. Service commenced in November, 1966, and, at the urgent request of her general practitioner will continue until her confinement in March.
2. A maternity case given free service. The mother, aged 22 years, already had three children and her husband was in prison. Full-time service was provided for two weeks.
3. Three patients in the same family, the husband aged 73 years, suffering from tuberculosis, and almost blind, his wife aged 72



years, with a heart condition and their daughter aged 40 years, paralysed since 1949 and now quite helpless. Service has been provided since 1959.

4. This patient, aged 85 years, lived alone and was very happy with her cigarettes and well fed cat. Her home was in a deplorable condition and she was filthy and incontinent. The old lady was lucid and threatened suicide if removed. Her daughter was requested to call and see a medical officer and the home help organiser but was not prepared to give practical help, and was discounted. The patient eventually accepted mobile meals, the service of a home help and the use of the incontinent laundry service. She continues to live at home although a careful watch must be kept as she refuses to use a fire guard.
5. This patient, aged 28 years, suffered from a septic leg. She was separated from her husband and ostracised by her family and had three small children, aged three, two and one year. Presumably because of her worries the patient had taken an overdose of drugs and the district organiser found the children quite undisciplined and the mother past caring about them. Full-time service was provided until the patient recovered and nursery accommodation for the children was available.

#### TRAINING OF HOME HELPS

Training courses for Home Helps continued at the Mabel Fletcher College, Sandown Lane, and were attended by 156 members of the staff.

The course, of 21 hours' duration, is spread over six weeks and includes instruction in Hygiene, Elementary Nursing, Housekeeping, and Budgeting and Economical Cookery. It is enjoyed and appreciated by the Home Helps.



# HEALTH EDUCATION

## CANCER EDUCATION

During the course of the year medical officers and health visitors from the department gave a series of talks to groups of women from the corporation service and voluntary bodies. These covered general cancer education, smoking and carcinoma of the lung and cervical cytology.

## MATERNITY AND CHILD WELFARE

As is usual, many requests were received for health visitors to give talks in the evenings to all types of women's organisations, on such subjects as "Prevention of Home Accidents"; "Care of Young Children"; and "Services Available to the Community".

Student nurses from most of the training hospitals in the City visited health department centres, where they saw the services offered to the community and were spoken to by a senior member of the staff on the work of the health visitor and her relationship with other social workers and departments. This service was also available and accepted by numerous post-graduate students.

## FOOD HYGIENE

Members of the department have given a number of talks to organisations of citizens and groups of interested traders on the subject of food hygiene and other duties carried out by the Health Department, and firms have been advised and encouraged to give lectures to their staff on personal and food hygiene. Posters are distributed from time to time, and these visual aids are found to be advantageous.

## SCHOOLS

For the school nurse, Health Education is not restricted to formal talks on this subject, but also the visiting which she does on her district provides opportunities to teach Health Education in general within the child's own home. To succeed in this work, the school nurse must gain the confidence and the co-operation of the parents, and this is most practically done within the home situation. She must attempt to convince the parents that any action proposed by her is in the best interests of themselves, the child and the family as a whole. For example, she may be required to persuade the mother of a child who is retarded to keep an appointment for the child's assessment as a handicapped pupil, or she may be required to explain to the parents her view that bodily cleanliness is important and necessary for good health. Occasionally it is necessary to correct the view that nits are not important and, in such instances, it may not be easy to convince parents that nits will become vermin and, as such, give rise to further infestation. Each school nurse makes her own individual approach to parents and her success in her work is the acceptance by the parent of the advice which she offers.



In the more formal aspect of Health Education, films are an invaluable aid. Over the past few years a library has been slowly built up, but it is regretted that there are not, as yet, sufficient suitable films available to cover this field. The number of films is too few to produce a syllabus when requests for this are received from schools. When renting films, there is often difficulty in obtaining these on the dates required by the school because of long delays in the booking period. This is frustrating but inevitable. Not all films can be purchased and some can only be obtained on hire.

Until recently Health Education as a subject was looked on with grave suspicion by many schools. The reasons for this were two-fold in that head teachers felt that there were already too many intrusions into school time and the school staff were not entirely aware of the aims in this field. However, in the past two or three years, head teachers and staff have shown considerable interest in the facilities which can be offered in Health Education and Hygiene. A most pleasing aspect of this is an increasing demand from head teachers for talks and films on Health Education to be integrated into the normal school syllabus. These requests come from all types of school—grammar, comprehensive, modern, junior, infants and special. The request from the teaching staff may vary from one talk on a specific subject to a series of talks on general health education, hygiene, care of children, local authority services, social services available in the City of Liverpool or the needs of the community in general. Parent-Teachers' Associations are also beginning to express interest in work in this field and in one school the Parent Teachers' Association has asked to see the film "Women of Tomorrow" and also suggested that work in this field should be extended to even younger children.

Films owned:—

1. Let's Keep Our Teeth.
2. No Toothache for Noddy.
3. Women of Tomorrow.
4. This is Your Lung.
5. The Pulse of Life.

Films borrowed:—

1. Nothing to Eat but Food.
2. Your Feet.
3. The Best of Yourself.
4. Room for Hygiene.
5. Your Digestion.
6. Don't take the Risk.
7. Learning to Live.

A number of nurses "sat in" on the series of programmes on Sex Education produced by Granada School Programmes on television.



## MERSEYSIDE CANCER EDUCATION COMMITTEE

The year began with the resignation of the Administrator, Mr. W. Duffy and his successor Mrs. Patricia Hobbs took up her appointment on 14th February. Owing to the change of staff there had been some slowing down of the Committee's activities and it was seen that the re-building of the lecture programme would be dependent on the establishment of a panel of speakers.

Two meetings were held with members of the medical and nursing staff of the department to consider the "Purpose, Principles and Practice of Public Education Concerning Cancer" and two further meetings were held with members of the medical staff at which a Speakers' Panel was formed.

During the year speakers were provided on 40 occasions, as follows:—

Adult Groups, church and secular, 1st meeting	...	15
Adult Groups, church and secular, follow-up	...	2
Youth Clubs (on cigarette smoking and lung cancer)		14
Business and industry (people at their place of work)		9

The Youth Club Programme was arranged to coincide with a Ministry of Health poster campaign, held in the autumn, on the health hazards of cigarette smoking.

In addition the Administrator lectured to third-year student nurses at Broadgreen Hospital on three occasions.

This year the Committee carried out a survey of public opinion on cancer on Merseyside, drawing the major part of the sample from Liverpool. The objective was to ascertain the opinion on cancer of the senior female member of the households concerned, i.e. the wife, mother etc., since it is she who usually sets family standards on health matters. This information can serve both as a guide to the required content and method of the educational programme and as a base-line against which to measure future changes.

A true random sample of households in Liverpool produced 806 possible respondents. The interviews were conducted by members of the nursing staff of the department, mainly health visitors, using a carefully designed questionnaire and 483 questionnaires were successfully completed. These, together with the rest of the survey, from the Wirral and S.W. Cheshire, are being processed by computer. The findings of the survey will be reported subsequently.

In addition to the general range of five leaflets on cancer available for distribution by members of staff in their day-to-day work and by speakers at meetings, a new leaflet on cervical cytology has been produced and is in use.



## EPIDEMIOLOGY

The number of cases of notifiable infectious disease occurring in 1966 compared with 1963, 1964 and 1965 is shown in the table below:—

	Notified Cases 1963	Notified Cases 1964	Notified Cases 1965	Notified Cases 1966
Scarlet Fever ... ..	495	638	628	808
Whooping Cough ... ..	1,762	666	425	944
Measles (excluding rubella) ... ..	4,827	7,124	7,319	5,094
Poliomyelitis ... ..	1	1	—	—
Tuberculosis, respiratory ... ..	391	273	249	235
Tuberculosis, non-respiratory ... ..	43	28	34	30
Diphtheria ... ..	3	1	—	—
Smallpox... ..	—	—	—	—
Meningococcal Infection ... ..	15	15	16	7
Acute Encephalitis, post-infectious ... ..	—	—	2	1
Dysentery ... ..	383	313	259	372
Ophthalmia Neonatorum ... ..	97	88	79	62
Puerperal Pyrexia ... ..	356	315	265	230
Acute Pneumonia (primary or influenzal) ... ..	349	208	205	158
Paratyphoid Fever ... ..	8	3	12	5
Typhoid Fever ... ..	—	—	—	1
Food Poisoning ... ..	63	31	72	59
Erysipelas ... ..	26	17	21	26
Malaria (contracted abroad) ... ..	10	11	6	3
Typhus Fever ... ..	1	—	—	—
Anthrax ... ..	1	—	—	—

The general pattern of the incidence of infectious disease in 1966 was similar to that of 1965.

### Exclusion of Children from School

The total number of children excluded from school on account of infectious disease was 208, and the average period of exclusion was



34 days. There was a considerable range in the period of exclusion. The longest period was 138 days and the shortest period two days.

## DYSENTERY

During 1966, 372 cases were notified. The following table gives the number of cases of dysentery notified between 1955 and 1966:—

1955	920
1956	369
1957	484
1958	931
1959	407
1960	515
1961	335
1962	296
1963	383
1964	313
1965	259
1966	372

When a case is notified it is visited and, as soon as possible, a bacteriological diagnosis made. The situation is then assessed and the need for exclusion of contacts is considered. Food handlers and young children are invariably excluded from work or school when found to be positive carriers. In other cases of older 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 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. An analysis of the findings on visiting is given in the table below:—

					Dysentery 1966	
					Sonne Dysentery	Flexner Dysentery
1.	Original uncorrected notifications...	...	...	...	536	1
2.	Corrected notifications	...	...	...	371	1
3.	Notified cases, bacteriologically negative but with symptoms	...	...	...	165	—

## POLIOMYELITIS

No case of poliomyelitis occurred in Liverpool during the year.

## FOOD POISONING AND SALMONELLA INFECTION

It is very satisfying to be able to report once again that during 1966, food poisoning and salmonella infection did not present a major health problem. It is now 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.



Although food poisoning and salmonella infection did not present a major health problem, there was an increase in the number of patients, following the outbreaks of the previous year, who returned home from hospital still excreting salmonella organisms. Close co-operation with Fazakerley Hospital was maintained in such cases and where home circumstances were satisfactory and the patient's occupation did not constitute a special hazard, such patients were allowed home, even while excreting the organisms. They required strict follow-up and surveillance to determine the duration of the carrier state and several factors involved in this persistence were studied to determine the relation between the duration of initial symptoms and the drug combinations used in the course of treatment. The duration of symptoms ranged from two to twenty-one days. Streptomycin, ampicillin, kanamycin, nalidixic acid, neomycin, paramycin and chloramphenicol were all tried at various intervals and in different combinations. Of the 52 patients who were discharged as convalescent carriers, 33 remained persistent excretors in the community.

The duration of carrier state was found to be unrelated to the duration of symptoms, the strain of salmonella or the drug combination used. In the management of this carrier state no drug so far can be chosen as superior to the others. It is perhaps significant to note that in all these cases no new secondary cross-infection occurred within close family contacts, and the hazard may be much less than hitherto suspected. The strict attention to personal hygiene with washing of hands after the toilet seems to be a most effective weapon in preventing the hazard of cross-infections.

The total number of cases coming to the attention of the Department was 101. Of these, 62 occurred in a series of seventeen family outbreaks and 39 occurred in isolation. A table giving the organisms found in notified cases is listed below:—

Organism	Number of persons from whom organism was isolated		
Salmonella alachua ... ..	...	...	2
Salmonella anatum ... ..	...	...	6
Salmonella bovis morbificans ... ..	...	...	1
Salmonella brandenburg ... ..	...	...	3
Salmonella derby ... ..	...	...	1
Salmonella dublin ... ..	...	...	1
Salmonella duisberg ... ..	...	...	4
Salmonella enteritidis ... ..	...	...	2
Salmonella heidelberg ... ..	...	...	1
Salmonella illinois ... ..	...	...	1
Salmonella infantis ... ..	...	...	10
Salmonella newport ... ..	...	...	2
Salmonella panama ... ..	...	...	4
Salmonella poona ... ..	...	...	3
Salmonella stanley ... ..	...	...	1
Salmonella typhimurium ... ..	...	...	59
			<hr/> 101 <hr/>



It will be seen that *Salmonella infantis* infections are dying out. The organism would not appear to be replacing *Salmonella typhimurium* as the major source of salmonellosis. *Salmonella typhimurium* produced over half the total number of infections.

#### Sampling of Foodstuffs

Samples of foods sold to the public for consumption without cooking, numbering 139 were specially submitted for examination for the presence of food poisoning organisms. All samples were examined bacteriologically and found to be negative.

#### TYPHOID

During the months of February and April contacts of a proven case of typhoid were investigated from the vessels *Potosi* and *Kumba*. All those who were Liverpool residents were put under strict surveillance while careful follow-up investigations of stools and blood were carried out.

It is satisfying to report that no further cases of the disease occurred, no carriers were detected and in each case, bacteriological examination of samples of suspect food, water supply and other drinks were negative. The respective Medical Officers of Health of non-Liverpool contacts were duly informed so that appropriate action could be taken.

Source of Infection	CONTACTS	
	Liverpool Residents	Non-Liverpool Residents
M.V. <i>Potosi</i> ...     ...	13	—
M.V. <i>Kumba</i> ...     ...	2	2

From Aberdeen came a recovered case of typhoid who had been under routine follow-up during the previous year and a half. She moved to Liverpool in September, 1966 and was followed-up throughout the rest of the year. She remained symptom-free and all bacteriological samples were negative.

The only new case of typhoid fever which occurred during the year was probably acquired abroad while on holiday in Spain. This man, a fruit inspector, aged 60, returned from holiday in October and reported for his usual duties for the first week. Thereafter, he suddenly took ill with diarrhoea, fever and rigors followed by joint pains, cough, constipation, a transient rash and delirium. He was removed to Fazakerley Hospital where the diagnosis of typhoid was confirmed. He suffered an extremely severe illness, at times being comatose. He made a slow recovery and now, it is pleasing to be able to report, is quite well.



Specimens from his wife remained negative for typhoid throughout. His wife was admitted for investigation, and in spite of her close contact with the patient was found free of symptoms, although stool examination showed that she had *Salmonella anatum* infection which cleared up uneventfully.

Further investigation of all the close contacts of this man, and other members of the holiday trip, failed to reveal other infected persons. His response to treatment was dramatic and since his discharge all specimens have been negative. This is important, since with his occupation as a fresh fruit inspector, he would have constituted a source of infection had he become a carrier of the organism.

#### PARATYPHOID

During the month of October three contacts of a case of paratyphoid were seen from the ship *Northumbrian Prince*. All three close contacts were residents in Liverpool. Other non-Liverpool residents were referred to the Medical Officer of Health concerned. In all cases no evidence of infection was found.

In November three other contacts of a case of Paratyphoid 'B' seen in Birmingham were investigated. There was again no evidence of infection.

All the residents and staff of Fulwood Park Residential Nursery were fully investigated when a child, removed to Alder Hey Hospital, was found to be a chronic carrier of Paratyphoid 'B'. In spite of all treatment her specimens remained positive. Her family contacts and all concerned at the nursery were found to be free from the infection. One of the nurses from the Fulwood Park Residential Nursery, soon after she commenced duty at Mill Road Hospital, was involved in an outbreak of diarrhoea, together with five other nurses. On investigation it was found that this outbreak was coincidental and not due to typhoid. Strict isolation and surveillance were maintained until it was found safe to allow these nurses to return to their duties.

It was later in November that two girls, both of whom were among a holiday tour from Spain, returned with severe symptoms. Investigation at Fazakerley Hospital confirmed the infection to be Paratyphoid 'B'. There were no other cases involved in all the other passengers on this tour. Each girl had four close family contacts who fortunately were not involved. Following a course of treatment, both girls recovered but continued to excrete the pathogen. In one case laboratory culture revealed double infection with both *Salmonella paratyphoid* 'B' and *Salmonella newport*.

In view of the risk involved, before these girls were allowed home, T.A.B. inoculation was offered to all the family contacts. Only one of the contacts refused to be so immunised. Follow-up was carried



out and, but for initial intermittent excretion, specimens soon became continuously negative.

# ENTEROVIRUS SURVEY

The Enterovirus Survey has now covered a period of six years. Since the length of time to identify viruses may cover more than a year, previous reports of enteroviruses isolated in the survey have been incomplete and so a corrected summary has been prepared and is shown in the table below:—

ENTEROVIRUS SURVEY, 1961-1966—SUMMARY OF RESULTS								
	1961	1962	1963	1964	1965	1966	Total	
Number of children from whom specimens were taken ...	89	182	140	137	141	142	831	
Number reported on so far ...	85	180	134	133	138	108	778	
Number of enteroviruses isolated ...	16	33	29	29	36	31	174	
Details of positive cases:								
Adenovirus type 2...	1	1	1	—	1	1	5	
Adenovirus type 5...	—	1	—	1	1	—	3	
Adenovirus type 2 and Cocksackie virus type A...	—	—	—	—	1	—	1	
Cocksackie virus type A ...	—	—	5	1	9	4	19	
Cocksackie virus type A2...	2	—	—	—	—	—	2	
Cocksackie virus type A4 ...	1	1	—	—	—	—	2	
Cocksackie virus type A6 ...	4	—	—	—	—	—	4	
Cocksackie virus type A8 ...	—	1	—	—	—	—	1	
Cocksackie virus type A10 ...	—	2	—	—	—	—	2	
Cocksackie virus type B1 ...	—	—	—	—	2	—	2	
Cocksackie virus type B2 ...	—	1	2	—	—	—	3	
Cocksackie virus type B3 ...	—	2	2	—	—	—	4	
Cocksackie virus type B4 ...	—	3	—	—	—	3	6	
Cocksackie virus type B5 ...	—	—	1	1	1	—	3	
Cocksackie virus type B6 ...	—	1	—	—	—	—	1	
Cocksackie virus type A and E.C.H.O. virus type 14 ...	—	—	1	—	—	—	1	
Cocksackie virus type A and E.C.H.O. virus type 30 ...	—	—	—	1	—	—	1	
Cocksackie virus type A and unidentified virus ...	—	—	—	—	1	—	1	
E.C.H.O. virus type 1 ...	—	—	1	4	—	—	5	
E.C.H.O. virus type 2 ...	4	—	—	—	—	—	4	
E.C.H.O. virus type 6 ...	—	1	—	—	1	—	2	
E.C.H.O. virus type 7 ...	—	—	—	3	—	—	3	
E.C.H.O. virus type 11 ...	—	—	—	1	1	—	2	
E.C.H.O. virus type 12 ...	—	—	—	—	2	—	2	
E.C.H.O. virus type 13 ...	—	—	2	—	—	—	2	
E.C.H.O. virus type 14 ...	—	—	2	—	—	—	2	
E.C.H.O. virus type 18 ...	1	1	1	1	—	—	4	
E.C.H.O. virus type 19 ...	—	1	—	1	—	—	2	
E.C.H.O. virus type 21 ...	—	1	3	—	—	—	4	
E.C.H.O. virus type 24 ...	—	—	1	—	—	—	1	
E.C.H.O. virus type 25 ...	—	—	1	1	—	—	2	
E.C.H.O. virus type 30 ...	—	—	—	2	—	—	2	
E.C.H.O. virus type 25 with								



# ENTEROVIRUS SURVEY, 1961-1966—SUMMARY OF RESULTS—*continued*

Coxsackie virus type A ... ..	—	—	1	—	—	—	1
Polio virus (vaccine virus) type 1 alone...	2	1	—	3	—	1	7
Polio virus (vaccine virus) type 2 alone...	—	2	1	—	4	2	9
Polio virus (vaccine virus) type 3 alone...	—	5	3	3	6	3	20
Polio virus (vaccine virus)							
types 1 and 2 together...	—	2	—	2	—	—	4
Polio virus (vaccine virus)							
types 1 and 3 together...	—	1	—	—	2	1	4
Polio virus (vaccine virus)							
types 1, 2 and 3 together ... ..	—	1	—	1	2	—	4
Polio virus (vaccine virus)							
types 2 and 3 together...	—	3	—	1	1	—	5
Polio virus, type not identified ... ..	—	—	—	1	—	—	1
Virus unidentifiable							
(or not yet identified) ... ..	1	1	1	1	1	16	21
Totals ... ..	16	33	29	29	36	31	174

It will be seen that the range of viruses isolated has trebled, 32 different types having been reported so far. Some have remained unidentifiable. As would be expected, the polio vaccine virus, "tame" polio virus, has been isolated in 53 instances out of 174 positive isolations. Only one polio virus, as yet to be identified fully, has been isolated which may subsequently prove to be a "wild" strain. Coxsackie virus type 'A' is the next commonest virus to be found, occurring in nineteen instances out of 174 isolations. It is unusual to find combinations of "wild" viruses.

The commonest occurring type of Coxsackie virus, type 'A', has been found in combination on one occasion with adenovirus type 2; on one occasion with E.C.H.O. virus type 14; on one occasion with E.C.H.O. virus type 30; on one occasion with E.C.H.O. virus type 25 and on one occasion with an unidentified virus. It would appear suggestive that Coxsackie virus type 'A' may be the only pathogen commonly to coincide with other enteroviruses.

The polio vaccine virus "tame virus" commonly co-existed with either two or three types together. Multiple isolation of polio vaccine viruses occurred in seventeen instances, out of a total of 174 isolations, these seventeen instances being out of a total of 57 isolations of vaccine virus.

Polio vaccine virus has never been found in association with other enteroviruses. This suggests that "blanketing" with polio vaccine might well be effective in limiting the outbreak of other enterovirus infection in addition to limiting the spread of poliomyelitis. So far since the survey has commenced an opportunity to put this to the test has not occurred.

## INFLUENZA

The influenza spotting scheme was again put into operation during the winter months. Only minor outbreaks of influenza were reported.



# IMMUNISATION AND VACCINATION

## DIPHTHERIA IMMUNISATION

The number of persons receiving a primary course of diphtheria immunisation in 1966 was 10,850, which is practically the same as 10,829 immunised in 1965.

Immunisation in schools is carried out by a team of doctor, nurse and clerk visiting schools for medical inspection, wherever it is possible to do so. The improvement brought about by the institution of this approach has been maintained. During 1966, a total of 1,818 primary courses and 5,879 booster doses were carried out in schools, figures comparable with the previous year.

The number of primary courses carried out in Maternity and Child Welfare clinics was 5,843; in addition 3,189 were performed by general practitioners. Fewer booster doses were done in Maternity and Child Welfare clinics, the total being 513, similarly fewer were carried out by general practitioners, the total being 993. This gives an overall total of booster doses of 7,385, a little higher than the figure of 7,255 achieved in 1965.



TABLE A

## PRIMARY DIPHTHERIA IMMUNISATIONS—1957-1966

Where immunised	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Maternity and Child Welfare Clinics ... ..	4,479	6,861	5,789	13,091	5,479	5,016	5,263	5,710	6,023	5,843
Schools ... ..	3,008	2,316	3,245	3,926	1,332	1,464	1,362	2,732	1,401	1,818
General Practitioners ...	3,713	5,761	5,102	8,929	6,375	3,523	3,399	3,397	3,405	3,189
<b>TOTAL ... ..</b>	<b>11,200</b>	<b>14,938</b>	<b>14,136</b>	<b>25,946</b>	<b>13,186</b>	<b>10,003</b>	<b>10,024</b>	<b>11,839</b>	<b>10,829</b>	<b>10,850</b>



TABLE B

Number of children immunised against diphtheria at various age groups

Age at date of immunisation	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	Estimated immunisation rate
—1	2,062 2,063	3,820	3,286	3,945	5,826	2,661 2,661	8,546	8,214	8,369	1,259	1,286 1,286	3,246	3,340	3,312	2,881	Total under 5 years of age 31,757, being 41.8% of the population of this age group.
1—	2,071	1,198 1,198	2,311	2,176	1,786	2,458	1,343 1,343	2,386	4,206	4,684	4,962	2,127 2,128	4,234	4,462	4,352	
2—	576	394	190	353	290	399	436	193	683	1,209	676	692	370	633	720	
3—	381	118	114	55	89	123	135	120	106	978	153	214	409	223	388	
4—	301	55	53	52	21	59	64	57	100	429	162	102	225	874	183	
5—	1,568	1,527	1,485	1,230	781	488 487	1,075	1,016	2,692	1,245	352	767	1,230	425	546	Total 5-9 years of age 63,511, being 79.6% of the population of this age group.
6—	1,170	812	790	654	415	518	285 286	540	1,435	663	286	145 144	868	130	1,073	
7—	286	718	699	579	368	459	506	239 239	1,266	585	142	178	131	45	290	
8—	196	580	565	468	297	370	409	387	510	472	78	61	141	31	128	
9—	180	481	466	386	245	307	339	320	844	194	107	50	122	45	27	
10—	177	87	155	57	55	71	58	81	1,609	468	26	102	120	90	17	Total 10-14 years of age 51,387, being 65.2% of the population of this age group.
11—	126	74	128	47	46	60	49	68	1,469	412	51	—	60	122	25	
12—	59	35	60	22	22	28	23	33	681	191	29	68	29	63	8	
13—	44	34	58	21	20	20	21	30	662	186	29	—	29	31	2	
14—	28	32	55	20	19	25	20	28	658	184	—	—	—	61	1	
15—	14	13	20	10	17	—	—	—	—	4	—	—	—	—	4	
Total	11,311	11,176	10,625	10,129	10,319	11,200	14,938	14,145	25,966	13,186	10,003	10,024	11,839	10,829	10,854	

\* The percentages given in the last column are based on the total live births for the five related years in each age group. It has not been possible to correct for the trend of reduction in the child population which has taken place almost continuously over the fifteen years covered by this table.

Population under 15, June, 1957 (Registrar General's estimate) ... 200,000 (1956 figure not available).

Population under 15, June, 1966 (Registrar General's estimate) ... 181,500

Total live births 1952-1966 inclusive (15-year period) ... 234,578

No correction has been made for deaths, or for children who have left the city since being immunised. The corrected immunisation rate would therefore be higher than that stated in the table. The figures given are intended only to be a reasonable approximation.



TABLE C

## DIPHTHERIA IMMUNISATION—1966

Where Immunised		Year of Birth			
		1963-66	1959-62	Others under 16	Total
Primary Course	Maternity and Child Welfare Clinics ...	5,406	424	13	5,843
	General Practitioners ... ..	2,931	233	25	3,189
	Schools ... ..	4	1,618	196	1,818
Total ... ..		8,341	2,275	234	10,850
Booster Doses	Maternity and Child Welfare Clinics ...	48	439	26	513
	General Practitioners ... ..	283	598	112	993
	Schools ... ..	2	5,298	579	5,879
Total ... ..		333	6,335	717	7,385

## WHOOPING COUGH IMMUNISATION

The number of primary courses of whooping cough immunisation in 1966 was 8,807, a similar level to that of 1965, when 8,937 were completed. Similarly the level of booster doses remained fairly constant, being 1,144 as compared with 1,303 in 1965.



TABLE D

## WHOOPING COUGH IMMUNISATION—1966

	Where Immunised	Year of Birth			
		1963-66	1959-62	Others under 16	Total
Primary Course	Maternity and Child Welfare Clinics ...	5,362	277	5	5,644
	General Practitioners ... ..	2,907	231	25	3,163
Total ... ..		8,269	508	30	8,807
Booster Doses	Maternity and Child Welfare Clinics ...	43	206	15	264
	General Practitioners ... ..	283	521	76	880
Total ... ..		326	727	91	1,144

## TETANUS IMMUNISATION

The level of tetanus immunisation in 1966 was almost the same as that in 1965. A total of 10,860 primary courses were completed with 10,844 in the previous year. In addition, 7,378 booster doses were carried out compared with 7,233 the previous year, of these 5,877 were administered in schools.



TABLE E

TETANUS IMMUNISATION—1966

	Where Immunised	Year of Birth			
		1963-66	1959-62	Others under 16	Total
Primary Course	Maternity and Child Welfare Clinics ...	5,405	433	16	5,854
	General Practitioners ... ..	2,929	233	26	3,188
	Schools ... ..	4	1,618	196	1,818
	Total ... ..	8,338	2,284	238	10,860
Booster Doses	Maternity and Child Welfare Clinics ...	48	438	27	513
	General Practitioners ... ..	283	594	111	988
	Schools ... ..	2	5,296	579	5,877
	Total ... ..	333	6,328	717	7,378

TABLE F

## PRIMARY COURSES OF ANTIGEN

Diphtheria/tetanus/whooping cough and poliomyelitis, combined antigen	...	33
Diphtheria/tetanus and whooping cough, combined antigen	... ..	8,775
Diphtheria and tetanus, combined antigen	... ..	2,033
Tetanus antigen	... ..	9

## SMALLPOX VACCINATION

The trend of increase in the number of infants vaccinated has continued. From 4,691 primary vaccinations in 1965, the figure has increased to 5,915 in 1966.

The number of vaccinations for purposes of persons travelling abroad increased practically sevenfold from 3,781 to 21,985 in 1966. This was a direct repercussion of the variola minor outbreak in this country and, with the serious shortage of medical staff, threw a very heavy burden on the department.



TABLE G  
SMALLPOX VACCINATIONS—1963-1966

	1963	1964	1965	1966
Births	15,775	15,625	14,553	13,557
Total Primary Vaccination ... ..	1,454	3,722	4,691	5,275
Total Re-vaccinations ... ..	341	349	343	640
	1,795	4,071	5,034	5,915
Total Vaccinated at Clinics ... ..	648	1,962	2,621	3,295
Total Vaccinated by General Practitioners ...	1,147	2,109	2,413	2,620
Total ... ..	1,795	4,071	5,034	5,915

#### POLIOMYELITIS VACCINATION

The number of primary courses of poliomyelitis vaccination has dropped from 16,914 in 1965 to 14,088 in 1966 and booster doses from 23,945 to 9,673. This is a dramatic pointer to an important factor in the acceptance of poliomyelitis vaccination. The 1965 figures were very much influenced by the poliomyelitis outbreak in Blackburn. It is sad to think that it requires the presence of the disease to ensure an adequate level of acceptance of immunisation.

TABLE H  
POLIOMYELITIS IMMUNISATION—1966

#### *Completed Primary Courses*

Where Immunised	Year of Birth					Others under 16	Others over 16	Total
	1966	1965	1964	1963	1959-62			
Maternity and Child Welfare Clinics ...	1,780	3,548	1,069	848	1,590	212	731	9,778
General Practitioners	666	1,494	348	221	451	131	327	3,638
Schools ... ..	—	—	—	—	524	148	—	672
Total ... ..	2,446	5,042	1,417	1,069	2,565	491	1,058	14,088



# Reinforcing Doses

Maternity and Child Welfare Clinics ...	—	2	24	54	625	218	402	1,325
General Practitioners	—	26	70	54	581	305	818	1,854
Schools ...	—	—	—	1	5,659	834	—	6,494
Total ...	—	28	94	109	6,865	1,357	1,220	9,673

TABLE J

Number of children immunised against poliomyelitis at various age groups

Age at date of immunisation	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	* Estimated immunisation rate
-1	—	22	395	458	376	2,804	232	831	2,662	2,868	2,457	Total under 5 years of age 33,800 being 44.5% of the population of this age group.
1-	—	23	1,489	3,789	3,027	3,752	232	1,771	5,362	5,725	5,060	
2-	144	1,003	1,488	1,424	1,512	3,364	3,454	1,772	1,057	1,889	1,419	
3-	240	1,221	2,922	1,424	444	851	910	1,057	827	827	1,070	
4-	136	1,434	2,678	2,477	445	3,182	775	154	1,031	827	570	Total 5-9 years of age 45,368 being 56.9% of the population of this age group.
5-	136	1,443	2,594	2,054	683	2,036	453	62	321	1,106	570	
6-	410	723	2,427	1,934	697	3,761	161	40	173	895	887	
7-	372	723	1,225	1,961	542	3,724	233	11	42	144	800	
8-	415	1,610	1,225	894	529	3,622	155	16	13	88	193	Total 10-14 years of age 53,618 being 68.0% of the population of this age group.
9-	508	2,855	2,483	895	231	3,398	210	6	15	54	154	
10-	544	3,037	2,197	1,747	231	1,686	263	8	8	99	64	
11-	—	3,098	2,288	1,606	486	1,685	67	7	6	74	67	
12-	—	3,611	2,399	1,336	479	3,170	67	4	7	55	81	Total 15-19 years of age 53,618 being 68.0% of the population of this age group.
13-	—	—	3,897	1,582	375	3,177	123	5	3	58	25	
14-	—	—	7,411	1,253	392	3,172	114	6	3	25	15	
15-	—	—	5,884	1,029	396	3,327	80	11	4	24	10	
16-	—	—	5,923	852	286	2,824	68	7	1	26	11	Total 20-24 years of age 53,618 being 68.0% of the population of this age group.
17-	—	—	4,734	1,551	14,582	355,519	6,197	409	429	2,077	1,058	
	2,905	20,803	53,659	28,266	25,713	406,239	13,896	6,041	12,207	16,914	14,575	

This table does not cover the same period as Table B (diphtheria immunisation) as immunisation against poliomyelitis was not available in the earlier years of Table B.

\* The percentages given in the last column are based on the total live births for the five related years in each age group. It has not been possible to correct for the trend of reduction in the child population which has taken place almost continuously over the eleven years covered by this table.

Population under 15, June, 1957 (Registrar General's estimate) ... 200,000 (1956 figure not available).

Population under 15, June, 1966 (Registrar General's estimate) ... 181,500

Total live births 1952-1966 inclusive (15-year period) ... 234,578

No correction has been made for deaths, or for children who have left the city since being immunised. The corrected immunisation rate would therefore be higher than that stated in the table. The figures given are intended to be only a reasonable approximation.



## YELLOW FEVER CLINIC

A total of 21,985 persons received vaccination and immunisation for international travel at the clinic which is held every afternoon for this purpose. This is over twice the number who attended the year before and the staffing of the clinic to cope with this increase has been extremely difficult since repeated advertisements for assistant medical officers failed to bring forward applicants. At no time during the year was the full complement of assistant medical officers achieved. For the whole year the yellow fever clinic has been run by part-time medical officers; the volume of work has been too great for one medical officer and doctors have had to be taken from other essential duties, to deal with the large influx of extra requests. Inevitably other work has had to suffer.

Of the total attending, 2,723 were immunised against yellow fever, 16,998 were vaccinated against smallpox, 871 received a course of T.A.B. and 1,393 were immunised against cholera.

TABLE K

VACCINATIONS FOR  
INTERNATIONAL TRAVEL—1966

Month	Yellow Fever	Smallpox— Number of persons vaccinated	T.A.B.— Number of full courses	Cholera— Number of full courses	Total
January ...	243	327	46	122	738
February ...	231	305	52	87	675
March ...	192	439	91	112	834
April ...	178	374	55	73	680
May ...	186	4,001	98	69	4,354
June ...	268	4,976	103	172	5,519
July ...	202	3,711	85	147	4,145
August ...	247	1,724	69	161	2,201
September ...	304	356	79	165	904
October ...	301	314	49	162	826
November ...	226	244	47	93	604
December ...	151	227	97	30	505
Totals ...	2,723	16,998	871	1,393	21,985

## 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.



# CONTROL OF RADIATION HAZARDS

## REGISTERED USERS UNDER RADIOACTIVE SUBSTANCES ACT, 1960

There were no alterations in the number of establishments on the Register of Users, during 1966. The close co-operation between the Health Department, Fire Service, Factories Department and Radiological Protection Service continued throughout the year with useful exchanges of information, concerning details of sources in use in the City.

In last year's report, mention was made of a large factory in which a series of small fires had occurred, to each of which a medical officer from the department had been called since the factory had a medium size gamma ray source. It is pleasing to note that as a result of the investigations carried out by the Fire Prevention Officer and the implementation of his recommendation for dust extraction with improvements to the ducting system, there was no recurrence of these fires during 1966.

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

The only alteration in the radioactive substances used in schools was an exchange in one school of a single 5 microcurie radium 226 source for a similar 5 microcurie source of cobalt 60. The use of these radioactive substances in the teaching of physics in the various schools has now proved to be quite safe, involving no hazard to pupils or staff. As a result of the detailed inspections and visits a worthwhile contribution has been made towards ensuring that the pupil of today, who will be the industrial user of tomorrow, will have acquired at first hand a simple basic level of appreciation of the safe handling of radioactive materials.

At the time of writing this report the faulty X-ray crystallography unit which had to be taken out of use last year as unsafe is being modernised and adapted. It is hoped that in 1967 it will be made completely safe and come back into use. The proposed neutron source which was deferred for re-design in a safer form has been found to be unnecessary. An alternative safer and more suitable source has been provided in another establishment.

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



# RADIOACTIVE SEALED SOURCES—EDUCATIONAL ESTABLISHMENTS

Nature of Source	Size of Source	Number of Sources
<b>SCHOOLS</b>		
Americium 241 ... ..	0.125 microcuries	23
Cobalt 60 ... ..	5       "	28
	1       "	1
Plutonium 239 ... ..	0.1       "	7
Radium 226... ..	5       "	17
	3       "	6
Strontium 90 ... ..	0.125   "	24
	9       "	17
	1       "	7
<b>TRAINING COLLEGES</b>		
Americium 241 ... ..	0.125 microcuries	1
Cobalt 60 ... ..	5       "	1
Plutonium 239 ... ..	0.1       "	2
Radium 226 ... ..	5       "	2
Strontium 90 ... ..	1       "	2
	9       "	1
	0.125   "	1

# 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
Carbon 14 } Iron 59 } Sulphur 35 }	Total not exceeding 2   millicuries	3
Caesium 137 ... ..	0.5   millicuries	1
Thallium 204 ... ..	20       "	1
	24       "	1
Strontium 90 ... ..	12       "	2
	2.5       "	6
	469       "	1
Iridium 192 ... ..	500       "	1
Thulium 170 ... ..	300       "	1



## SURVEY OF DENTAL X-RAY APPLIANCES IN SCHOOL DENTAL CLINICS

A survey of dental X-ray sets used by the School Dental Service was carried out by the Radiological Protection Service at the request of the Medical Officer of Health. It was found that with the exception of minor details which were soon remedied, the appliances were satisfactory and safe. The possibility of reducing the dosage from these sets is being investigated and it is hoped to be able to improve on the collimation. The present standard is a 2.5 in. diameter beam at a film distance of 7 to 8 in. It is hoped to be able to reduce this to a beam diameter of 1.75 in. with a resulting considerable reduction of dose.



# MEDICAL CARE OF IMMIGRANTS

## MEDICAL ARRANGEMENTS FOR LONG-STAY IMMIGRANTS

In January, 1965, the Ministry of Health introduced a scheme under which the medical inspectors at the 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 Ministry of Health.

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 173 persons.

Successful first visits made relating to 122 persons. No notifications of pulmonary tuberculosis relating to these persons were received.

Not Liverpool addresses: 20.

Not traced during the period: 31.



# TUBERCULOSIS

## STATISTICS

The downward trend in the number of new cases found was maintained throughout the year. A total of 265 cases was discovered, consisting of 235 pulmonary and 30 non-pulmonary cases. These figures represent a reduction of eighteen compared with 1965 and give an incidence rate of 0.33 per 1,000 for cases of pulmonary tuberculosis and 0.04 per 1,000 for cases of non-pulmonary tuberculosis. The figures for 1965 were 0.34 per 1,000 and 0.05 per 1,000 respectively.

During the year 531 cases were removed from the Register, consisting of 500 pulmonary and 31 non-pulmonary. These included those cases who had recovered during the year.

The number of cases on the Register at the beginning of the year was 3,962. Of these 3,683 were pulmonary and 279 non-pulmonary. This gave a prevalence rate per 1,000 of population of 5.17 pulmonary and 0.39 non-pulmonary with an overall tuberculosis prevalence rate of 5.56 per 1,000 at mid-year.

The total number of cases remaining at the end of the year was 3,510, comprising 3,234 pulmonary and 276 non-pulmonary, excluding a total of eleven cases where diagnosis had not been completed. These figures represent a continuation of the annual decrease in the overall reservoir of cases.

The number of new cases found as the result of illness was 199, which is three less than the previous year. The number of new cases found by examination of apparently healthy persons was 66. The proportion of cases detected in apparently healthy persons has shown no significant change from the previous year. Details are given in the tables in the statistical section.

Of the new cases of pulmonary tuberculosis, 158 were male and 77 female, being 67.2 per cent of the total male, and 32.8 per cent of the total, female. Details of age and sex distribution are also given in the statistical section.

The total of 51 tuberculosis deaths in 1966 comprised 46 deaths from pulmonary and five from non-pulmonary tuberculosis. These represent rates of 0.065 pulmonary per 1,000 of the population and 0.007 per 1,000 non-pulmonary, making an overall rate of 0.07 per 1,000 for all forms. This apparent increase in deaths from the disease could be misleading since there was an increase in post-mortem diagnosis of tuberculosis. Much of this represents old disease, not new active infections.



## TUBERCULOSIS AFTER-CARE AND PREVENTION

The full complement of tuberculosis visitors is sixteen. The number employed at any one time varied throughout the year, due to retirements and the difficulty experienced in recruiting suitable replacements. At the end of the year there was a total of fifteen tuberculosis visitors and these were distributed between the four clinic areas.

The situation which followed the closing of the Central Chest Clinic and Chest Hospital has now become stable and the reduced Central Chest Clinic has continued to function satisfactorily in its new location at the Liverpool Clinic (Myrtle Street).

The re-allocation of areas has proved worthwhile. The staffing of each enlarged area by two visitors working as a team in place of one working in isolation has resulted in a smoother continuity of work especially during times of staff changes or periods of absence by one or other member of the team due to leave or illness. As in previous years, visits have been concentrated on cases of greatest need, on re-visiting cases where social, particularly housing conditions were affecting the disease or where persons were awaiting re-housing. Details of the work in relation to re-housing appear in the section on re-housing on medical grounds. In general, the aim has been to concentrate a greater amount of time on fewer cases in an attempt to eradicate sources of infection. Much more group work is being practised. This policy is adjusted to the present problems met which are peculiar to the late stage of the programme of the progressive eradication of tuberculosis. In addition increasing attention is being paid to other lung conditions, such as bronchitis, bronchiectasis, carcinoma of the lung and post-operative conditions.

### USE OF SECTION 172 OF THE PUBLIC HEALTH ACT 1936

The value of Section 172 has been in the main not in its implementation but in its existence, lending persuasion in cases who might otherwise refuse hospital treatment.

Although legal action through the Court was not resorted to during the year, the value of this section as a deterrent was demonstrated in several cases where a letter suggesting the possibility of legal action was sufficient to persuade the unwilling patient to co-operate and thereby favourably influence the course of his treatment.

The problem of the unco-operative tuberculosis patient still exists and its solution involves both doctors and tuberculosis visitors in a great deal of hard and time consuming work. Despite intensive health education, the problem, although slightly lessened, still remains and the clinic is still forced to deal with the patient who for one or more reasons



refuses to accept or continue hospital treatment for his disease. More especially since the development of effective anti-tuberculosis drugs, this problem is often complicated by the ease with which patients on these drugs can convince themselves that they are not seriously ill. This is particularly so for the patient who has absconded from hospital after only a short stay, who was beginning to feel the first benefits of the new regimen of rest, medicinal treatment and improved diet and thinks himself already cured. Fortunately, even in the most difficult cases, visits to the patient's home by a doctor or tuberculosis visitor with frank discussion on the grave dangers of refusing or neglecting treatment of the disease usually succeed in making the person concerned accept treatment in the form best suited to his case. At the same time, the opportunity is taken during these visits to initiate measures of social aid and advise on problems of support of dependants, suitability of work and so forth, all of which weigh adversely in influencing judgment.

### B.C.G. VACCINATION

During the year B.C.G. vaccination of new-born babies continued in both the clinics and maternity wards of the Sefton General, Walton, Mill Road and Liverpool Maternity Hospitals. The total number of babies vaccinated throughout all these units in the City was 459.

In addition nineteen University students were given B.C.G. vaccination at Walton Hospital.

### B.C.G. Vaccination of School Children

Vaccination was offered to 10,299 school leavers and 9,159 parents signed the consent form. The number Heaf tested in schools was 8,356. In addition to the completed Heaf tests, 246 persons were given a test but failed to attend for its reading. The number of positive Heaf tests was 1,135 (13.5 per cent). This number includes 463 (5.38 per cent of total number tested) who had previously had B.C.G. or a history of tuberculosis. The number of children given B.C.G. vaccination was 7,221, being 83.9 per cent of the total number tested and 70.1 per cent of the number to whom vaccination was offered. The corresponding percentages in 1965 were 84.2 and 66.8 respectively.

#### Summary

(1) Number of school children offered B.C.G. vaccination ...	10,299
(2) Number of acceptors... ..	9,159
(3) Number Heaf tested ... ..	8,356
(4) Number of positive Heaf tests. ... ..	1,135
(5) Number of children vaccinated with B.C.G. ... ..	7,221

### MASS RADIOGRAPHY

Mr. C. C. Warmer, Organising Secretary, Liverpool Regional Hospital Board, writes:—



The Liverpool Regional Hospital Board administers the Mass Radiography Service. A static unit operates at 9A, Hood Street. Two mobile units cover industry in the City of Liverpool.

The static unit at Hood Street examines individuals from three main sources:—

- (i) Cases referred by general practitioners mainly within the City.
- (ii) Local business firms, shops and offices.
- (iii) General public volunteers.

Of the 35,913 examinations made by No. 1 Unit, 8,958 were referred by general practitioners.

All prospective employees of the City Nursing Service are X-rayed by the Hood Street unit before their engagement, 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 examinations include a chest X-ray and these are carried out by the Mass Radiography Service.

The M.M.R. Service co-operates closely with the Health Department by arranging visits of the mobile units to factories and other premises in the City whenever an active case of pulmonary tuberculosis is discovered.

The number of cases of active pulmonary tuberculosis discovered in 1966 by the Hood Street unit was 43. Of these, 34 were Liverpool residents, and a further nine active cases resident in the City discovered by the mobile units made a total of 43 Liverpool cases brought to light by the Mass Radiography Service.

#### TUBERCULOSIS WELFARE

During 1966, 21 cases have been the subject of reports to the National Assistance Board (later the Ministry of Social Security) with a view to determining their eligibility for allowances based on medical needs.

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 in this matter and supplies the information necessary. In addition, constant liaison is maintained with the Ministry of Labour Rehabilitation Centre in order to assist in suitable cases. A summary of the cases dealt with is as follows:—

Total cases referred by the Ministry of Labour for rehabilitation	...	...	21
(a) Examined and found fit for light, part-time or full-time employment	...	...	12
(b) Not fit for employment	...	...	—
(c) Failed to attend for examination	...	...	—
(d) Certified as non-tuberculous	...	...	—
(e) Cases not yet examined	...	...	9
Actual number of patients reported by Ministry of Labour as placed in employment	...	...	—

During 1966 three patients have had occupational therapy at home and two have attended the occupational therapy units.

#### WORK OF THE CHEST CLINICS

The statistical survey of the work done during 1966 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, states:—

“Statistically 1966 had not been a very eventful year. There has, as expected, been a 10 per cent reduction in the numbers of tuberculous patients on the register, a negligible fall in the numbers of new patients notified and a slight reduction in the numbers removed from the register as fully recovered.

The modification of the clinic work following the loss of two colleagues a year or two ago has now been more or less completed and work is now a matter of normal routine. Despite the reduction in new cases, there has been a modest rise from nine to fifteen in the numbers dying of tuberculosis, but these may not be entirely reliable figures since I know of at least two cases where notification was attributed to the disease but death in fact occurred from other causes.

In 1965 only 73 per cent of new patients were admitted to a sanatorium for treatment, but this year the figure was 87 per cent. This possibly indicates that the disease has been rather more severe on discovery than last year on the average, but that is not the clinical impression.

In 1965 there were 24 patients with positive sputum who were not in hospital. It is satisfying to note that the figure this year is only six.



Due to lengthy absence of a member of the medical staff because of illness, many of the routine supervisory clinics were not held and the total number of attendances for the year is therefore well below that of 1965."

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

"During 1966 there was a rise in the notifications of tuberculosis in the North Chest Clinic area from 65 to 76, and this was accompanied by a rise in the number of deaths from pulmonary tuberculosis from fifteen to 24, and from 29 to 34 where tuberculosis cases have died from other causes.

These figures would bear out the clinical impression that we are still seeing some very widespread disease in some patients, mostly in the older age group among people who do not readily seek medical advice.

One hundred and forty-nine were removed from the register as recovered, and the total number on the register has fallen from 1,291 to 1,128. Five hundred and fifteen contacts were clinically examined, and an additional 228 had X-rays only. The number of contacts found to have active pulmonary tuberculosis was five. Total attendances at the clinic was down slightly to 5,702, but the number of attendances of patients who have not got tuberculosis was up to 2,208. B.C.G. vaccinations given, numbered 331 and 614 tuberculin tests were performed during the year.

Looking back on 1966 there are therefore some disquieting features, namely the increase in the number of new cases, and the increase in the number of tuberculosis deaths. These features suggest that tuberculosis is not yet defeated, and that doctors in all branches of the Health Service and outside it should be aware of the danger. Eternal vigilance remains essential. It may be next year the figures will again assume a downward trend, and that 1966 may turn out to be a freak year. We shall have to wait and see."

Dr. S. Kalinsky, of the Central Chest Clinic, states:—

"During the past year 200 patients and 214 contacts were seen and a total of 150 B.C.G. vaccinations were given at the Central Chest Clinic and the Liverpool Maternity Hospital.

The Central Chest Clinic is well organised and easy to run. This applies particularly to the examination of patients since it is possible for them to be X-rayed and seen during the same visit. Of the 129 new patients for the year, 29 have been diagnosed as suffering from tuberculosis."



Dr. D. Osborne Hughes, of the East Chest Clinic, states:—

“The decline in the number of known cases of tuberculosis continues, the Register was reduced by a further 120 cases during the year.

The figures for pulmonary disease can be regarded as reasonably accurate, but notification of cases of non-pulmonary tuberculosis disease is sometimes omitted and it is possible that some cases do not come to official notice.

During 1966 the figures for male pulmonary cases show a greater improvement over 1965 than those for females, but even so, the men on the Register are in the majority.

Chronic bronchitis and carcinoma of the lung, both predominantly also diseases of men, are still far too prevalent when it is considered that they must now be recognised as being to a large extent preventable, if, individually and as a community, we made a determined effort to ensure that we breathed purer air.

B.C.G. vaccination is now well established as a preventive measure against tuberculosis and the 800-odd patients vaccinated include some done at the request of parents.”



# VENEREAL DISEASE

## INCIDENCE OF GONORRHOEA

There was a slight increase in incidence of gonorrhoea on the 1965 level, affecting both men and women. As may be seen from the table below this simply represents the normal random fluctuation which is to be observed when statistics are collected annually. There is no indication of any particular epidemiological factor to account for this increase.

Age in years	1946		1961		1962		1963		1964		1965		1966	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Under 15	—	4	—	5	—	1	—	2	—	—	—	—	—	1
15-17	21	17	24	27	42	25	37	31	49	43	23	21	26	45
18-20	262	79	180	94	184	86	204	85	228	129	143	94	164	126
21-25	978	141	416	138	429	106	427	122	541	140	418	149	400	157
26-30	870	88	295	56	294	36	302	57	377	66	281	59	334	74
31-35	513	53	155	21	148	20	149	23	170	29	130	19	157	28
36-40	259	29	102	16	79	13	85	10	91	8	70	10	90	21
41-45	135	5	52	3	44	6	49	3	70	2	51	7	48	8
46 and over	74	6	49	4	42	4	64	3	43	5	35	6	59	3
Total	3,112	422	1,273	364	1,262	297	1,317	336	1,569	422	1,151	365	1,278	463

## INCIDENCE OF SYPHILIS

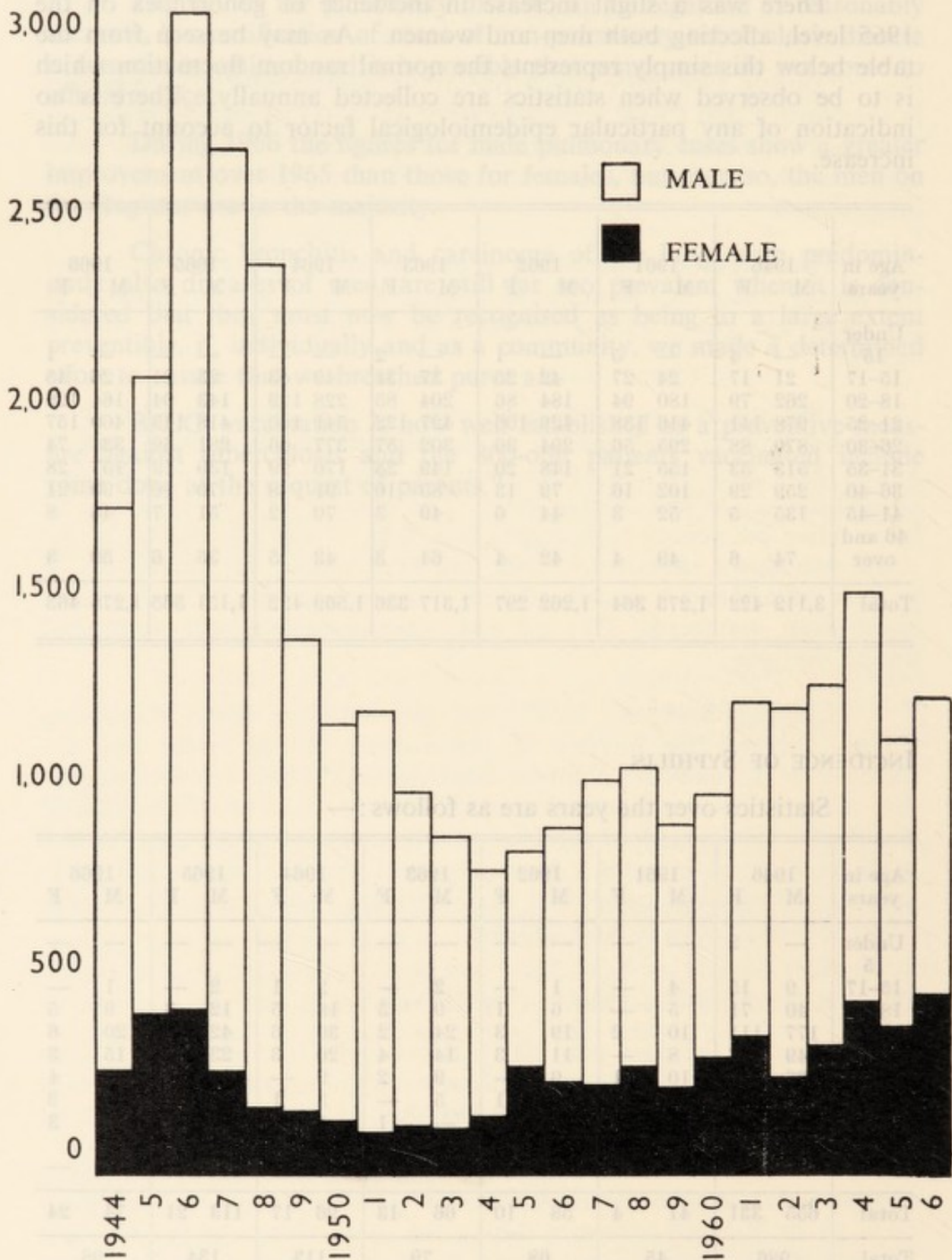
Statistics over the years are as follows:—

Age in years	1946		1961		1962		1963		1964		1965		1966	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Under 15	—	2	—	—	—	—	—	—	—	—	—	—	—	—
15-17	9	15	4	—	1	—	2	—	2	1	2	—	1	—
18-20	40	71	5	—	6	1	9	3	18	5	12	3	9	5
21-25	177	111	10	2	19	3	24	2	36	6	42	14	20	6
26-30	149	57	8	—	11	3	14	4	20	3	23	2	15	3
31-35	136	41	10	1	9	—	9	2	9	—	14	1	10	4
36-40	73	23	2	1	4	1	5	—	3	1	7	—	7	3
41-45	32	5	2	—	4	—	—	1	5	1	5	1	5	3
46 and over	39	6	—	—	4	2	3	1	3	—	8	—	7	—
Total	655	331	41	4	58	10	66	13	96	17	113	21	74	24
Total M & F	986		45		68		79		113		134		98	



# INCIDENCE OF GONORRHOEA

1944-1966

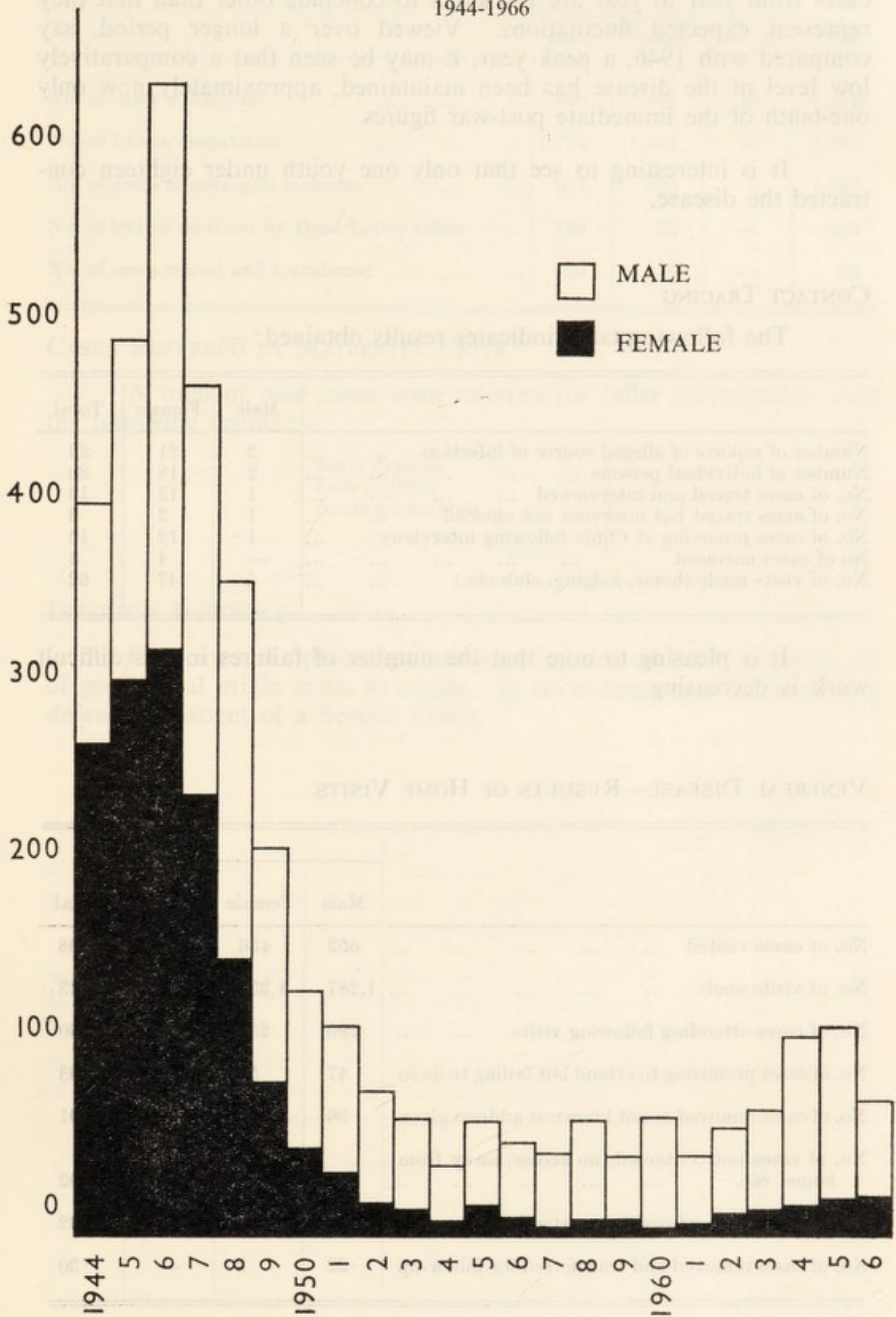




700

## INCIDENCE OF SYPHILIS

1944-1966





The incidence of syphilis was lower than the year before but still higher than in the early sixties. The differences in the total number of cases from year to year are too small to conclude other than that they represent expected fluctuations. Viewed over a longer period, say compared with 1946, a peak year, it may be seen that a comparatively low level of the disease has been maintained, approximately now only one-tenth of the immediate post-war figures.

It is interesting to see that only one youth under eighteen contracted the disease.

#### CONTACT TRACING

The following table indicates results obtained:—

	Male	Female	Total
Number of reports of alleged source of infection ... ..	2	21	23
Number of individual persons ... ..	2	18	20
No. of cases traced and interviewed ... ..	1	12	13
No. of cases traced but interview not effected ... ..	1	2	3
No. of cases reporting at Clinic following interviews ...	1	12	13
No. of cases untraced ... ..	—	4	4
No. of visits made (home, lodging, club etc.) ... ..	5	47	52

It is pleasing to note that the number of failures in this difficult work is decreasing.

#### VENEREAL DISEASE—RESULTS OF HOME VISITS

	Male	Female	Con- genital	Total
No. of cases visited ... ..	552	456	—	1,008
No. of visits made ... ..	1,287	1,336	—	2,623
No. of cases attending following visits ... ..	296	254	—	550
No. of cases promising to attend but failing to do so	47	56	—	103
No. of cases removed or not known at address given	96	95	—	191
No. of cases not contacted, no access, away from home, etc. ... ..	68	34	—	102
No. of cases who refused to re-attend ... ..	23	9	—	32
No. of cases removed and transferred for follow-up	22	8	—	30



## VENEREAL DISEASE—PATIENT DEFAULTERS

	Male	Female	Con- genital	Total
No. of cases written to ... ..	1,286	978	10	2,274
No. of letters despatched ... ..	1,774	1,958	10	3,742
No. of cases reporting in response ... ..	657	526	9	1,192
No. of letters returned by Dead Letter Office ... ..	156	52	—	208
No. of cases traced and transferred ... ..	29	6	—	35

## CASES REFERRED BY MATERNITY UNITS

A total of nine cases were referred for fuller investigation with the following results:—

Early syphilis ... ..	2
Late syphilis ... ..	4
Acute gonorrhoea ... ..	3
Total ... ..	9

## INFANTILE INCIDENCE

Five cases of ophthalmia neonatorum, one of vulvo-vaginitis, all of gonococcal origin came to notice. In no instance was the mother a defaulting patient of a Special Clinic.



## MENTAL HEALTH SERVICE

The preamble to the Mental Health Act, 1959, under which the mental health service operates, states that its object is to . . . "make fresh provision with respect to the treatment and care of mentally disordered persons". These two words, treatment and care are the key to the Act. Previous legislation had emphasised custody and control and public policy tended to isolate the mentally disordered and keep them in hospital for the good of the community long after treatment had finished. The emphasis is now completely changed; with advances in medical science has come the realisation that community care is possible and isolation unnecessary in many cases. Many people can be discharged from hospital after weeks or months instead of years and the Act not only assumes that they *should* be discharged but places responsibility for their welfare after discharge on local health authorities.

Thus the whole of the work of the mental health service can be seen as support and help for the patient and his family within the community whether directly by the personal contact of home visits, by affording training and occupation, or by offering an acceptable substitute for home life if necessary.

There has been no slackening of effort in 1966 in any of these branches of the work and notable development in two of them—the long delayed opening of the sheltered workshop at New Hall took place in September, and co-operation with the hospitals received a fillip by the attachment of a senior officer to hospitals with the object of smoothing the return of patients to the community.

The latter development can be examined under the first heading to this report, viz. :—

### HOME VISITS AND CO-OPERATION WITH HOSPITALS

Though the number of visits paid—15,485—was slightly smaller than in previous years due to the fact that more officers were away from duty on full-time courses, it represents an enormous amount of work.

Visits can, of course, only be made if the department is informed of a need and this information is given in three chief ways—mentally ill people are notified on discharge from hospital, mentally subnormal people are notified (either as children or as school leavers) by the Education Department and, thirdly, doctors, social workers, and relatives all get in touch with the department from time to time.

In 1966 the numbers under the headings were :—

Hospital discharges notified	...	...	1,456
Subnormal notification			
Unsuitable ...	...	...	57
School Leavers ...	...	...	139
Doctors, social workers, relatives, etc.	...	...	894



In general, co-operation with the psychiatric hospitals is now much closer than it has been in the past. The Principal Medical Officer (Mental Health) attends meetings with consultants at the hospitals at which policy matters are discussed and such discussion has smoothed out difficulties which formal correspondence had not been able to solve.

The scheme by which a senior mental welfare officer regularly attends the two chief psychiatric hospitals taking Liverpool patients is proving a great success. The officer has established a most satisfactory relationship with the medical and nursing staff, has access to the records and in his informal visits to the wards has been able to gain the confidence of patients so that, by the time discharge is contemplated, he is well aware of any problems confronting them and can take action to make the crucial transitional period as easy as possible. Instead of a cold, unwelcoming home, the patient who lives on his own finds everything in order and another officer ready to help in the days ahead; the family of the patient, who is anxious about his welcome home, is visited and reassurance given; allowances are arranged in readiness and discharges are postponed until the domestic circumstances are reasonably satisfactory.

Not all patients have such problems, of course, but the regular presence of an officer able to help is a real comfort at a difficult time. One example may be given—Miss C. has been in hospital a number of times, it usually being necessary to invoke the compulsory provisions of the Act. She was ready for discharge on the last occasion, in March 1966, but on visiting her home where she lived alone, the officer found it filthy and uninhabitable. There followed what may be described as a round-up of voluntary help—one society gave furniture, another bedding, a third arranged for rooms to be decorated, others cut the hedge and removed garden rubbish and a private firm generously moved the furniture free of charge. Allowances and home helps were also obtained and, altogether, the home to which Miss C. returned a few days later made a bright and cheerful picture.

Home visits are often continued for very long periods—in the case of mentally subnormal people especially, visits go on at least until adult status is reached and sometimes throughout life. The oldest person being visited is 76-year-old Mr. D. who lives with his sister. His story epitomises the progress made in dealing with mentally subnormal people. In his young days his mental handicap did not prevent him from serving many prison sentences for small offences until at age 33 he was placed in a "mental deficiency institution" from which he was not discharged for many years.

He is a happy individual well known as a "character" in the neighbourhood and nowadays the mental welfare officer just pays an occasional visit to see that he and his sister are comfortable and arranges



a yearly holiday for him. If anything happened to his sister, Mr. D. would no doubt be quite happy at one of the New Hall hostels.

As has been emphasised in previous reports, too much must not be claimed for visiting. Mental welfare officers tackle the family and social problems, provide a friendly outlet for grievances and confidences, are often able to recognise if a patient is approaching a recurrence of illness and can estimate when family strains become intolerable. The benefit of their services can often be seen, but periodic visits, however frequent, are unlikely to affect long-standing and deep-seated conditions of mind and the officers are used to making great efforts without apparent result.

Two cases dealt with during the year may be cited to illustrate this point:—

Mr. S., a man in his 70's, was referred to the department in May by his doctor. He had not previously been a patient, though the Welfare Department had had some dealings with him earlier, apparently without success. Living in poor, neglected surroundings with an unmarried sister just a year younger, he had apparently lost all interest in his life and his personal appearance. He seldom washed, his hair and beard were long and unkempt and he had not been out of the house for ten years.

Was this a case which the mental health service could help? He was not confused in mind, had a fair knowledge of current affairs—he had just “lost interest”.

It was decided that practical help should be given whether or not he was mentally ill and, with his consent, two officers washed and shaved him and cut his hair. Through co-operation with the Welfare Department the services of a chiropodist were obtained, and a change of clothing effected—Mr. S's own clothing was in an indescribably filthy state.

The doctor got no co-operation when he suggested vitamin tablets, Mr. S. stating that they were probably poisonous and, the encouragement given by the mental health officers having effected no lasting improvement, he was seen by a consultant psychiatrist who thought him a “paranoid recluse”. He referred him for hospital treatment and by this time his depression was such that compulsory admission was felt desirable. He was admitted to Sefton General Hospital at the end of September and during the following weeks the mental welfare officers made strenuous efforts to improve the domestic situation by arranging the redecoration and refurnishing of the home.

Sister and brother are devoted to each other and he was delighted to be discharged a week before Christmas—the mental welfare officer had ensured that the ingredients of a comfortable Christmas existed and he visited on Christmas Day, taking the Christmas dinner with him.



Alas! the former pattern was already beginning to re-form. Though he enjoyed his dinner he had not washed or shaved and his apathy was returning. The last report at the end of the year was "Regular visits will continue".

For contrast to the above we can take the case of Miss C. who has been living in the community for the past year after spending 27 years in a psychiatric hospital.

For many years she was a "certified" patient suffering from a severe psychotic depression. A leucotomy operation was performed and for six years prior to discharge she had remained as an informal patient and had spent leave on a number of occasions with her niece.

When discharge to the niece was considered the hospital doctor described Miss C. as "institutionalised", a word which to most people carries connotation of dependence and utter lack of initiative and will-power. To such a person a return to community life could be terrifying—the changes of the last three decades can alarm many people who have lived through them, let alone one who was sheltered from them.

The mental welfare officer has paid very careful attention to this need for adjustment and the relatives have been most understanding. With constant encouragement Miss C. has overcome the feelings of inadequacy and fear of society and is described in the latest report as pleasant, cheerful, of good appearance and making excellent progress.

The improvement in liaison with the psychiatric hospitals described above, applies also to the hospitals taking mentally subnormal people, though here co-operation assumes a different aspect—the difficulty has always been the shortage of hospital places.

The shortage still remains but is not so acute. One factor making for improvement is the development in the mental health service's own facilities—provision of more and better training, hostels, workshops, special care facilities, etc., has meant some patients who otherwise would have felt it necessary to apply for hospital care have been able to keep children (and adults) at home. The other factor is that the Regional Hospital Board has increased its accommodation. The waiting list has gone down from the peak figure of 146 in 1954 to 49 in 1966.

The Regional Hospital Board during the year carried out a review of its accommodation and set up, jointly with the mental health service, an out-patient clinic which should be of benefit in the future.

In general it is felt that difficulties are better appreciated on both sides but, while a waiting list of urgent cases continues, misery and family upheaval remain and the Health Committee must continue to express anxiety and press for action. An example will serve to emphasise this:—



When G. was notified five years ago as unsuitable for education in school, his restlessness and tantrums made him difficult to manage. He was then five years old. Attendance at the Cherry Tree Centre, New Hall, was arranged almost immediately and he settled down well there. Control at home was still difficult and short-term care was arranged for him during the holidays. When the special door-to-door transport system between home and training centre started he was one of the first to be given a place.

By 1964 his mother had had two more children and his increased restlessness and destructiveness caused her constant anxiety. Sedation by his doctor seemed to have little effect. The position did not change very much up to the beginning of 1966. Obviously the domestic situation of his mother was adversely affected and control even at the training centre, was very difficult. Father, a co-operative and conscientious man, still would not hear of hospital care, saying it was the parents' duty to look after their children as long as they were able. But by June his attitude had changed—G. was not attending the centre, neighbours were complaining that he was scratching and bruising their children and he had been caught carrying his baby sister upside down, having taken her out of her pram. The Regional Board have since provided accommodation for two temporary periods to give the parents some relief but have not been able to give a place for extended care.

In the meantime, mother finds it impossible to get him to the training centre—he kicks and bites, throws things at the baby, of whom he is obviously jealous, and is completely out of control. One of the recent reports by the visiting officer says that permanent care is extremely urgent if a tragedy is to be averted.

These details are cited to show that the Board have some way to go before the hospital vacancy position can be considered satisfactory—parents who have made every effort over the years to care for a child who obviously needs admission to hospital should not have to wait months or years when they have reached a point of decision which has caused them so much heart-searching.

Two large groups of mentally subnormal people are the responsibility of specialist officers—for children attending training centres one officer acts as a liaison between home and centres, and for the sheltered workshop another officer effects a similar liaison and also deals with employment. With 350 children and 400 adults attending the various centres the work of these two officers has increased and each has been given the services of welfare assistants to help with routine visits.

Home visits may help mentally ill people to regain their independent place in the community but in the case of some mentally subnormal people independence is not a practicable aim and the object of the mental health service must be to provide opportunities for



maximum development within a sheltered environment. One of the chief ways of doing this forms the next section to this report.

#### TRAINING AND OCCUPATION OF THE MENTALLY SUBNORMAL

The service provides training for children who are reported as unsuitable for education at school and training or sheltered occupation for adults. In addition, a proportion of the children who leave special schools are informally notified as being in need of help because of their subnormality. Thus in 1966, there were 57 children and 139 school leavers in these two categories. Many of the school leavers needed only general guidance and in fact many find jobs almost immediately and the family usually requests a cessation of visiting.

The accommodation in the various types of centre is shown below, and the positions when the service started in 1948 and in 1956 are shown for comparison:—

	At 31.12.48		At 31.12.56		At 31.12.66	
	Num- ber	Accomm- odation	Num- ber	Accomm- odation	Num- ber	Accomm- odation
Mixed Centres (Juniors and Adults)...	1	100	3	315	—	—
Junior Centres ...	—	—	—	—	5	320
Adult Centres ...	—	—	—	—	2	120
Sheltered Workshop ...	—	—	—	—	1	300
Total, all centres ...	1	100	3	315	8	740

The three mixed centres continued, very overcrowded, until the acquisition of the New Hall estate in 1959, enabled the Committee to produce the plan, now nearing completion, by which all adult training and occupation is carried on at New Hall whilst the junior mixed centres plus others at New Hall have been allocated to children's training only.

The great event of the year was, of course, the opening of the workshop at New Hall in September. Previously three buildings had been used for workshop purposes and the opening of the new workshop left these for expansion of training. Adults from Dovecot, Garston and Princes Road centres were transferred and the large waiting list of adults was completely absorbed.

The workshop is the only completely new building at New Hall. Built and equipped at a cost of £83,000, it consists of a 200 by 60 feet workshop floor divided into bays, a storeroom, education room and dining room. The accommodation for 300 was almost fully taken up



by the end of the year. The mid-day meal, provided free of charge, is cooked in the New Hall central kitchen. Free contracts on public buses are given to those able to travel alone and others travel on special buses.

There has been no shortage of work and the following are among the jobs being done for various firms: stripping cable for scrap metal, labelling cartons, packing cups, inserting pourers in salt tops, packing toy sets in boxes. The standard of work is high and the morale and well-being of the workers are obviously improved by their inclusion in a purposeful group. All visitors, and there have been many parties and individuals attracted to see this new venture, are impressed by the obvious happiness of those participating.

All money received is divided on a points system which takes into account attendance and effort as well as ability. Since the scheme started the following have been the yearly amounts distributed:—

1962	...	...	£2,514	1965	...	...	£6,225
1963	...	...	£5,865	1966	...	...	£6,947
1964	...	...	£5,275				

Training in the junior centres has gone forward as usual, helped by the improved transport facilities now available. Children physically as well as mentally handicapped whose physical disabilities formerly kept them at home are now transported to special classes in the training centres direct from their homes. An extension of the provision, by the opening of a special centre for such people at New Hall, will, it is hoped, be possible next year.

The boundary between the functions of Regional Hospital Board and Local Health Authority is somewhat tenuous in this sphere of activity and close co-operation is being maintained in the planning of this development.

At Princes Road Centre facilities were offered for the consultant psychiatrist at Moston Hospital to hold a weekly evening out-patient addiction clinic, use of the premises being given free of charge.

## HOSTELS

Of the thirteen hostels planned for New Hall, seven are now well established and the size of the waiting list makes it certain that the remaining six, which were nearly ready for occupation at the end of the year, will be fully used.

The following figures will be of interest:—

In residence 1.1.66	...	46 (22 men, 24 women)
In residence 31.12.66	...	67 (29 men, 38 women)
Comprising from hospitals	...	49
from community		18
Discharge—own or parents request	.....	4
To hospital admission	.....	5
To remand centres	.....	1



Age groups of residents at 31st December, 1966:—

16-19...	...	...	...	...	...	2
20-29...	...	...	...	...	...	21
30-49...	...	...	...	...	...	27
50 and over ...	...	...	...	...	...	17

Sufficient time has elapsed to say with some confidence that the hostels are proving useful, that residents are happier and leading fuller lives than they otherwise would have done, that far from causing any disruption in the surrounding community New Hall is well integrated with it.

When it is realised that upwards of 500 mentally subnormal people of all ages are at New Hall daily (resident and non-resident) the absence of disturbance is a tribute to the good sense of the people living in the neighbourhood and is in marked contrast to the hysterical outbursts which are publicised from time to time when even small centres are planned in residential areas.

New Hall has rarely been free from parties of visitors during the year and one predominating impression is left with most people—the capacity of these mentally subnormal people for cheerfulness and enjoyment.

The great improvement in some of the residents after a period of hostel life can be illustrated by looking at Mr. B's case:—

When he was admitted a year ago it was on trial as his behaviour and condition gave rise to some anxiety. Almost chair-bound, unkempt and illiterate, he had been left to his own devices at home for many years.

In striking contrast, today he takes a pride in his appearance, is walking without support, using his spastic hand, goes to night school for Mathematics and English twice weekly and takes part in all the social activities.

Even more can be done given officers who really live up to their title of houseparent. Unfortunately, not all persons available are of this calibre and the year has not been without its staffing difficulties. One is left with a strong feeling that this is one sphere of social work in which sympathy, commonsense and a real commitment to the idea of making a home for a family are more important than academic qualifications. This applies in New Hall, at least, where the size of the estate requires that a good deal of administrative work is done by the Superintendent of Hostels and not the houseparents.

The life of the residents compares favourably in variety and interest with that of many people in their own homes—they have television, bingo and other entertainments, good meals, good clothes, daily occupation suited to their capabilities, holidays—and may it not be said



that they have the added happiness of not feeling under pressure to "keep up with the Joneses"!

The department has as yet no hostels for mentally ill people. A long-standing plan to provide such hostels (scattered homes) on Corporation housing estates had not been advanced pending completion of the thirteen hostels for mentally subnormal adults at New Hall, but is being pushed forward now that the New Hall hostels are completed. The experience gained at New Hall will be useful even though some of the problems will be different.

It is in fact difficult to assess the likely need. In June the psychiatric hospitals estimated that about 70 people, half of whom might be over the age of 65, would be suitable for discharge if hostel accommodation were available but the position is constantly changing. The difficulties, staffing and otherwise, of running small hostels for psychiatric patients in the open community are evident and the project needs very careful consideration at every stage.

The department also lacks any hostels for children. It will be of interest to mention that accommodation for children was under consideration by the Health and Children's Committees in August when the latter Committee suggested that the Children's Department should not have to accept "deprived" children who are mentally subnormal. In a very full report the Medical Officer of Health suggested that each case should be considered individually and that a Children's Department hostel or foster home could be suitable and beneficial to a mentally subnormal child; if such a child did not have an adverse effect on others it should be normal practice.

#### MENTAL HEALTH CENTRE—JOHNSON STREET

Three rehabilitation units now cater in some degree for mentally ill people. The two which deal with physically handicapped people also are reported on in the Occupational Therapy section of the report but it is appropriate to report on the Johnson Street unit here as it deals entirely with mentally ill people and works in the closest co-operation with the officers of the mental health service whose offices are situated in the same building.

About 30 people attend daily. The mornings are spent on contract work—chamois leathers, feeders and panscrubs and on the purchasing and preparation of mid-day lunch. This latter activity in which all take part is very valuable as patients are familiarised with shopping and catering and also are provided with a proper meal each day.

Recently the need for work demanding sustained concentration and dexterity was felt and to this end printing was introduced. This has proved a popular form of therapy especially with the less severely ill patients.



The social and recreational side of the unit is also being developed, activities such as quizzes, dancing lessons, outings and visits, etc., occupy the afternoons. Contact has been made with other occupational therapy units in local hospitals and table-tennis tournaments and quizzes are played against them. The attendance at the social club, held each Wednesday evening, has increased this year, and the programme of forthcoming events at the club is circulated to organisations catering for similar people. Contact and exchange visits have been arranged. In organising club activities the staff are assisted by the newly formed patients' committee. Film shows and demonstrations are popular. Swimming—a new activity, has proved beneficial to many patients. Those participating claim to feel more relaxed after taking part. As in previous years, the Christmas party and summer holiday were successful.

As always, in planning therapy for the patients, close liaison is kept with their mental welfare officers.

#### ADMISSION TO HOSPITAL

It must not be forgotten that the mental health service is involved in a large number of admissions to psychiatric hospitals, two mental welfare officers being continuously engaged on this duty during the day and one at night. Admissions are normally intended by the Mental Health Act to be informal but it is recognised that this is not possible in all cases and the officers are mainly engaged with urgent admissions in which the element of compulsion must be considered.

Measures to reduce the proportion of compulsory admissions, which remains high in this area as compared with others in proportion to total population, were again taken and a further reduction took place. The steady reduction can be seen from the following figures—admissions dealt with by mental welfare officers in the last five years:—

	1962	1963	1964	1965	1966
<i>Compulsory Procedure</i>					
Section 29 (Emergency) ...	1,116	1,083	958	777	711
Section 25 (Observation) ...	56	65	88	199	171
Section 26 (Treatment) ...	9	13	10	4	7
Section 60 (Court) ...	18	22	19	17	21
<i>Informal</i> ...	144	109	174	299	399

The initiative for compulsory admission usually starts with general practitioners; mental welfare officers were instructed this year to discuss with them more critically the necessity for compulsion before deciding whether to apply for compulsory admission. A special report form is now being completed in every case in which emergency admission is requested by the practitioner and a post-admission enquiry is being



made jointly by medical representatives of hospitals and the mental health service to assess the correctness of the admission procedure finally adopted. The matter was being further explored by the Health Committee at the end of the year following an intervention by the Regional Officer of the Ministry of Health.

In the case of mentally subnormal people compulsory procedure is rarely necessary, except where Court Orders are made, though it must be said that of a total of 58 hospital vacancies given, 23 were in fact as a result of such Orders.

## STAFF

Reference has been made to the dearth of suitable resident house-parents. Recruitment to other grades has been satisfactory and the department is well satisfied with the new policy of appointing as trainee mental welfare officers young men and women who have the necessary educational background to complete qualifying courses.

The staff of the service now totals 208, the great increase (compare 1960, total 60) being due of course mainly to the vast developments at New Hall.

Its composition is as follows:—

Principal Medical Officer (Mental Health) ... ..	1
Superintendent Mental Welfare Officer and Deputy ...	2
Senior Mental Welfare Officers ... ..	6
Mental Welfare Officers and Trainees ... ..	21
Welfare Assistants ... ..	4
Senior Assistant Admin. and Deputy ... ..	2
Clerical and Typing ... ..	8
<i>Hostel Staff</i>	
Hostels Superintendent ... ..	1
Houseparents ... ..	7
Attendants (first appointments to be made shortly) ...	6
Domestic staff ... ..	54
<i>Workshop Staff</i>	
Manager and Deputy ... ..	2
Senior Assistant Supervisors ... ..	3
Assistant Supervisors ... ..	13
Domestic staff ... ..	4
<i>Training Centre Staff</i>	
Senior Supervisor ... ..	1
Supervisors... ..	6
Senior Assistant Supervisors ... ..	6
Assistant Supervisors and Trainees ... ..	37
Domestic staff ... ..	24



## AMBULANCE SERVICE

### WORKING PARTY ON AMBULANCE TRAINING AND EQUIPMENT

One of the outstanding developments affecting the ambulance service during the year was the publication by the Ministry of Health of the report of the Working Party on Ambulance Training and Equipment. Part I—Training. The terms of reference of the Working Party were: "to advise on the revision of the guidance given by the Minister of Health and the Scottish Home and Health Department on the equipment and the training of staff in the ambulance services provided under the National Health Service Acts; to recommend, in the light of recent developments in accident surgery, what should be included in post-entry training and the form this training should take; and to prepare a model manual if this is thought desirable". The report make some 49 recommendations and inter alia the introduction of a Central Ambulance Services Council with Standing Committees on training, equipment and organisation to advise the Minister on all aspects of the ambulance service. In addition the report makes the following recommendations regarding new entrants:—

1. A new entrant should be regarded as being on probation until he has obtained the full Ambulance Services Proficiency Certificate, the syllabus for which is detailed in the report; he should wear ambulance uniform distinguishable from that worn by trained ambulance staff; he should proceed as soon as possible after entry, to a training school for a course leading up to Part I of the Ambulance Services Proficiency Certificate and should complete this course within six months of joining the service.
2. If the new entrant is unsuccessful the training school should consider whether he be allowed to take the test again with or without further formal instruction. If he is not recommended for or is unwilling to make a further attempt, he should be regarded as unsuitable for further employment in the ambulance service.
3. Twelve months after obtaining Part I of the Certificate the trainee should appear before a board, appointed by the Central Ambulance Services Council, for oral and practical tests (of which a written test may form a part) based on the experience gained on operational duties during the preceding twelve months. If the board is satisfied that he has achieved the required standard they should recommend to the Council the award of a full proficiency certificate providing he has obtained a satisfactory report from the employing authority.
4. Transitional arrangements for awards to existing staff have been made providing the employing authority gives a satisfactory report.



5. The qualifying certificates recommended are:—

- (a) Local training certificate
- (b) Part I and full proficiency certificate
- (c) Ambulance Service Control Course
- (d) Potential Officers and Instructors Course

6. The report recommends the introduction of a single national school, or alternatively, if a single national school is impracticable the introduction of Regional Training Schools based on a combination of Regional Hospital Board areas. If the Minister agrees to the introduction of Regional Training Schools, Liverpool is mentioned within the report as one of the areas that might be selected to establish a school.

#### CADET TRAINING IN LIVERPOOL

My previous annual reports have mentioned the Cadet Training School and it is pleasing to report that this authority is prepared to meet any of the training requirements contained within the report. However, I am mindful of the fact that some of the older members of the service have not had the same opportunities as the cadets and consideration will have to be given to increasing the number of Training Officers to enable all staff to be brought up to the required standard.

Twelve cadets were recruited in September, 1965 and eight finished the full course, sat the preliminary examination of the Institute of Ambulance Personnel in November, 1966, and became fully operational in December, 1966. A further eleven cadets were recruited in February, 1966 and will sit the preliminary examination in April, 1967. In addition five ex-cadets were successful in passing the Diploma examinations in October, 1966. Another interesting feature is that for the second year running, an ex-cadet from Liverpool obtained the highest number of marks in examinations held at various centres throughout the country.

#### STAFF TRAINING

To encourage drivers who have not had the same opportunities for training as cadets, three-day courses were held on emergency life saving measures and new techniques in first aid. The courses proved to be very popular amongst the staff and of tremendous value to them. In addition, from the public relation aspect it did much to give staff on the accident out-stations, who do some wonderful work, a feeling that they form an important and integral part of the ambulance service.

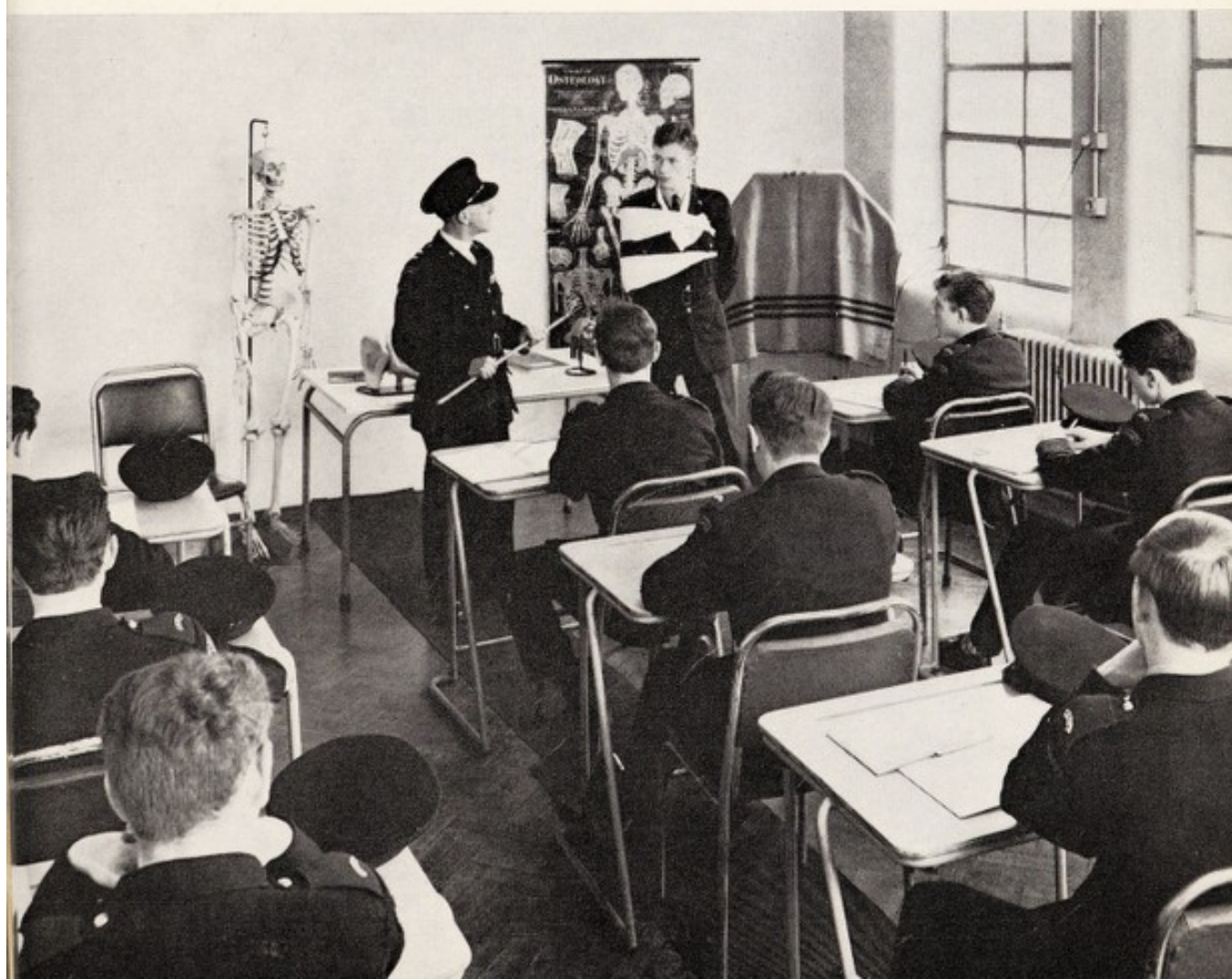
#### CASE LOAD OF PATIENTS

The number of cases moved throughout the year amounted to 289,861 which shows an increase on the previous year of 18,541. Much of this increase can be credited to the internal transportation of patients at Walton Hospital caused by building redevelopment. An increase in





TRAINING OF AMBULANCE CADETS







SHELTERED WORKSHOP, NEW HALL—WORK IN PROGRESS



the number of patients attending day centres also contributed. Ambulance vehicles travelled a total of 1,045,135 miles using 48,975 gallons of petrol and 11,410 gallons of diesel oil.

## EMERGENCY CALLS

Details of emergency calls received during 1966 are as follows:—

		(A)	(B)	(C)
Month		Accident/ Emergency Calls	False calls with good intent	Malicious False calls
January	...	1,986	161	13
February	...	1,863	103	21
March	...	2,018	115	15
April	...	2,045	137	28
May	...	2,125	146	23
June	...	1,954	134	15
July	...	1,985	171	22
August	...	2,053	186	18
September	...	2,003	115	25
October	...	1,998	143	17
November	...	1,964	130	31
December	...	2,154	192	23
Total	...	24,148	1,733	251

(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.

## TRANSPORT OF THE HANDICAPPED

It was decided during the year to transfer the day-to-day operation of the handicapped persons transport service to the ambulance service. It had become obvious that the rapid expansion of this service necessitated greater supervision and it was felt that, rather than create several new supervisory posts and still run the risk of inadequate garage accommodation, it would be more beneficial if the complete operation and management of this service became the responsibility of the Chief Ambulance Officer.

The change meant that headquarters of the handicapped persons fleet was based on Upper Stanhope Street Ambulance Station where certain vehicles are kept with others at Westminster Road and Lower Breck Road.

The service conveys approximately 240 persons a day and delivers in addition approximately 750 meals each day. Details are as follows:—



**HANDICAPPED PERSONS TRANSPORT—1966**  
**Number of Persons Attending Centres Daily**

	Longmoor Lane	Rumney Road	Walton Village	New Hall	Mencap House	Sandfield Park	Greenbank Lane	Princes Road	Dovecot	Garston	Mill Street	Cadwa Hall	Totals
Monday	20	17	12	67	32	36	11	15	14	11	—	—	235
Tuesday	18	16	18	67	32	36	11	16	16	13	—	—	243
Wednesday	23	16	—	67	32	36	11	16	16	13	13	—	243
Thursday	21	13	13	67	32	36	11	16	16	13	—	—	238
Friday	19	18	12	67	32	36	11	15	14	11	—	18	253
Total	101	80	55	335	160	180	55	78	76	61	13	18	1,212

**NUMBER OF PERSONS ATTENDING  
CENTRES OF AN EVENING**

	Garston Baths	A.T.C.	E.P. Rodney Street	Wheelchair	Inskip	Deaf/Dumb	Totals
Times							
Monday	—	—	—	—	—	—	—
Tuesday	—	—	—	—	30	—	30
Wednesday	—	—	—	30	—	11	41
Thursday	11	4	—	—	—	—	15
Friday	—	—	16	—	—	—	16
Totals	11	4	16	30	30	11	102

**MOBILE MEALS—DAILY RUNS**

Number of Vehicles used      Pick up Points for Meals at 10.30  
on Meals Rounds Daily

	Lunches 10.30	Teas 17.00	Melwood House	West- minster House	New Grafton House	Holt House	Lathbury House	Aigburth House
Monday	20	7	1	14	2	1	1	1
Tuesday	20	7	1	14	3	1	1	—
Wednesday	20	7	1	14	2	1	1	1
Thursday	20	7	1	14	3	1	1	—
Friday	20	7	1	14	2	1	1	1
Saturday	20	7 (Pick up 15.00)						

**Note:** All tea runs are collected from Westminster House.



**MOBILE MEALS—DELIVERIES TO LUNCHEON CLUBS**  
**Block Meals Collected at 1100**

Delivered to														
	From		Presby- terian Church, Green Lane	Walton Village Hall	Childwall Luncheon Club	W.V.S., Paradise Street	Metho- dist Church, Lower Lane	Red Triangle Club	Con- servative Club, Crawford Avenue	Domestic Mission, Mill Street	Holy Trinity, Wavertree	Dovedale Luncheon Club	Cadwa Hall	Picton Road Conservative Club
	West- minster House	New Grafton House												
Monday	2	—	—	1	—	1	—	—	—	—	—	—	—	—
Tuesday	6	—	—	1	1	—	1	1	1	—	—	—	—	1
Wednesday	2	1	1	—	—	—	—	1	—	1	—	—	—	—
Thursday	3	—	—	1	1	—	—	—	—	—	1	—	—	—
Friday	3	1	—	1	—	1	—	—	—	—	—	1	1	—
Saturday	—	—	—	—	—	—	—	—	—	—	—	—	—	—



## OCCUPATIONAL THERAPY

In 1966 the occupational therapy section has been fully occupied in attending to the needs of many of the handicapped and disabled of Liverpool. Although fully staffed throughout the year, changes in personnel have occurred and it is interesting to note that two vacancies were quickly filled by newly qualified staff who had spent part of their training with this section.

### REHABILITATION UNITS

As before the aim has been to treat the patient as a human being and to assess his disability in the light of his home background. This approach is peculiar to a domiciliary occupational therapy service and it is an asset which this service tries to realise to the full. Examples can be seen in the detailed case histories and in the accounts of the co-operation between the home visiting section and the occupational therapy units together with the social activities arranged by the section. All patients are seen at home or referred by the domiciliary occupational therapist who then decides whether treatment at a unit would be of value. A brief account of home background is now submitted to the occupational therapy unit together with the prescription card received from the medical practitioner concerned. The staff thus have a better picture of the medical and social history of the patient. Throughout the year the Deputy Medical Officer of Health had held clinical sessions to the advantage of patients and staff.

#### Rumney Road Unit

This unit has been staffed by two occupational therapists throughout the year and during this period 33 new patients were admitted and 26 discharged. There was an average attendance of between fifteen and twenty at each session. Lower limb activities, often difficult to provide, can now be given on an ankle rotator whilst the Oliver Rehabilitation machine—basically a treadle fretsaw with many adjustments, is used daily by as many patients as possible. The long-awaited kitchen alterations have been finished and it is now possible for patients in a wheelchair to use the sink and draining board.

Bathseats, bedboards and other simple woodwork projects are carried out by the male patients as are the more traditional forms of occupational therapy.

Social activities have included a theatre outing, a cinema outing and a New Year luncheon at which 50 patients were served a four-course traditional turkey meal.

This centre tends to treat the more chronic type of patient and possibly this is the reason for an absence of dramatic results. Nevertheless improvement is almost always present, perhaps not physically if the



disease is progressive but mentally in the attitude shown to disability, surely a most important aspect of rehabilitation. The following typical case histories are illustrated:—

1. *Mr. W.*, aged 44, suffers from muscular dystrophy which at present is rapidly progressive. He had given up work as a foreman joiner three years after he first noticed symptoms of the disease and when visited initially by the domiciliary occupational therapist was able to stand and walk a little and propel himself in his wheelchair. Structural alterations in the home were provided in the form of a hoist for transference from bed to wheelchair and a downstairs lavatory. Attendance at an occupational therapy centre was arranged to maintain mobility and morale and assess for aid for dressing, feeding, etc. Treatment was given by walking practice, use of treadle machine and by weaving, the patient's arms being supported and aided by slings and springs. Gradually weaving became impossible as the shuttle could not be held and typing was introduced. This was done by sticks attached to the hand by VELCRO straps. Deterioration was, however, more rapid in the upper limbs which are now virtually useless. *Mr. W.* can still walk, however, and practice is given in this at the unit. Obesity became a problem but the institution of a strict diet is counteracting this tendency and aiding walking. Morale continues to be amazingly high and *Mr. W.* takes part fully in any activity open to him.

2. *Mrs. S.*, aged 39, had a history of possible vertebro-basilar artery syndrome. She suffered from ataxia, nystagmus, intention tremor of left arm and increased reflexes. After an initial visit by the domiciliary occupational therapist she started to attend an occupational therapy unit. The aim of treatment was to encourage standing tolerance and improve balance, also to strengthen grip and improve fine finger movements. Treatment was given on a treadle machine for balance and co-ordination, hand exercise was provided by manipulation of specialised putty adaptations to the printing press together with typing and work on the electric sewing machine.

From being brought to the unit by ambulance *Mrs. S.* eventually was able to travel by bus, coincidentally her sewing improved in speed and accuracy. With the approval of her general practitioner and in co-operation with the disablement resettlement officer, *Mrs. S.* is now working part-time at her former occupation as a machinist.

#### Longmoor Lane Unit

A full establishment has been maintained throughout most of the year though there have been changes in personnel. There are now about 50 patients on the register and the majority of them attend daily. Difficulties of transport are still the limiting factor but the possibility of half-day attendance at the unit is being considered and this would have the advantage of reducing the waiting list though other factors have to be considered before the idea is implemented.



The unit is now equipped with an Oliver Rehabilitation machine and with the acquisition of a treadle-operated lathe, further expansion of the woodworking section is now possible. The work of the printing section is increasing and provides a valuable activity. The purchase of a thermograph has improved the scope and quality of work produced in this field. Simple adaptations to the printing machine make it possible to use it as treatment for a variety of handicaps and for this reason it is a valuable tool to the therapist.

Assessment for aids is frequently carried out at this unit and instruction to the handicapped is given in dressing, eating, cooking etc. At the present time a bathroom is being constructed, the purpose of which will be to teach independence and assess for aids in personal hygiene. A shower will also be fitted and the relative merits of shower and bath can be assessed, the knowledge obtained thereby being incorporated in adaptations to property for the handicapped.

### Young Paraplegics

A group of about ten young paraplegic patients attend the unit daily and are encouraged to take part in an active programme in which sport plays a large part. They and other patients go swimming several times weekly, play ball games, table tennis and "run" obstacle races to encourage co-ordination and wheelchair manoeuvrability. Future plans include archery and bowls.

It is also hoped to use gardening as a treatment in the near future. Some indoor gardening has been carried out and, as the unit stands in its own grounds, it is possible to cultivate an outdoor garden. Part of the grounds will be raised to waist level so that wheelchair patients can reach it easily. There are also plans for a greenhouse.

As indicated in previous reports both mentally and physically ill are treated by the occupational therapy section as the following case histories of patients at Longmoor Lane unit illustrate:—

Mr. E. S., aged nineteen, had been referred by the Disablement Resettlement Officer. He had attended an Industrial Rehabilitation Unit on leaving school but his future employment seemed very doubtful and the officer requested a further assessment. Mr. S. was found to be very voluble—mainly in the telling of "tall stories". He showed little concentration, and little ability to follow instructions. He was assessed on a variety of tasks, had an interview with his former headmaster who found a considerable deterioration, and finally was interviewed by the Principal Medical Officer (Mental Health). The latter concluded that Mr. S. was unsuitable for open employment but would benefit from sheltered employment at the New Hall Training Centre where he will be admitted in due course.

Miss C., aged 47, is handicapped since birth by a spastic left hemiplegia. Her life had been adapted accordingly but when referred



to occupational therapy her walking showed considerable deterioration and she had been issued with a self-propelled wheelchair. At the unit her assessor concluded that the fitting of a caliper might benefit her considerably. Arrangements were made for this to be provided and now Miss C. has a caliper to correct the inversion of her left foot. She is being given practice in walking when wearing this caliper and it seems likely that, if progress continues as at present, she will soon be able to dispense with her wheelchair except for outdoor use.

#### Johnson Street Unit

This unit continued to provide occupational therapy for the mentally ill, about 30 patients being treated daily. The mornings are spent on contract-work making chamois leathers, mops, bibs and nylon pan scrubs, and on the purchasing and preparing of a mid-day lunch. This latter activity in which all take part in turn is very valuable as patients are familiarised with shopping and catering and also are provided with the main meal of the day.

Recently the need for work demanding sustained concentration and dexterity was felt to be necessary and to this end printing was introduced. This has proved a popular form of treatment especially with the less severely ill patient.

The social and recreational side of the unit is also being developed. Social activities occupy the afternoons. Among other activities a monthly magazine is produced by the patients. The social club on a Wednesday evening has had an increased attendance this year and the programme of forthcoming events at this club is circulated to other organisations catering for similar people. Contacts and exchange visits have been arranged. In organising club activities the staff are assisted by a committee of patients. Film shows and demonstrations are very popular, while swimming, a new activity to many of the patients, has proved very beneficial. Those participating claim to feel more relaxed after taking part. As in previous years the summer holiday and Christmas party were very successful.

Rehabilitation is, of course, the aim of treatment in all cases and with most of the patients attending this unit this means re-employment. The following cases illustrate success and partial failure in this aim. Both patients have been diagnosed as schizophrenics.

Mr. A. came to the unit shortly after completing a course at an Industrial Rehabilitation Unit. He had a history of frequent admission to hospital and as no employment was available on the completion of this course it was felt that, if he were left at home in the intervening period, he would soon lapse into apathy again. The aim of treatment was to maintain the work habit and to resocialise. Mr. A. proved to be co-operative and joined in all activities. Eventually he obtained a job



as a storekeeper and he has held this post for some time now. He maintains contact with the unit through the Wednesday Social Club.

Mr. S. was treated at the unit for about two years before it was possible to place him in employment as a sweeper in a canteen—"under the wing" of another ex-patient, now well established in his job. Mr. S. held this position for nearly a year but his work gradually deteriorated and he finally had to be readmitted to hospital. On discharge it was difficult to persuade him to stir from home although he did occasionally visit the Wednesday Club. Eventually he was persuaded to recommence occupational therapy, but as he felt the staff at Johnson Street were "against him", he now attends Longmoor Lane Unit, where the rehabilitation process has started again. As with so many psychiatric patients their life is a recurrent cycle of events and occupational therapy can provide a useful "leg-up" when they are fit enough to take advantage of the facilities offered.

#### DOMICILIARY OCCUPATIONAL THERAPY

The trend of the domiciliary service continues to be towards the provision of aids, gadgets and structural alterations in the home. Assessment can now be carried out much more accurately at one of the units.

Wherever possible patients requiring long-term therapy are referred to one of the units but in some cases this is inadvisable. Therapy is then given in the home to provide as active a life as possible within the limits of the disability, viz.:—

Miss R. suffers from a multiplicity of illnesses; she has multiple sclerosis and asthma and has undergone a colostomy. In addition there is a tendency for stones to form in her single kidney. Fortunately she is single-minded by nature and all her energies are directed towards the maintenance of living alone in her Corporation flat. In spite of all her difficulties Miss R. and her flat are always clean and tidy. The heavy work is done by a home help but Miss R. herself manages many of the minor activities. Occupational therapy is directed towards the maintenance of hand dexterity and improvement of muscular tone. To these ends stool seating and stitched rugs have been the activities used.

In some ways Miss R. would benefit from attendance at one of the units but owing to her frequent prostrating attacks of illness this has not been suggested. She enjoyed both the Carol Service and the shopping expedition to a store in the City centre and may take part in the holiday at Caernarvon. Home visiting will continue and it is likely that further aids will be supplied as the multiple sclerosis pursues its inevitable course.

Sometimes home occupational therapy can be given as a "maintenance dose" during the waiting period before admittance to one of



the units. This period can often be valuable in assessment of the home situation.

Mrs. N. is in her 60's and suffers from osteoarthritis of both hips. When first visited she was extremely tearful and anxious. She was living with one of her married daughters and her family but while they were happy to make this a permanent arrangement Mrs. N. felt she was "in the way" and should go back to her flat which she shared with a rather "difficult" unmarried daughter. Unfortunately the flat was a first floor dwelling overlooking the cemetery and Mrs. N. had little inclination to return. At the initial visit Mrs. N. complained of feeling quite useless in contrast to her previous very busy life. She had been widowed at an early age and had worked as a canteen manageress to bring up her large family. Chamois mop-making was suggested as there is always a ready market for the finished article. Her work was very good and during visits good rapport was established between her and the therapist. Mrs. N. began to attend Longmoor Lane Unit where she gradually became less depressed and more adventurous mentally and physically. Eventually she felt brave enough to take the—to her—enormous decision of going back to her own flat having practised house-craft at the unit and being confident of her ability to be largely independent when equipped with suitable aids. When recently visited at home she agreed that her depression was much less severe. Her family are most impressed with the change especially with the fact that Mrs. N. has put her name down for the holiday at Caernarvon. Her walking is also much improved. They hope soon to be able to send back the wheelchair they have had on hire for the last two years. Mrs. N. will probably soon be ready for discharge but in this case some substitute will have to be found for the supportive role of attendance at the Occupational Therapy unit.

A good example of co-operation between various sections is the case of Mrs. J. She was first referred by a hospital as being in need of rehousing as she had suffered a right hemiplegia and could no longer live alone in her three-bedroomed house. She was eventually rehoused in a one-bedroomed flat on the first floor of a multi-storey block. Bath aids were supplied, also a walking-trolley and one-handed bread buttering board, tin opener and vegetable peeler. A home-help visits regularly and the caretaker of the block keeps a friendly eye open. Mrs. J. has settled down well in her new accommodation and hoped to come on holiday with the section this year.

Mrs. G., aged 51, suffers from osteoarthritis of the hips and spine, and obesity. In the house she had difficulty in walking, rising from a chair, bending, climbing stairs and getting in and out of the bath. These difficulties have been partially overcome by the supply of a trolley walking aid, a high chair, a long-handled reaching aid, an extra banister rail and bath aids. Mrs. G. now feels much more cheerful about the



future and is looking forward to having an invalid motor-vehicle so that she can do her own shopping.

## REHOUSING THE HANDICAPPED

Rehousing the handicapped has continued to occupy the therapists for much of their time and some progress has been made towards the building of dwellings specially adapted for handicapped as an integral part of the housing programme in the City.

Progress on plans for special dwellings to be designed for the handicapped has been slow owing to pressure of work in the Architect's Department but the first drawings have now been prepared and discussion has been held between the architect concerned and the Head Occupational Therapist. It has been agreed that the only really satisfactory answer to the problem of the wheelchair case is a bungalow and it is hoped that pairs of these can be built in different areas of the City.

This problem of housing the handicapped has increased during 1966 owing to the fact that the majority of multi-storey flats are quite unsuitable for wheelchair cases, many of them having narrow passages and very small bathrooms. While ground floor flats should be suitable for handicapped people it must be realised that children from the upstairs flats play round the ground floor, knocking on windows and causing noise and inconvenience to the occupiers who quite frequently cannot stand shocks and noise. The high rents of modern dwellings is a real problem for a family with a handicapped member. The wage earning capacity of a disabled man is often reduced, while a disabled housewife may require assistance which has to be paid for, and there is often extra expenditure on special food, clothing and heat. It is obviously advantageous to arrange alterations to new buildings at an early stage, but at this time it is impossible to find out what the rents are likely to be. This can cause embarrassment, when people are faced with a higher rent than they are able to pay.

Helping handicapped to be placed in the right sort of living accommodation is one of the most valuable forms of rehabilitation. It often means the difference between imprisonment in one room with dependence on other members of the family, and complete independence in all activities of daily living and even eventual re-employment.

## SOCIAL EVENTS

Social events this year have been the annual holiday at Bryn Mor, the Carol Service at the Cathedral and the Christmas party at which part of the entertainment was a pantomime written and played by patients and staff at Longmoor Lane Unit.



A further extension of social activities was the shopping evening organised by this section at which approximately 1,000 people, handicapped and helpers from the Merseyside area were able to do their Christmas shopping in a large Liverpool store plus the relative comfort of having the "store to themselves". Transport was provided either by the voluntary societies taking part or by the Handicapped Persons' Transport Service and there was willing help from many volunteers, including the staff of the store. This is likely to become an annual event as it was such a great success.



## RE-HOUSING ON MEDICAL GROUNDS

During 1966, a total of 7,374 applications were received for rehousing on medical grounds. Close assessment is made of the personal housing needs in each case and also the needs of the family as a unit. In addition, requirements such as invalid chairs or aids for the handicapped are considered in relation to the disability suffered by the individual.

Of the non-tuberculous cases recommended for rehousing, cardiac conditions comprised more than half the total.

1966	Special Priority Cases	Transfer Cases	Totals
<b>General Medical Cases</b>			
Number of Applications received	3,461	3,773	7,234
Number recommended ... ..	158	163	321
Number re-housed... ..	71	16	87
Number refused offers ... ..	19	3	22
Number still not re-housed ...	68	144	212
<b>Tuberculosis Cases</b>			
Number of Applications received	118	213	331
Number recommended ... ..	68	96	164
Number re-housed... ..	14	6	20
Number refused offers ... ..	3	1	4
Number still not re-housed ...	51	89	140

Some typical cases occurring during the year help to illustrate the way of approach to the problem.

A mother suffering from severe heart disease had lost her husband several years before. There were three young children to bring up.



The family lived in two rooms, one a bedroom, shared by mother and three children. The bathroom and toilet were shared with other families. The family were recommended for a three-bedroomed flat with lift facilities. Rehousing has been effected.

A young mother, suffering from severe heart disease, with three children and expecting a fourth child, was living in a three-storey detached house. The house contained nine separate flatlets, the occupiers sharing bathrooms and toilets. The family shared a living room, kitchen and storeroom on the ground floor. The bedroom was on the second floor, and was shared between the three children, her husband and herself. Living conditions would have been critical with the arrival of the fourth child. A special priority recommendation was made, the family being provided with a three-bedroomed house.

A young mother with four children, and suffering from a cancerous condition, underwent major surgery and was left with a colostomy. She therefore required proper washing and toilet facilities. The house only had a toilet in the backyard; there was no bathroom or running water. All hot water had to be boiled on the stove, and there was only one tap. After a priority recommendation, the family was rehoused in premises with adequate facilities, and near a family relative.

A young father of three children suffered from disseminated sclerosis, a progressively disabling nervous disease. The house in which the family lived was approached by steep steps, and the rooms were on different levels. There was a long flight of stairs to the bedrooms. No accessible accommodation existed for the father's invalid vehicle, which had to be garaged several hundred yards away. The father found it very difficult to walk the distance. Although situated in a slum clearance area, the house was not due for demolition for at least two years. In view of these factors, special rehousing priority was recommended as an urgent necessity. Ground floor accommodation near to the father's place of employment, with accessible garage facilities for his motor-propelled invalid vehicle was provided.

A family of five lived in a terraced house let off into flats in a slum area of the City. There were three children aged five, three, and two years. They occupied two rooms, one serving as a bedroom in which all the family slept. The cooker was upstairs on the landing and shared by another tenant. The only sink was used for both personal and domestic purposes. Both parents had unstable personalities and were under psychiatric treatment. They quarrelled frequently and there had been suicidal attempts. The very squalid housing conditions were considered to have an adverse effect on the precarious family situation. Priority rehousing was recommended as a matter of urgency. The family was provided with a three-bedroomed house.

In addition to special priority allocations, 560 applicants were awarded extra medical points.



## MEDICAL EXAMINATIONS

During 1966 a total of 4,024 medical examinations of employees was carried out by the medical officers in the Health Department. These examinations were of three types—(1) for entry into the Corporation service for officers, (2) for entry into the superannuation scheme for manual workers, and (3) by reason of extended sickness. In this latter category examination is carried out to determine—

- (a) Whether the employee remains fit to continue in his existing employment;
- (b) Whether modifications will be required; and
- (c) Whether extension of sick pay is indicated or whether retirement is necessary.

Sixty candidates were examined on behalf of other local authorities. Of the examinations undertaken for the Corporation 2,276 were for new appointments of officers, 1,274 for admission of manual workers to the superannuation scheme, 172 for extension of sick pay and 302 in consideration of the suitability of their present employment. Included among these were 64 Mersey Tunnel workers who are given periodical examinations because of the nature of their work. This year there were no employees of the Water Engineer's Department needing special examination for work in compressed air in the shaft and tunnel under the Manchester Ship Canal. Several hundred reports were obtained from doctors in hospitals and general practice. In consultation with the patient's general practitioner or hospital consultant, where appropriate, it was decided after medical examination that 219 were permanently unfit for work and should be retired, 22 manual workers were found unfit for entry into the superannuation scheme and seventeen officers were medically unfit to take up new appointments, a total of 258 persons, being almost eight per cent of those examined.. A list of the medical conditions causing unfitness appears in the following table:—

### Respiratory Diseases.

Chronic Bronchitis ... ..	62
Tuberculosis ... ..	2
Other ... ..	15
	<hr/>
	79
	<hr/>

### Cardiovascular Diseases.

Hypertension ... ..	39
Coronary disease ... ..	30
Cardiac failure ... ..	4
Valvular disease... ..	1
Other ... ..	23
	<hr/>
	97
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### Psychiatric Diseases.

Anxiety State ... ..	12
Depression ... ..	7
Schizophrenia ... ..	2
Other ... ..	4
	<hr/>
	25
	<hr/>

### Nervous Disease.

Cerebrovascular disease ... ..	8
Nerve affections... ..	12
Epilepsy ... ..	5
	<hr/>
	25
	<hr/>



**Alimentary Diseases.**

Peptic ulcer ... ..	7
Hernia... ..	3
Intestinal conditions... ..	8
	<hr/>
	18
	<hr/>

**Carcinoma.**

Bronchus ... ..	6
Stomach ... ..	2
Genito-Urinary ... ..	3
Throat ... ..	1
Other ... ..	1
	<hr/>

13

**Orthopaedic Conditions.**

Fractures and injuries ... ..	8
Arthritis ... ..	20
Other ... ..	12
	<hr/>
	40
	<hr/>

**Other Conditions.**

Physical impairment and debility	13
Deafness ... ..	1
Endocrine ... ..	5
Visual defects ... ..	3
Dermatitis ... ..	1
	<hr/>

23

Total Conditions causing unfitness ... .. 320

Total Persons found unfit ... .. 258

Number of unfit persons with more than one cause of unfitness ... .. 58

**SCREENING OF CROSSING PATROLS**

During the course of the year, 44 school crossing patrols underwent screening examinations carried out by three specially trained members of the nursing staff who had been instructed in interview technique, in the measurement of blood pressure, hearing testing and vision testing, including examination for restriction of the visual field. Where abnormalities occurred these were referred to a medical officer for assessment. It is pleasing to report that although many persons were referred for medical treatment, for refraction for spectacles, or recalled for re-examination, only two were found to be permanently unfit for crossing patrol work.

**CARDIOVASCULAR AND RESPIRATORY SURVEY**

This survey continued throughout the year, new entries being interviewed and a questionnaire completed; 918 electrocardiograms were carried out during the year. Twelve serious abnormalities were detected. Among persons examined for possible retirement due to sickness, eight had E.C.G. changes of cardiac ischaemia and one showed auricular fibrillation. Among new entrants to the service, three were found to have serious abnormalities, two cases of cardiac ischaemia and one of auricular fibrillation. Two of these, one of the cases of ischaemia and the one with fibrillation had no previous knowledge of the existence of the condition.

**DISABLED PERSONS**

With the introduction of parking restrictions in the City many disabled persons might have been seriously affected. In order to alleviate



any undue hardship a system of priority parking badges has been introduced. These are issued on the authority of the Medical Officer of Health only in serious cases and only when fully justified. Applicants are required to submit to a thorough medical assessment. Unless stringent medical restrictions are maintained the scheme could become unwieldy and be subject to misuse.

A total of 29 persons were examined during the year for whom nineteen priorities were granted.

#### RADIATION WORKERS

Persons working with radioactive substances or sources of ionising radiations, in the Corporation employment, undergo periodic general health checks and blood tests. Scrutiny of all radiation exposure by computation and dosimetry is regularly carried out. During the year 32 persons were examined and all except two were found fit for these special duties. These two were found to be affected by neutropaenia. One was able to return to full duties very quickly while the other was returned to modified duties involving no radiation exposure.



## ENVIRONMENTAL HEALTH

### General

The slum clearance drive has kept up its impetus and this important aspect of the work is now beginning to show results. A total of 5,500 houses were represented as unfit for human habitation in clearance areas or by closing orders or demolition orders. The present programme envisages a further 15,000 houses will be represented in the next three years and therefore, some 46,000 houses will have been dealt with in the period 1954/69.

A number of other measures have been adopted to reduce the problem by the repair of unfit houses and also a drive to persuade owners and owner/occupiers to carry out improvement of their houses. Some 3,000 houses have now been removed from the register of unfit houses.

Action under the Offices, Shops and Railway Premises Act, 1963, has made good progress, some 13,000 detailed or incidental inspections have now been made and over 13,500 infringements have been dealt with by warning letter.

Supervision of food premises for the purpose of securing clean food handling, packing, storage and distribution has been continued throughout the year, and over 2,300 infringements were dealt with by warning letter, and by Court proceedings in respect of 25 informations which resulted in penalties of £198 being imposed.

Smoke control is progressing very satisfactorily, this year some 3,630 houses were converted to smokelessness and a total of some 91,000 houses are now included in confirmed smoke control areas.

Noise is now becoming a major problem and it has been found, on the outskirts particularly, where there are several large industrial firms, that nuisance from noise is becoming an almost insoluble problem, due to the proximity of the premises to dwellinghouses. Nevertheless, one firm has spent several thousands of pounds in an endeavour to reduce the noise level and it is praiseworthy that although they operate a 24-hour shift, the improvement may reduce the nuisance.

### Staff

There is still a shortage of qualified public health inspectors but the number of resignations has now been reduced. In addition, technical assistants have been appointed for routine duties and this new arrangement will allow the qualified inspectorate to concentrate on specific aspects of the work.

### Details of Work

Inspectors visit houses to make enquiries following notifications of certain infectious diseases. The number of visits to premises in



connection with cases of infectious disease amounted to 1,239 and the number of enquiries regarding contacts was 81.

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 4,413 from 2,369 persons, of which 1,109 from 628 persons proved positive.

There are thirteen registered common lodging houses in the City, twelve providing accommodation for 916 males and one providing accommodation for 95 females. The public health inspectors made 175 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 keeper a verbal warning. A total of 3,504 beds were examined and 875 beds and articles were found to be verminous, 858 being cleansed by the local authority and seventeen articles being destroyed under the supervision of the public health inspectors. During the year it was necessary to arrange for the cleansing of 63 persons living in these houses.

Eight seamen's lodging-houses exist in the City, five of which are unlicensed and three licensed, under byelaws. These houses provide satisfactory accommodation for British seamen and other nationalities. The total accommodation available is 817 beds, and public health inspectors made 57 day and night inspections. Infringements of the byelaws were reported on nine occasions, and the necessary action was taken to comply with the requirements of the legislation.

During the year 40 prosecutions were taken, and the penalties and costs which were imposed amounted to £383.

The weekly meeting of the Special Sub-Committee has enabled emergency action to be taken for the remedying of urgent defects. This procedure constantly reduces the period of time during which tenants can suffer discomfort.

Work in default of owners was carried out to 683 houses. The expenditure incurred is recoverable under the appropriate enactment.

A total of 32,486 requests was received for inspectors to visit premises and altogether a total of 260,428 visits and inspections was carried out under the various enactments and 13,412 notices were issued under the Acts and Regulations.

The Public Health Act, 1961, empowers the Corporation to clear drains after giving 48 hours' notice. Notices in respect of choked drains numbered 1,169 and it was necessary for the Corporation to clear 99 drains in default of the owners. The cost incurred will be recovered in accordance with the Act.



Defective drains cause rodent infestation, flooding and subsidence. Drainage systems tested to remove these problems numbered 977 and notices were issued in respect of 445 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. The cost incurred will be subsequently recovered from the owners of the property involved.

Under the terms of faculties or licences issued from the Home Office, inspectors supervised the exhumation of seven bodies during the year and the remains of one person was shipped abroad. In addition, inspectors supervised the removal of remains from a number of disused burial grounds which were being prepared for development purposes.

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

Liverpool is one of several registration authorities for boats used as dwellings plying on the canal. There is very little traffic on the portion of the canal within the City and inspections were only possible whilst the boats were in the docks. No case of infectious sickness was reported as having occurred during the year on any canal boat visiting the district.

Other departments have co-operated by forwarding references in respect of matters requiring the attention of inspectors, and 5,289 references were forwarded to other departments.

## HOUSING AND SLUM CLEARANCE

Slum clearance has continued to make marked progress and since the programme recommenced after the last war, a total of 31,059 houses have been represented as unfit for human habitation and included in clearance areas or dealt with individually.

Forty-six clearance areas were represented during the year involving 5,411 houses classified as suitable for demolition having regard to the standard of fitness as laid down in the Housing Act, 1957, and 1,937 houses in ten clearance areas were made the subject of seven compulsory purchase orders. Eleven compulsory purchase orders were submitted to the Minister of Housing and Local Government for confirmation and two clearance orders in respect of eight houses were also made and submitted for confirmation.

Seventeen Public Inquiries were held involving a total of 5,899 houses in seventeen orders, and during the year eighteen compulsory



purchase orders involving 4,189 houses and one clearance order involving five houses, were confirmed.

Families rehoused from houses included in confirmed compulsory purchase orders numbered 2,217 and ten families were rehoused from houses included in confirmed clearance orders.

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 89 dwellinghouses being represented to the Sub-Committee as unfit for human habitation. These premises were occupied by 136 families.

The Sub-Committee considered the condition of 140 houses which included a number which had been represented the previous year. Of these it was resolved that demolition orders be made in respect of 83 houses, closing orders in respect of 52 houses, and undertakings to make the premises fit for human habitation within a specified period of time were accepted in respect of four houses, and in one case notice of intention to purchase was served. In addition, 28 considerations in respect of rooms and parts of premises occupied as separate dwellings which were unfit for human habitation were considered and in all cases it was decided that closing orders should be made.

Following upon the rehousing of the occupants in premises subject to operative orders, 346 houses were demolished and 167 were closed and sealed. In addition 78 dwellings being parts of premises were also closed.

Premises were reinspected where owners had carried out works as required to make them fit for habitation and, as a result of the works undertaken, the Committee during the year rescinded fourteen closing orders and five undertakings.

#### Rent Act, 1957

A total of 32,620 visits has been made by public health inspectors to dwellinghouses, under the provisions of the Rent Act, 1957, since the Act first became operative on the 6th July, 1957, and 8,995 applications for certificates of disrepair have been received. Some 3,256 tenants have applied for certificates as to the non-remedying of defects specified in undertakings given by landlords, and 2,590 applications have been received from owners for certificates as to the remedying of defects in undertakings which they have given to tenants. Figures in 1966 were:—

Total number of applications for certificates of disrepair	153
Applications withdrawn	7
Number of notices served on landlords of the Local Authority's intention to issue certificates of disrepair (Form J)	153
Number of undertakings to carry out repairs received from landlords (Form K)	80



Number of certificates of disrepair issued to tenants (Form L) ... ..	50
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 ... ..	53
Number of certificates (Form P) issued to owners ...	45
Number of applications (Form O) not finalised during the year ... ..	8
Number of applications (Form M) received from owners for a cancellation certificate ... ..	36
Number of objections to cancellation received from tenants ... ..	9
Number of cancellation certificates issued ... ..	29

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.

### Improvement Grants

During the year 514 houses were inspected following enquiries regarding improvement grants and of 131 formal applications for standard grants, 128 were approved. Applications were also made in 94 cases for discretionary grants and 102, which included several brought forward from the previous year, were approved.

### Loans on Mortgage

During the course of the year, the City Council again considered applications for loans on mortgage from prospective owner/occupiers and 1,172 houses were inspected for this purpose.

## SHOPS ACTS, 1950 to 1965

The duties of enforcement under these enactments have been carried out during the course of other duties under the Offices, Shops and Railway Premises Act, 1963, Food Hygiene Regulations and other



relevant legislation. In addition, special duties have operated in connection with complaints of shops being kept open on the early closing day, after the evening closing hour, and on Sundays.

Since the shops (Early Closing Days) Act, 1965, came into operation no further changes in the law affecting general trading hours and exemptions have taken place, and the former problems associated with these requirements still remain and give rise to difficulty in enforcement and much dissatisfaction amongst traders generally.

New developments in trading practices in the furniture and fried fish and chips trades have underlined the extremely unsatisfactory state of the existing shops law. Complaints are now being received of the premises of certain furniture dealers being open for sales to customers on Sundays. As the result of action by the department one firm undertook to stop trading on this day but insisted upon keeping the showroom open for viewing only. Appropriate notices were exhibited by them to inform the public of this arrangement. The new development in connection with the sale of fried fish and chips on Sundays arises from the exclusion of the sale of these commodities from exempted trades prescribed in the Fifth Schedule of the Shops Act, 1950, whilst the same Schedule permits the sale of meals and refreshments on the Sabbath. Fried fish and chip shops have always sold other foods on week days, such as meat pies, tripe, pigs trotters, etc., but the trade has always observed the prohibition of Sunday trading. In recent years quite a number of shops of this class have also made and sold cooked meals, mainly Asian dishes for off-consumption and this trading has extended into the early hours of Sunday morning, and in the evening. Several complaints have been received from other fish fryers about this new class of trade because fried fish and chips are also being sold for consumption off the premises.

Observations by inspectors have been carried out early on Sunday morning and in the evening, and Court proceedings have been taken and warning letters sent in several instances.

Unfortunately, enforcement action has had little effect in certain cases, and these new trading trends simply emphasise the serious legal weaknesses which make this Act almost unenforceable.

Complaints are also received about other classes of trades operating after the evening closing hour, and the necessary action is taken in all cases, either by warning letter or Court proceedings.

A total of 3,821 special visits were made to shops on Sundays and in the evenings and appropriate action was taken in respect of 181 infringements of the closing hour provisions.

A total of 12,341 inspections of retail shops of all classes, cafes, pet shops, warehouses, clubs, public houses and service establishments



such as hairdressers, launderettes and repairing depots have been made during the year.

#### **Pet Animals Act, 1951**

The number of pet animal dealers licensed during the year was 45 and 89 visits were made to their premises to deal with applications for licences and ascertain that all the requirements of the Act are observed. Twenty-one matters required the attention of the traders, and these included recommendations by the Liverpool Fire Service who are responsible for dealing with fire precaution measures.

#### **Animal Boarding Establishments Act, 1963**

The requirements of this enactment are very similar to those of the Pet Animals Act, but have the additional benefit from an enforcement point of view, that the keepers of these establishments have to keep a register of the animals boarded. Eight premises were licensed and the appropriate inspections were made.

#### **The Riding Establishments Act, 1964**

In determining whether to grant a licence to any person, the local authority is required to have regard to the applicant's suitability either by qualifications or experience in the management of horses. In addition, the local authority is required to obtain a report from the veterinary surgeon or practitioner appointed by the authority, in connection with the examination and health of the animals together with a report as to the suitability of the premises. There are three riding establishments in the City which are licensed under this enactment and subject to periodic inspection by the public health inspector.

#### **Hairdressers and Barbers**

The number of new hairdressing businesses registered during the year was 27 and the number of businesses transferred to new ownerships was ten. The total registered hairdressers is now 767.

Upon receipt of an application for registration of either new businesses or changes of ownership a full inspection is made of the premises, equipment and hygiene practices and facilities. There were 103 such inspections and 34 unsatisfactory conditions were dealt with by warning letter.

Complaints of hairdressing in dwellinghouses have been received and dealt with by inspections of the houses, and the City Planning Officer has been informed in writing of the use of the houses for business purposes. This action has caused the practice to be terminated.

#### **THE OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963**

Since this Act came into operation on the 1st May, 1964, some 13,000 general and incidental inspections of shops, offices, warehouses,



service establishments such as hairdressers, cleaning and repair depots, and food premises have been made.

The general inspections of 6,208 premises since the commencement of the Act means that a complete and detailed examination of those premises has been made affecting all the relevant requirements of the Act, together with a full documentation in respect of departmental records and action for dealing with the 13,606 infringements recorded. The incidental inspections have been related to measuring premises in advance of the inspection team; advisory work; speeding up the registration of premises with regard to the number of persons employed; follow-up work after notices have been issued, such as interviews with employers, owners of premises, architects and contractors; and dealing with complaints by employees. It should be mentioned here that there have been remarkably few complaints about conditions of work.

During the year under review there were 2,503 general or detailed inspections and 3,160 incidental visits compared with 1,644 general and 3,770 incidental inspections in 1965. These inspections resulted in 7,187 recorded contraventions in 1,264 premises, whilst in 1965, infringements totalled 4,665 in 742 premises.

#### Accidents

Of the 531 accidents notified to this department during the year, in accordance with Section 48 of the Act, 166 required special investigation and reports. Whilst it is realised that many accidents may occur which are not notified as required, it is pleasing to record that there were no serious or fatal accidents, and that a large majority of the accidents were of a very minor nature.

#### Demarcation of duties

The Offices, Shops and Railway Premises Act delegates appropriate duties upon local authorities, fire authorities and H.M. Factories Inspectorate, and an officer of the latter department is appointed by the Ministry of Labour to advise local authorities when guidance is sought and to deal with questions of the demarcation of inspections. The factories inspectorate are responsible for the enforcement of this enactment in shops and offices connected with factories, and where the demarcation is not clearly defined in particular premises, a highly satisfactory liaison between the two authorities always leads to an acceptable working agreement.

#### Report to the Ministry of Labour

A detailed report on the year's work under this enactment is the subject of a separate document, and is prepared for submission to the Ministry of Labour in accordance with their request that local authorities furnish the Ministry with narrative reports which may guide them in the



event of amendments to the provisions or in the framing of new regulations.

## THE ADULTERATION OF FOOD AND DRUGS

During the year 3,464 samples of food and drugs were procured and analysed and of this number 124, or 3·6 per cent, were found not to be genuine or otherwise irregular.

The samples taken comprised 409 formal and 3,055 informal. An informal sample is one procured without the statutory intimation to the vendor that it is to be analysed. Valuable information as to irregularities may be obtained in this way. Milk, being such a widespread and staple source of food supply, must figure prominently in any sampling programme, and 2,205 samples of milk were procured for analysis.

Statutory action was taken in respect of milk and fish cakes. Fines totalling £95 and £73 5s. 0d. costs were imposed.

Samples of ice cream, ice lollies and frozen confections submitted for chemical analysis or bacteriological examination numbered 162. A total of 104 ice cream samples were examined bacteriologically and 64 were found to be in Grade I, eleven in Grade II, eleven in Grade III and eighteen in Grade IV. Samples in Grades III and IV are considered unsatisfactory and it is the practice to take further samples to see if the results are consistently poor. Appropriate action was taken in respect of unsatisfactory samples and advice given to manufacturers concerning the sterilisation of the processing plant.

In addition to the bacteriological examination of milk and ice cream 139 samples of other foods were examined for their suitability for human consumption, including examination for food poisoning organisms. The foods selected were those to be eaten without further cooking and included meat products, sandwiches, cakes and shellfish. The results of examination generally were satisfactory.

### Examination of Milk

Regular routine samples of milk were taken from processing plants and milk producers within the City and the standard of cleanliness and efficiency of pasteurisation continues to be satisfactory. The total number of milk samples submitted to the Public Health Laboratory for examination was 1,457, comprising 1,384 heat treated milks and 73 raw milks. Of the 1,384 heat treated milks, one failed the phosphatase test for efficiency of pasteurisation and the processing plant was examined and the fault rectified. In addition, 71 samples failed the methylene blue test for bacterial quality. The majority of these failures were from cartoned milk obtained from automatic vending machines.



Four methylene blue failures were reported from the 73 untreated milk samples taken and the result of the guinea-pig inoculation of the milk tested for the presence of tubercle bacilli proved all samples were negative.

The milk supply to schools, hospitals, aged persons' hostels and other Corporation establishments is sampled regularly and 231 samples were tested chemically and bacteriologically. All samples proved to be genuine.

A small percentage of the milk supply of the City consists of untreated milk. Of the 73 samples of untreated milk all were specially tested for the presence of brucella abortus. These samples were procured from milk produced within the City and from farm bottled milk produced in outside areas. Positive results were obtained from two City herds and one outside herd.

In the case of the herds in the City area the cows were quickly isolated and removed from the herds for slaughter. With the co-operation of the Medical Officer of Health of the outside area the milk from the herd was voluntarily pasteurised until full investigation had been completed. It was not necessary to serve notices under the Milk and Dairies (General) Regulations, 1959.

New registration certificates in respect of milk distributors and their premises numbered 170 and licences, required for the sale of designated milk, were issued. A total of 1,723 visits was made. These visits revealed that 74 dairies required to be transferred from one person to another and 170 new registrations were required to be effected. At the same time the public health inspector ensured that the requirements of the Milk and Dairies (General) Regulations, 1959 and the Milk (Special Designation) Regulations, 1963, were strictly complied with.

During the year 357 visits were made to milk processing plants for the purpose of sampling when the installations were in operation. Special attention was paid to the temperature and the functioning of the recording and indicating instruments.

There are five pasteurising plants in the City consisting of three multiple high temperature short time pasteurising plants and two of the batch or holder type. In each instance the units are coupled to mechanical bottle washing plants, filling and capping machines and adequate cold room accommodation. In addition, there are three milk sterilising plants in the City.

Extensive additions and re-siting of plant is being carried out at one large processing dairy. Three stainless steel balance tanks which will store 9,000 gallons of pasteurised milk prior to bottling have been installed and a 3,000 gallon per hour high temperature short time



pasteurising plant is now in operation. The processing dairies continue to be well maintained and effective in operation.

The Liverpool Corporation Act, 1921 empowers the local authority to grant licences to all persons keeping dairy cows, store cattle and pigs, subject to the premises being of the required standard. There are ten cowsheds and fifteen piggeries in the City.

### Sampling

The Liquid Egg Pasteurisation Regulations, 1963, forbid the use of unpasteurised liquid egg with the object of preventing the ingestion of organisms capable of producing food poisoning in the consumer. There are no egg pasteurisation plants in the City and five samples were taken during the year and submitted to the Alpha Amylase test. All samples proved satisfactory.

During the year eighteen samples of animal feeding stuffs and fertilisers were obtained from City mills for analysis. There were no major infringements of the principal Act.

In addition, 31 samples of animal feeding stuffs were examined bacteriologically for the presence of *B. Anthracis*. All samples proved negative. Six samples of dried blood were obtained from the Liverpool Corporation blood drying plant for bacteriological examination for *B. Anthracis*. All samples proved negative.

### SUPERVISION OF FOOD SUPPLY

Close supervision of the food supply of the City has again been maintained throughout the past year. Public health inspectors have made daily visits to the Wholesale Fish Market, the Wholesale Fruit and Vegetable Markets at Queen Square, and Cazneau Street and St. John's Retail Market. Frequent visits were also made to the various food and canned goods warehouses in the City and during the year 1,572 special food complaints made by representatives of the wholesale and retail trades were dealt with satisfactorily.

There are no poultry processing premises within the City. Routine inspection is carried out on poultry and game entering the wholesale market prior to sale to the retail trade; 1,426 lbs. were rejected and destroyed as a result of these inspections, due mainly to decomposition.

An extensive retail fish and poultry trade throughout Merseyside is supplied by the wholesale market. Daily inspections at this market resulted in the rejection of 27,972 lbs. of fish and 85 lbs. of rabbits as being unfit for human consumption.

The daily examination of fresh fruit and vegetables at Queen Square, the North Market and at various wholesale warehouses in the City has been maintained and resulted in the rejection of 121,333 lbs. of



various fruits and 198,162 lbs. of vegetables as being unfit for human consumption.

Daily visits have been made to a variety of food premises including shops, warehouses and food factories for the purpose of the inspection of goods and grocery sundries. A large proportion of rejected foodstuffs was disposed of at a Corporation controlled tip and smaller consignments were removed by the City Engineer (Cleansing) Department and subsequently tipped, under supervision.

The examination of canned goods and grocery sundries resulted in the rejection of some 76,883 lbs. as being unfit for human consumption. In addition, some 13,629 packages of frozen foods were rejected due to the breakdown of refrigerator cabinets.

Details of the various categories of canned goods, etc., rejected are as follows:—

	<i>lbs. wt.</i>
Canned Meats ... ..	33,813
Canned Fruit and Vegetables ...	27,895
Canned Fish, Milk and Soups ...	8,425
Dry Groceries, etc. ... ..	6,750

To ensure compliance with the Merchandise Marks Act, visits were made to provision merchants, butchers and greengrocers. Any infringements observed were immediately rectified and routine visits confirmed that the instructions given were being carried out.

Foodstuffs intended for export are required to be accompanied by a certificate of fitness for human consumption signed by the Medical Officer of Health. These foodstuffs consisted mainly of bacon, canned goods, cream cakes, sausage rolls and various cuts of fresh or pickled meat. Inspections of 125 consignments were carried out and all were found to be fit for human consumption and export from this country, and the necessary certificates were issued.

Investigations into food complaints originating from members of the public were carried out with regard to foreign bodies and the question of nature, substance and quality of various foodstuffs. A total of 376 complaints was received, thoroughly investigated and completed, generally to the satisfaction of the complainants.

#### MEAT INSPECTION

The year 1966 will be remembered as an exceptional year, a year of early shortage of supplies, high prices, the collapse of the export market in both livestock and meat to Europe; followed by the seamen's strike which cut off the South American frozen and chilled meat, the frozen lamb from Australia and New Zealand and made the export of store cattle from Ireland to Britain impossible. This led to a build up in



Ireland of livestock, which after fattening there, was slaughtered and sent to this country as carcase meat at the back-end of the year, causing a glut and drop in prices, just at the time when home-reared fatstock was ready for marketing. In turn the home rearer suffered an unexpected loss which he could ill-afford. Surprisingly enough, the housewife, who might have been expected to benefit from this price level drop, did not gain any material advantage in lower prices on her meat bill.

The total number of animals slaughtered in Liverpool was 493,638, an increase of 39,154 on last year when the number was 454,484. The main increase was in sheep and lambs which went up by just over 38,000, calves by 2,500, bulls, cows, heifers and bullocks by some 5,000 but the number of pigs dealt with dropped from some 132,000 to 126,000.

### Animals Slaughtered

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

Calves	Pigs	Sheep	Bullocks	Heifers	Cows	Bulls	Total
4,443	126,504	309,388	34,221	1,067	17,912	103	493,638

### Diseased Conditions

Of the 493,638 animals slaughtered and inspected, 2,425 whole carcasses were totally rejected as diseased and unfit for human consumption, together with part carcasses from 9,763 animals. In addition, organs from 96,102 other animals were found to be diseased and rejected as unfit. These figures indicate that 21 per cent of the animals slaughtered were found to be diseased; this compares with last year's figure of 22 per cent. A summary of the reasons for condemnation is set out in the statistical appendix.

### Diseased meat and offal—disposal and treatment

The amount of diseased meat and offal rejected was 501 tons. All this material was dealt with in the City Council's by-product plant within the abattoir, where it was rendered down and sterilised. The resultant inedible tallow was sold for industrial purposes, and the meat meal used in animal feeding stuff manufacture.

The meat traders as owners or agents are paid for this raw material, the weight and type of meat or offal being certified from the meat inspection records, and payment made by the Markets Department.

### Meat Inspection Charges

In 1963 the City Council decided that charges for meat inspection and stamping would be 2s. 6d. for a bovine animal (other than a calf);



6d. per sheep or lamb, and 9d. for each calf or pig. On this basis the amount received by the Council for the inspection of the 493,638 animals slaughtered in the City during the year was approximately £19,308.

### Tuberculosis

The overall incidence of tuberculosis found, during routine inspection, in bovine carcasses was as last year, less than one per cent. In pig carcasses, which last year showed 1·37 per cent, there was a drop to 0·9 per cent.

The number of reactor cattle sent in for slaughter by the veterinary officers of the Ministry of Agriculture, Fisheries and Food under the eradication scheme was 26, comprising seventeen cows, two heifers and seven bullocks.

On post-mortem inspection thirteen carcasses and offals were clear and did not show tubercular lesions. Two carcasses showed systemic infection necessitating condemnation of parts of the carcass, whilst eight carcasses were found to be infected in either the liver, lungs or mesentery. Three of the cow carcasses which were free from tubercle showed actinomycotic lesions, one being a generalised systemic infection which was totally condemned.

### Pyæmia

The incidence of pyæmic infection in pig carcasses was less, 72 carcasses compared with 100 last year. This is a welcome sign and justifies the policy of advising farmers and pig breeders (through the wholesale meat trader) of the occurrence of pyæmia in pig carcasses. This enables the breeder to pay particular attention to tail biting, followed by infection, and sepsis, among his pigs which might otherwise go unnoticed. Many appreciative comments and thanks have been received from breeders during the year, for information, passed on by the wholesaler traders, through the department.

### General diseased conditions—Sheep and Lambs

There was an increase in the number of sheep and lambs slaughtered during the year; the total figure of 309,388 is 38,383 more than last year. The increase in quantity did not coincide with an increase in quality. The number of hogg lambs (yearlings) coming forward was an indication of the struggle which breeders experienced in carrying forward last year's lambs in an endeavour to put on weight and produce a marketable carcass. Hill and mountain sheep and lambs were of poor quality without "finish". The Kosher trade however did benefit, because the forequarters on the hogg lambs were of reasonable size and weight. The London Kosher trade in this respect is an important feature of the Liverpool market from which source there is an outlet for the best heavier weights of forequarter lamb that would otherwise be difficult to clear. The



diseased conditions met during the year were the familiar ones—pleurisy, pneumonia, peritonitis, sepsis, arthritis and distomatosis. One unusual aspect was the number of sheep from a Lancashire farm which had to be slaughtered, during a two-week period, suffering badly from the effects of dog-worrying. Some eighty carcasses had to be rejected wholly or in part following attacks by two dogs which continually went back to the sheep after the first taste of blood, before they were finally shot.

The number of carcasses wholly condemned during the year for diseased conditions and injury was 1,647, together with part carcasses from another 5,060 sheep or lambs, and organs from a further 81,371.

### Calves

The number of calves slaughtered was 4,443, double the last year's figure of 1,865 and apart from some good quality calves for the Easter time trade, the general level of quality was only fair, the bulk of the calves slaughtered being small "bobbie" calves which breeders did not wish to rear. The two main reasons for condemnation were umbilical pyaemia ("joint ill") and acute enteritis. Carcasses wholly rejected numbered 350 with part carcasses from another 249 calves mainly for injury of the legs, pelvis, or back, due to careless handling at livestock markets, or during transit to the abattoir. As it is impracticable to feed calves satisfactorily at Stanley, arrangements have been made through the traders, that calves arrive from markets, during normal working hours, and are slaughtered as soon after arrival as possible.

### Cattle

Of the 53,303 cattle slaughtered consisting of 34,221 bullocks, 17,912 cows, 103 bulls and 1,067 heifers—an increase of 3,852 on last year—the quality varied greatly. Some of the stock was superb; although the average housewife with her dislike of fat and reluctance to purchase even half-fattened "finished" beef, is slowly but surely eliminating the best quality buy from the markets and the butchers' shops. The outlet for this superb quality beef is the luxury hotel, and the shipping companies, who demand (and pay for) the best.

On the other hand, the demand for manufacturing (boneless) cow beef continues unabated, and is a source of profit even at today's price level for livestock of this category. It is a somewhat melancholy if meaningful fact, that at the time of writing this report, one daily newspaper is currently running a competition to try and establish what is sought and acceptable as, price, consistency, and "old fashioned flavour" in beef or pork sausages.

The number of carcasses or offal found to be diseased at the time of slaughter and inspection was 8,935 out of the 53,303 bullocks, heifers, cows and bulls slaughtered; whole carcasses condemned were 69, and part carcasses totalled 8,866.



## Pigs

The total number of pig carcasses and offal inspected in the Stanley abattoir and at a private abattoir in the City was 126,504. This figure is 5,659 less than that for last year. The number of carcasses found to be diseased at the time of slaughter was 10,235, the number totally condemned 358; and part carcasses and offal condemned 9,877. The incidence of tubercle in pigs was just less than one per cent (0.9 per cent compared with 1.37 per cent last year).

## The Meat Market

The large quantities of frozen or chilled beef, lamb, mutton and offal (tails, kidneys, livers, hearts) sold daily on the market are subject to inspection. Irish dressed lamb and beef carcasses arrived in good condition. These carcasses are well butchered and dressed and efficiently inspected. On the rare occasions when it has been necessary to refer any matter, the government trade officer has been most helpful.

The frozen or chilled imported meat on the whole arrived in good condition, but there were occasions when extensive trimming of meat was necessary on account of mould and decomposition.

The quality of some of the home-killed carcass meat sent into the market from rural areas was rather poor, particularly mutton carcasses from the Border country and it was quite usual to reject part of the weekly consignments during the peak season, for oedematous, emaciated, and arthritic conditions. As these carcasses did not bear any inspection mark it is not known whether in fact any post mortem examination had ever been carried out. This matter is receiving attention, as it is the practice to advise the responsible officer of a local authority of any conditions found, requiring rejection of meat in the Liverpool market, if the carcass bears an inspection stamp.

Carcasses and meat dealt with in the market *excluding* the meat and offal from the 493,638 animals slaughtered in the City were as follows:—

Origin	Beef Hinds/Fores	Carcasses Mutton/Lamb	Carcasses of Pork	Carcasses of Veal
Imported chilled or frozen ... ..	17,766	747,408	2,752	—
Slaughtered outside Stanley Abattoir ...	21,470	161,863	112,680	3,083

In addition to the above, 290,979 packages of imported meats were handled.

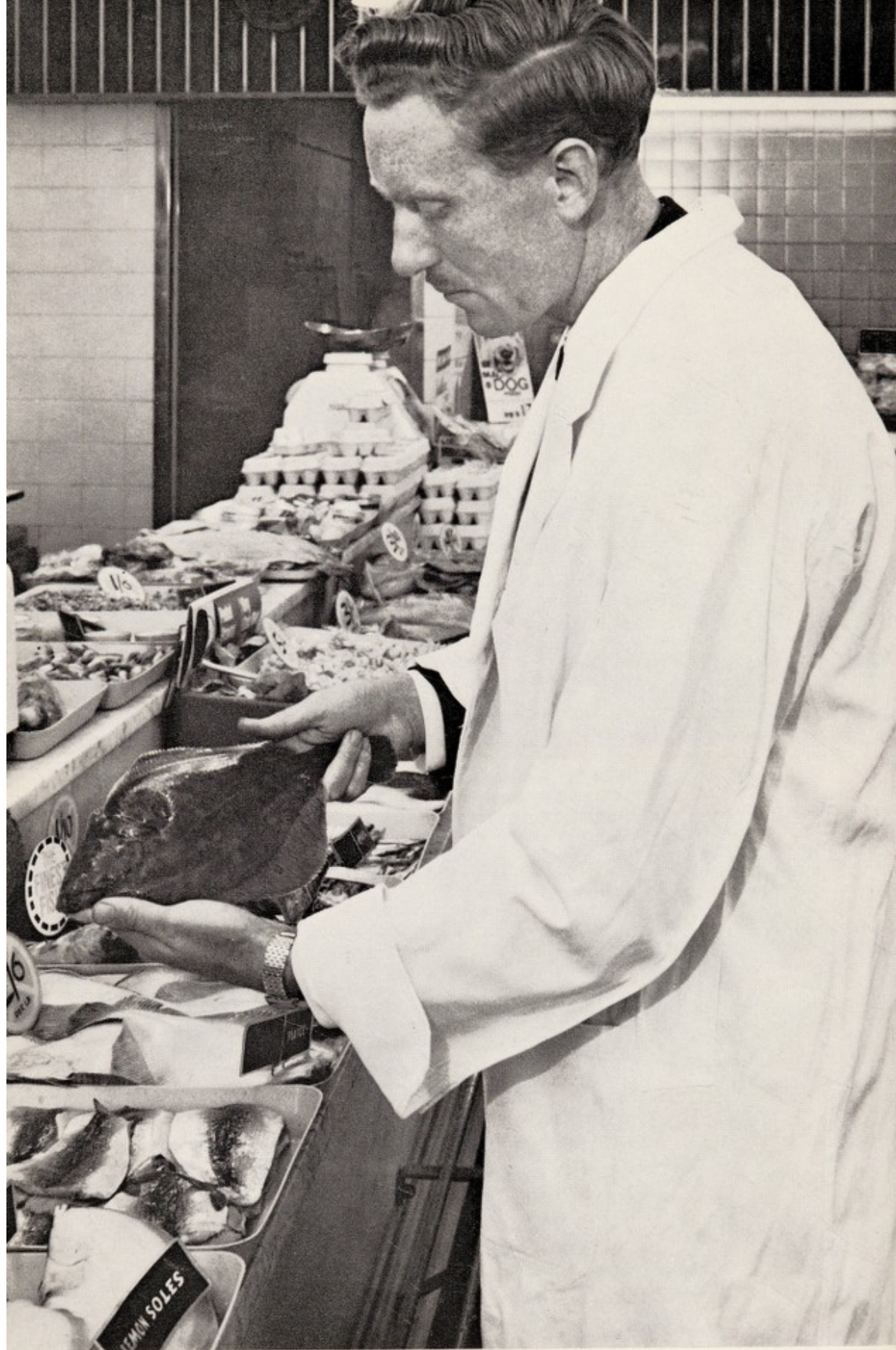




SMOKE CONTROL—BEFORE AND AFTER







FOOD INSPECTION



## Transport of Meat

In general, a satisfactory standard of hygiene is maintained throughout the meat-carrying vehicles working out of Stanley Market. Metal lined vehicles are gradually replacing the older type containers with wood floors and duck boards. Fibre glass linings have proved very satisfactory in use and an increasing interest is evident in this field. A new type of truck is also being tried out, which incorporates a glass fibre top. The very hard usage which these hand trucks receive will be the deciding factor in their adoption but, so far, the glass fibre has proved equal to the demand. The question of cost is not in this instance the important aspect, as a comparison of wood, metal-lined trucks against the glass-topped truck favours the fibre-glass.

A number of butchers who transport their own meat from Stanley Market to their shops favour the shooting-brake type vehicle, into which a metal inset is placed when meat is carried, and can be withdrawn when not required. These metal insets have now been produced on a commercial scale by a local supplier in galvanised metal or stainless steel, to fit the popular makes of motor vehicles.

An increasing number of long-distance meat delivery motors are fitted with refrigerating machines as well as being insulated. By this means, any selected temperature can be maintained for long periods in the container which can be detached from the motor "horse" and left at the delivery depot, or a distant market, whilst the actual motor "horse" can be coupled to another loaded container of produce for the return journey.

Greater attention is being paid to the question of mechanical loading. By this means, hindquarters or forequarters are loaded on to a drop rack, each on individual hooks, the rack is then hydraulically operated and the meat swung inside the container pushing the beef on runners to the front end of the hanging rails. As many as 200 pig carcasses can readily be loaded, transported, and unloaded with the minimum of handling by meat porters, using one of these mechanical loading containers.

## Slaughtering Licences

During the year, 93 licences were granted by the City Council to slaughtermen, ritual cutters of the Shecita Board, and two Muslim ritual cutters to slaughter animals in the abattoir. In addition, 38 licences were issued to Mohammedan seamen who slaughtered sheep in Stanley, the carcase meat being purchased by shipping companies for consumption by Mohammedan members of ships' crews.

## New Refrigerating Unit

The new chill rooms came into use in the early part of the year, and appear to have given general satisfaction to the traders. There is,



however, a tendency for the wholesalers to be rather cautious in their complete acceptance of the estimate, that, even at this time, the chilling facilities offered are completely adequate to cater for the peak killing season, and obviate Sunday slaughtering. The Markets Committee, and the traders have been in consultation on this problem, and the Committee has extended the period during which Sunday slaughtering may take place, until April, 1967.

### Installation of Line Cattle Slaughter

During the year discussions have taken place between the trade, the Corporation, and the consulting engineers on new proposals by the trade for a layout of a line slaughter system which modified the original plan. A decision by the City Council on the project will be made in the near future.

### Pharmaceutical Raw Material

Various organs and glands for example adrenals, thyroids, pituitaries, and ovaries taken from sound healthy carcasses after inspection were collected and sent for processing for medicinal use. In addition, some 43 tons of distomatotic livers were sent for pharmaceutical manufacture.

### Specimens for Teaching Purposes

Requests for supplies of cysts, eyes, embryos, hearts, blood, and pathogenic specimens from the various departments of Liverpool University, training colleges, schools, and hospital laboratories have, as in past years, been met. Various specimens were also set up for the veterinary department of the Liverpool University, and for the examinations of the Royal Society of Health.

### Training Courses

The courses for those preparing for examinations in meat inspection, food hygiene, and public health inspection were well attended. Thirty-nine students received instruction in the theory and practice of meat and food inspection, together with the law relating thereto.

## FOOD HYGIENE

The supervision of food premises for the purposes of securing clean food handling, packing, distribution and storage, has been continued throughout the year in conjunction with the inspection of all premises under the varied enactments affecting them. In addition to visits to food premises, special inspections of mobile shops and street traders' stalls were carried out.

The total number of inspections for all purposes was 8,800 and 2,311 infringements of the Food Hygiene Regulations were dealt with by



warning letter and by Court proceedings in respect of 25 informations. Fines totalling £198 were imposed by the Magistrates in these cases.

### 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.

Proposals in a new Liverpool Corporation (General Powers) Bill requiring the registration of food traders operating from stalls and mobile shops were withdrawn.

Later in the year the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966, were published for operation on 1st January, 1967. Powers have now been given to local authorities extending the standards of the Food Hygiene (General) Regulations as applied to food premises to all street and market traders in food and to vehicles used for delivering food. There appears to be certain difficulties of application, but, no doubt, when the field work commences many of these apparent problems will be overcome.

In connection with the registration of ice cream premises, seven new applications and ten transfers to new vendors have been approved. Also one application was received and approved in respect of the manufacture of ice cream.

Other food premises, including cafes, snack bars, fried fish shops, public houses, clubs and retail food premises generally have been given as much attention as other urgent duties have permitted. New factors or problems have not been revealed, but the enforcement action of inspectors is essential in ensuring the maintenance of satisfactory standards of hygiene in certain food establishments and in connection with street trading.

### Bakehouses

The varying nature of food products used in the bakery industry such as cream, synthetic cream, gelatine and meat, any of which could be the offending agent in an outbreak of food poisoning, and the number of complaints concerning foreign bodies which occur each year in the various foods, arising from faulty machinery, equipment and broken



structure, such as glass, make it essential for public health inspectors to carry out systematic inspections.

The large modern bakeries are usually equipped with the latest plant and the buildings are structurally sound and well maintained. However, a number of these firms have found it necessary to completely re-organise departments and put them under specialist control, in an endeavour to eliminate foreign bodies entering their products and to ensure that food is packed and stored at a suitable temperature, prior to delivery to the public.

#### FOOD PREMISES—1966

Food Trade							Approximate Number
Licensed premises	...	...	...	...	...	...	1,036
Off-licence premises	...	...	...	...	...	...	175
Ice cream vendors	...	...	...	...	...	...	1,942
Bread and confectionery	...	...	...	...	...	...	410
Butchers and cooked meats	...	...	...	...	...	...	795
Cafes, snack bars, etc.	...	...	...	...	...	...	400
Dairies (Registered)	...	...	...	...	...	...	710
Fishmongers and poulterers	...	...	...	...	...	...	197
General	...	...	...	...	...	...	1,115
Greengrocers	...	...	...	...	...	...	850
Grocery and provisions	...	...	...	...	...	...	950
Sweets, minerals, etc.	...	...	...	...	...	...	1,260
Fish frying establishments	...	...	...	...	...	...	490
Food Factories	...	...	...	...	...	...	2,300
Local authority meals, canteens and kitchens	...	...	...	...	...	...	217
Clubs—Licensed	...	...	...	...	...	...	62
Clubs—Registered	...	...	...	...	...	...	282
Clubs—Other	...	...	...	...	...	...	170

#### FACTORIES INSPECTION

Administrative details under Section 153 of the Factories Act, 1961, are given in the statistical appendix.

Problems arising during inspections under the Offices, Shops and Railway Premises Act, 1963, have been dealt with in a satisfactory manner by the close co-operation which exists between the various local authority departments concerned and between H.M. Inspector of Factories and the Public Health Inspectors.

In order to maintain a satisfactory standard of hygiene both in a personal and structural manner, frequent visits are made to food premises under the provisions of the Food Hygiene (General) Regulations, 1960, and in addition to the correction of infringements found, advice and guidance was given on the storage and packaging of the various commodities produced.



## Outworkers

The periodic visits to business premises and dwellinghouses used by outworkers have been maintained throughout the year, details are as follows:—

(1) Number of outworkers during the year...	...	...	125
(2) Number of returns received from other authorities	...	...	1
(3) Number referred to the Medical Officer of Health of districts outside the City	...	...	7

## Rag Flock and Other Filling Materials Act, 1951

The number of premises where rag flock is manufactured, stored or sold is as follows:—

(1) Licensed to manufacture rag flock...	...	1
(2) Licensed to store and sell rag flock	...	5
(3) Registered for use of filling materials	...	74

The number of samples submitted to the prescribed analyst was 14; all samples were found to conform to the requirements of the Act.

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

Agricultural premises visited during the current year consisted of farms, smallholdings, markets and nursery gardens; there were no infringements under the above enactment and 108 visits were made.

## INDUSTRIAL NUISANCES

### Offensive Trades

Redevelopment in the town centre has resulted in a gradual movement of firms into the industrial belt containing the old established offensive trades and the construction in these areas of tenement tower blocks has resulted in a number of complaints being received concerning the emission of foul smelling vapours and gases into the atmosphere. Investigations have proved that the cause is due to either plant breakdown or some human error in dealing with a particular consignment of offal. It has been found that continuous observation is necessary on certain plants in an endeavour to prevent the occurrence of a nuisance.

The rebuilding of certain office blocks and the increase in the installation in these buildings of mechanical ventilation systems, coupled with the large number of catering establishments which are situated in basements or at ground level has resulted in a number of complaints about cooking fumes entering offices situated on upper floors. In most cases it was found necessary to install metal ducting to carry the fumes clear of the roofs and windows of adjoining buildings.



## Dust

The major dust problem in the City arises from the demolition of buildings in the central area redevelopment scheme and on various other sites throughout the City. On windy days it is difficult to control this nuisance which is aggravated by the movement of vehicles to and from the demolition areas. Contractors were advised by the public health inspector to provide water sprays so as to minimise the nuisance.

## Noise

One of the most difficult problems to investigate is nuisance from noise as, in the majority of cases, the investigations have to be carried out outside normal hours of duty usually very late at night or early morning. During the daytime the noise level is not apparent and it is only when other businesses have ceased to operate that the noise from a particular source commences to be a nuisance. This is very marked when large industrial works operate night shifts and the premises are situated in close proximity to dwellinghouses.

The number of complaints, from various occupiers of both industrial and residential properties concerning noise nuisance from pneumatic drills, increased during the year. This was rectified in the main by fitting mufflers on the drills, and in some instances by varying the hours of working to suit the complainant. Amongst a number of other types of complaint received was one from residents adjoining a factory complaining about the noise from a large compressor which was in operation for 24 hours a day. After a number of attempts to abate the nuisance it was found necessary to resite the compressor in a soundproof room, well away from the houses.

In another case it was found necessary to move the main entrance to a large factory in order to abate the noise nuisance caused by vehicles entering and leaving the premises at all hours of the day. Although in a number of instances it was necessary to issue a statutory notice, in the main a satisfactory solution was obtained by negotiation between the public health inspector and factory managements. It must be acknowledged, however, that when industrial type premises are situated in close proximity to dwellinghouses, the risk of nuisance from noise is correspondingly increased.

A number of complaints concerned noise caused by dogs barking and it is extremely difficult to deal with this type of complaint. The noise is intermittent and usually the complainant is the only person who can prove that the noise is, in fact, a nuisance.

## LICENSED PREMISES

During 1966, twelve applications were received under the Licensing Act, 1964, by the Clerk to the Justices for new club registration



certificates. Following the issue of specifications, adaptations and improvements at an estimated cost of £4,000 were carried out to the premises concerned. Subsequently the Stipendiary Magistrate granted the necessary certificates and eleven applications were approved, one being withdrawn.

Under the provisions of this enactment the Stipendiary Magistrate is empowered to renew a certificate of registration for a period of twelve months, but after the second and subsequent application, if the Court thinks fit, the certificate can be renewed for a period of up to ten years. During the year, 32 clubs were reinspected when applications were made for renewal of certificates and in nine cases it was necessary to issue specifications of works, subsequently carried out, at an estimated cost of £650.

The Stipendiary Magistrate renewed registrations in respect of 24 clubs, the other eight clubs had not completed the necessary works at the end of the year. Five registered clubs surrendered their certificates upon obtaining new Justices On Licences.

The total number of registered clubs at the end of the year was 282, and a further 62 clubs are subject to On Licences under Section 55 of the Licensing Act, 1964.

In addition to the club registration certificates, twelve premises were visited and inspected in connection with applications for Justices' Licences to hold excise licences authorising the sale of intoxicating liquor. These included proprietary clubs, licensed restaurants, bingo halls and off-licence premises. Approval was given after the necessary works had been satisfactorily completed at a cost of £3,500.

As a result of these applications there are now 175 off-licence premises for the sale of beer, wine or spirits, twenty restaurants are licensed for the sale of intoxicating liquor, and three premises are subject to residential restaurant licences authorising the sale of intoxicants.

## ATMOSPHERIC POLLUTION

### Smoke Control Areas

One further Smoke Control Order became operative during the year and another seven were confirmed by the Minister of Housing and Local Government.

### Operative Smoke Control Areas

Seventeen Smoke Control Orders are now operative, covering the central area of the City and the wards of Aigburth, St. Mary's, Speke, Allerton, Woolton, Childwall, Dovecot, St. Michael's and parts of Church and Arundel. Some 91,000 houses are now included in confirmed areas.



## Abatement of Industrial Smoke

The reduction in smoke emissions from industrial boilers has been maintained and only comparatively few complaints have been received. Investigation of the emission in each case revealed that it was due to mechanical breakdown. It was not necessary for formal action to be taken on any occasion.

## Shipping

It is pleasing to record that progress on the river continues and on the few occasions when smoke emissions were observed the informal action taken was sufficient to prevent a recurrence of the emission.

## Warren Spring Laboratory

This section of the Department of Scientific and Industrial Research continues to accept the results of the investigation into atmospheric pollution in the City. Readings, from three different types of instrument, are forwarded each month for correlation.

## Special Visits

The services of public health inspectors are still requested by engineers, architects, works managers, contractors and householders. Advice is given on the desired instrumentation of boiler plants, heights of chimneys, methods of firing and attention to furnaces, the fixing of domestic firegrates and their efficient use when burning solid smokeless fuels.

A total of 95 new furnaces was installed and approval was requested in respect of 51 installations, all of which were approved without modification.

Plans of proposed new chimneys examined in accordance with Section 10 of the Clean Air Act, 1956, numbered 115. In seventeen cases the height of the chimney was increased in order to meet the requirements of the authority and one plan was withdrawn.

## RODENT CONTROL

The Rodent Control section continued the work throughout the year to eradicate rodent pests from buildings, lands and sewers in the City. Although many rat and mouse infestations were found either by notification or detected by routine survey, they were generally of a very slight degree. Practical assistance for the destruction of rats and mice was given to owners and occupiers of buildings and sites upon request, and in addition to the considerable amount of operational work completed, action was taken to prevent further infestations.



## 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.

To rely upon the enforcement of the Act without the local authority providing practical assistance to owners and occupiers for the destruction of rats and mice would be inadvisable. The exacting process of prescribing treatments either by informal or formal notices to owners and occupiers and the subsequent visits necessary to ensure that the notices were being complied with would, as a general practice, be too slow to be effective.

Continuous attention to suspected defective drains and sewers, to the remedying of defects in conjunction with systematic treatments of lands, buildings and sewers has helped to reduce the health danger associated with rodents and the risk of food contamination by them.

## Systematic Survey

The rodent control staff examined 15,904 sites during the year in connection with routine survey and investigation of complaints and a further 61,492 visits were made entailing operational work and re-examination of buildings and lands during or following treatments. Public Health Inspectors also made, in connection with other matters, 80,011 inspections under the Act.

## Rodent Infestation

During the year 4,495 sites were found to be infested, 2,157 by rats, 27 by rats and mice, and 2,311 by mice only and the majority were only slightly infested. Details are shown in the statistical appendix.

The sites principally affected were warehouses and factories within the dockside districts as may be expected, but with a continual fall in degree of infestation. The central areas of the City are still maintaining a decrease in rat population as a result of the steps taken year by year.

The transportation of rats, and mice in particular, conveyed in goods delivered to premises was again the means of causing occasional slight infestation during the year. The conveyance of rats in this way would account for ship rats being found some distance away from the dockside areas.

The rat infestations found within the middle belt of the City were again mainly slight and for the main part confined to yards of dwelling-houses and public passages.



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 11,629, an increase of 2,015 over the previous year, were received and promptly investigated.

Of the 1,152 dwellinghouses affected by rats, 960 infestations were solely confined to the external parts of the premises.

Occupiers generally have become accustomed to availing themselves of the services of the Rodent Control section and requests for assistance were made on the slightest sign of rodents in or near their premises. This will be noticed when comparing the number of complaints with the number of actual infestations reported.

### Rodent Disinfestation

During the year 3,756 buildings and lands were disinfested from rats and/or mice. The practice of providing free assistance to the occupiers of dwellinghouses was continued with an appreciable change in the number requiring their premises to be disinfested.

Owners or occupiers of buildings and lands other than private dwellinghouses who desire the department's assistance for the destruction of rodents are required to reimburse the local authority for the expenditure incurred. The demand for such assistance remains appreciable and 1,576 requests, an increase of 85 from the previous year, were received. A wide variety of business premises in all districts of the City were dealt with and the full cost of both the inspection and operational service was charged to the occupiers concerned, the work being in no way subsidised out of the rates.

Of the 3,961 infestations and reinfestations remedied during the year, 3,768 were treated by the department's operators and of these 3,730 were cleared by the use of poisons and the remaining 38 were remedied by trapping only. The effectiveness of the rodenticides used is apparent when having regard to the number of infestations remedied on one poisoning treatment, being 2,803 out of a total of 3,730. Of the others 760 required two treatments, 148 three treatments and 19 four or more treatments. The remaining 193 infestations were remedied by the occupiers or their contractors under the guidance and supervision of the rodent control inspectors or by the repair of defective drains.

It is estimated that at least 14,129 rats in buildings and on lands were destroyed during the year as a result of poisoning treatments. 1,028 dead rats were actually collected during operations and 437 were caught



in traps. The species of rats collected were 541 *rattus norvegicus* ("brown" or "common" rat) and 924 *rattus rattus* ("black" or "ship" rat). Of the rodents collected 54 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 10,322 ounces.

### Rat Destruction in Sewers

With the object of reducing the rat infestation of buildings and lands that may have its source from the sewer, treatments for the destruction of rats in sewers were applied during the year.

A new poison which can only be used in sewers was applied and, whilst it is too early to form a definite opinion, it is considered that the new treatment will reduce the surface infestations generally.

During the work of preparing sewer manholes for baiting it was necessary to refer to the City Engineer's Department 153 items of work that required attention before treatments were applied for rat destruction. The items included the removal of rubbish from baiting points, and clearing of choked or partially choked sewers.

### Preventative Measures

During the year 692 drain tests were held in connection with infestations, which resulted in 347 premises being found to have defective drainage systems and the necessary action was taken to have the drains repaired. Two 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 it was not necessary to institute legal proceedings under the Prevention of Damage by Pests Act, 1949.

### Pigeon Control

A sub-section was incorporated within the Rodent Control section to help reduce the number of feral pigeons in the City. Feral pigeons do considerable damage to the fabric of buildings where they roost and 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 killed and some feral pigeons were killed as a result of work carried out by private firms.

The tempo of help given by the public increased as the year drew to its close and it is anticipated that even better results will be shown in the control of the pigeon population next year.

A total of 13,935 visits were made which resulted in 37,440 pigeons being humanely killed and 7,504 eggs were destroyed. The number of birds caught by the department's staff was 20,323 and 17,117 with help from private firms.



## 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 rehousing of families was 13,577. As a result of these inspections 1,052 dwellinghouses and the furniture or effects of 184 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 2,347 inspections and 587 treatments being carried out.

### DISINFESTATION AND DISINFECTION STATION

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

5,110 Verminous articles disinfested.

15,080 Infectious articles disinfected.

24 Infectious library books disinfected.

24,504 Articles for precautionary treatment.

360 Tons of miscellaneous goods for precautionary disinfection.

### DISINFECTION OF INFECTIOUS PREMISES

Following the incidence of infectious disease at home 984 premises were dealt with in the manner prescribed for terminal disinfection.

### INCONTINENT LAUNDRY SERVICE

This service, which is continuing to expand, dealt with 25,300 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 14,200 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 the two attendants assisted at 474 post-mortems and 522 bodies were received.

## MISCELLANEOUS

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
4 Inspectors	21 Disinfectors, etc.
1 Depot Assistant	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 179,351 miles during the year and consumed 9,374 gallons of petrol.



## CIVIL DEFENCE

### AMBULANCE AND FIRST AID

Five training courses were arranged during the year covering all aspects of Civil Defence and two full first aid courses. The average monthly attendance throughout the year was 84. During the year seven volunteers passed the advanced test and five volunteers passed the standard test.

Combined exercises were held at Civil Defence Headquarters and Garston Old Road and fifteen volunteers assisted the Liverpool Regional Hospital Board in the semi-finals of their competition by acting as stretcher bearers.

### WELFARE

During the year the Welfare Section continued to train volunteers at Civil Defence Headquarters, Mill Bank, Liverpool 13, and the Pitville Ladies' Social Club, Pitville Avenue, Liverpool 18. Four Advance, two Standard, and one Home Nursing Course were held, sixteen volunteers passed their Advance training test and 23 successfully sat the St. John Ambulance Home Nursing examination.

The Section also took part in two combined Civil Defence Exercises, "Arcade" in March, and "Lend a Hand" in April, providing in all some 300 main meals. In addition to the normal training a series of three talks on the Organisation and Operational role of the Section were given to Senior Officers of the Corps, and a four weeks' Emergency Feeding Course was presented for members of the Women's Auxiliary Fire Service.

The total strength of the Section at the end of the year was:—

1	Organiser
4	Part-time Instructors
38	Volunteers in Class "A"
12	Volunteers in Class "B"
25	Volunteers in Reserve
53	Volunteers in Recruits

### SHELTER WELFARE

There has been no activity in this Section during the year as the numbers did not warrant it.

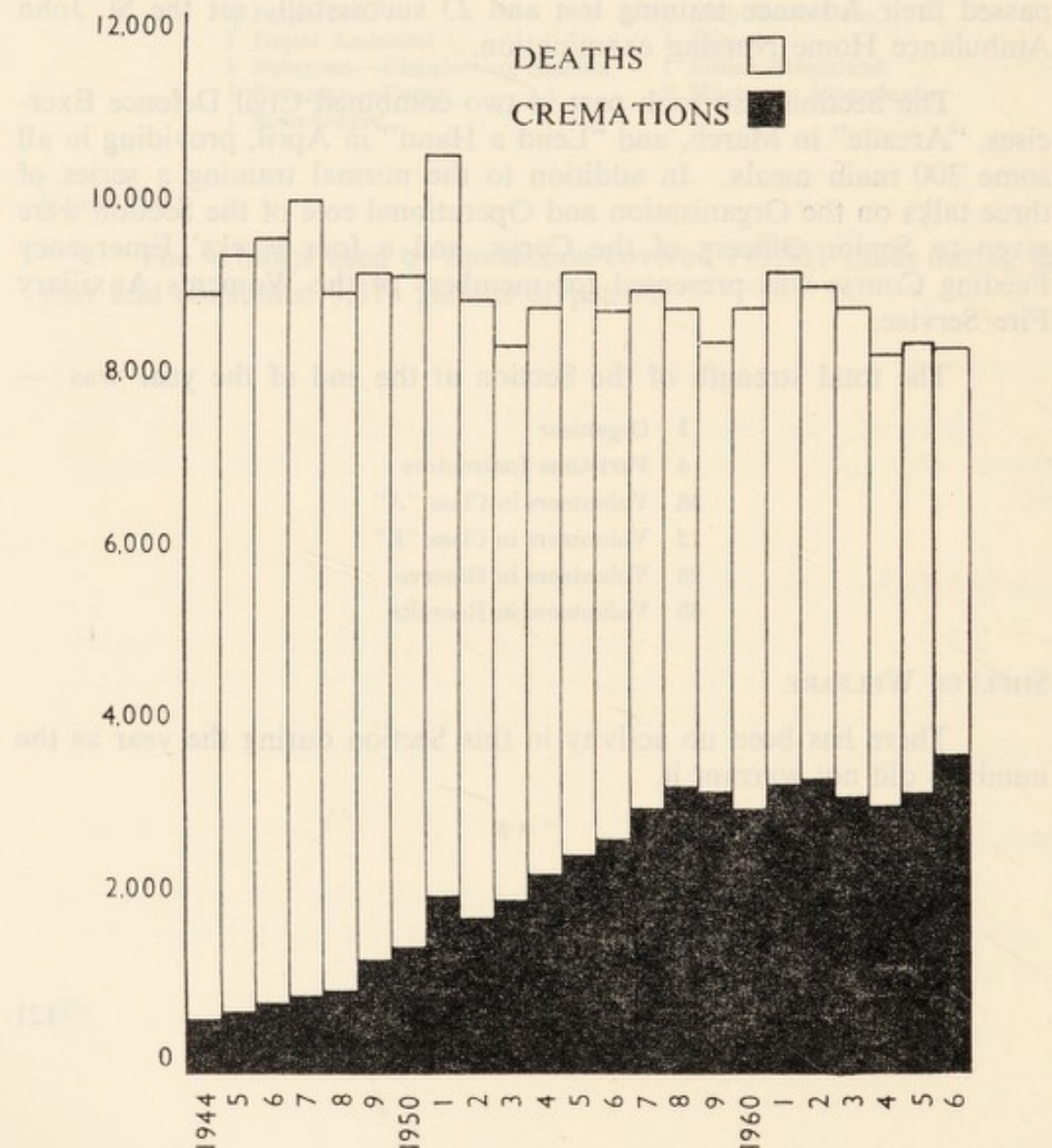


## CREMATION

The Medical Officer of Health continued to act as medical referee to the Liverpool Crematorium. The Deputy Medical Officer of Health and the Principal Medical Officer (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 3,505 which is a slight increase over the number undertaken during 1965. It is our opinion that the increase would have been greater had it not been for the fact that the two new crematoria in adjacent areas have now been operating since 1962 and another in the Thornton area since 1963. This fact, of course, has led to a slight decline in the figures up to the last two years.

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.





## WATER SUPPLY

The water supply in the area during 1966 was satisfactory both in quality and quantity. During the year 1966 bacteriological examinations were made on 3,541 samples of water from the aqueducts, wells, storage reservoirs, trunk mains and the distribution system. Of the 3,541 samples 547 were taken within the City from the two wells and from sampling points on the mains other than the trunk mains. Of the 547, 96.0 per cent were free from *B. Coli* and 54.8 per cent were free from coliform organisms. Also, of the 3,541 samples 1,666 were taken from the trunk mains which serve the City and other parts of the area of supply. Of the 1,666, 98.1 per cent were free from *B. Coli* and 63.2 per cent were free from coliform organisms. In addition, 76 chemical analyses were made and the results were satisfactory.

Six samples of water from the aqueducts and distribution system were examined for fluoride content. The average amount of fluoride, expressed as F, in these samples was 0.09 p.p.m.

For plumbo-solvency 282 analyses were made. The average amount of lead absorbed in those samples of water that had passed through test lengths of lead piping was 0.06 part per million. The supplies from both Rivington and Lake Vyrnwy were treated with hydrated lime in order to raise the pH value.

Unusual contamination occurred as follows:—

During the week-end which began on Friday, the 25th March, 1966, a report was received of an unusually heavy phenolic taste in the River Dee some miles upstream of the Corporation's intake. Having been warned to expect it the rate of abstraction from the river was reduced immediately by five millions gallons per day and the supply from Lake Vyrnwy was increased by the same rate. Also, the activated carbon plant at the Huntington treatment works on the River Dee, near Chester, was started up immediately and it treated the taste-bearing water effectively when that water arrived at the intake about eighteen hours later.

The number of dwellinghouses, flats and shops with domestic living accommodation supplied from the public water mains in Liverpool, was 206,168. None was supplied by a stand pipe. The population of the City as estimated by the Registrar General for 30th June, 1966, was 712,040.



# STATISTICAL SECTION

## VITAL STATISTICS

BIRTH STATISTICS—1943-1966

1966	LIVE BIRTHS			STILLBIRTHS		
	Males	Females	Total	Males	Females	Total
Legitimate ...	6,299	6,008	12,307	126	129	255
Illegitimate ...	666	584	1,250	16	6	22
Total	6,965	6,592	13,557	142	135	277

Year	Live Births	Birth Rate	Registered Stillbirths	Total Births	Stillbirths per 1,000 Live and Stillbirths	Illegitimate Live Births	
						No.	% of Live Births
1943	14,432	21.8	485	14,917	32.5	1,030	7.1
1944	15,412	23.1	492	15,904	30.9	1,274	8.3
1945	14,784	21.7	431	15,215	28.3	1,582	10.7
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



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			
1948	5.7	5.4			
1949	5.7	5.1			

DEATHS FROM PRINCIPAL CAUSES—1966

Class	Cause Group No. (List A).	Cause	Male	Female	Total	Rate per 1,000 Popula- tion	Percent- age of Total Deaths
II	44-48, 51-60	Cancer (except respi- ratory system) ...	484	645	1,129	1.59	13.61
II	49, 50	Cancer (respiratory system) ...	439	89	528	0.74	6.37
VI	70	Vascular lesions of central nervous system ...	396	538	934	1.31	11.26
VII	80-82	Heart Diseases ...	1,278	1,228	2,506	3.52	30.21
VII	79, 83-86	Other Circulatory Diseases ...	184	246	430	0.60	5.18
VIII	89-91	Acute and Broncho- Pneumonia ...	300	450	750	1.05	9.04
VIII	92, 93	Bronchitis ...	367	172	539	0.76	6.50
IX	98-107	Digestive Diseases ...	91	113	204	0.29	2.50
XIV & XV	127-135	Malformations and Diseases of Early Infancy ...	150	86	236	0.33	2.85
XVII	138-150	Violence ...	230	195	425	0.60	5.12
		All other causes ...	306	308	614	0.86	7.40
Totals		All causes ...	4,225	4,070	8,295	11.6	100



# DEATHS FROM CANCER 1966 (CLASS II)

Cause Group No. (List A).	Organs affected	Male	Female	Totals
44	Buccal cavity and pharynx ... ..	14	12	26
45-48	Oesophagus, stomach, intestines and rectum	237	244	481
49, 50	Larynx, trachea, bronchus and lungs ... ..	439	89	528
51	Breast ... ..	—	112	112
52, 53	Cervix and uterus ... ..	—	49	49
54-57	All other sites ... ..	189	191	380
58	Leukaemia and aleukaemia ... ..	20	14	34
59	Lymphosarcoma ... ..	20	15	35
60	Benign or unspecified neoplasms ... ..	4	8	12
	Totals ... ..	923	734	1,657

## TRENDS OF MORTALITY 1945-66

	<i>Deaths from Cancer of the Respiratory System</i>	<i>Deaths from Tuberculosis of the Respiratory System</i>
1945	160	605
1946	234	579
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



MATERNAL MORTALITY—1930-1966

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	—	—



# INFANT MORTALITY 1966

*Deaths from stated causes at various ages under one year.*

Cause of Death	I.C.D. No.	Under 1 week	7-27 days	1-6 months	7-11 months	Total Deaths under 1 year
Meningococcal Infection ...	057	—	—	1	—	1
Measles ... ..	085	—	—	—	—	—
Pneumonia ... ..	490-493, 763	3	5	37	3	48
Bronchitis ... ..	500-502	—	—	7	2	9
Enteritis ... ..	571, 572	—	1	6	2	9
Malformation ... ..	750-759	29	12	12	6	59
Injury at Birth ... ..	760, 761	24	2	—	—	26
Infections of Newborn ...	764-768	—	1	1	—	2
Other Diseases of Early Infancy ... ..	762, 769-776	110	8	5	—	123
Other causes ... ..	—	8	3	19	1	31
Totals		174	32	88	14	308

Live Births in the year ... Legitimate 13,557  
 ... Illegitimate 1,250

Deaths ... .. Legitimate Infants 272  
 ... Illegitimate Infants 36

## CAUSES OF DEATH—1966

Class	Male	Female	Total	Rate per 1,000 Population	Percentage of total deaths
I—Infectious and Parasitic Diseases ... ..	52	11	63	0.09	0.76
II—Neoplasms ... ..	923	734	1,657	2.33	19.98
III—Allergic, Metabolic Diseases etc. ... ..	39	66	105	0.15	1.27
IV—Diseases of the Blood ...	9	23	32	0.04	0.39
V—Mental and Psychoneurotic Diseases ...	45	5	50	0.06	0.60
VI—Diseases of the Nervous System ... ..	429	573	1,002	1.41	12.08
VII—Diseases of Circulatory System ... ..	1,462	1,474	2,936	4.12	35.39
VIII—Diseases of Respiratory System ... ..	704	656	1,360	1.91	16.40
IX—Diseases of Digestive System ... ..	91	113	204	0.29	2.46
X—Diseases of Genito-Urinary System ...	64	61	125	0.18	1.51
XI—Diseases of Pregnancy ...	—	—	—	—	—
XII—Diseases of Skin ... ..	—	7	7	0.01	0.08
XIII—Diseases of Bones ... ..	7	12	19	0.03	0.23
XIV—Congenital Malformations	39	38	77	0.11	0.93
XV—Diseases of Early Infancy	111	48	159	0.22	1.92
XVI—Senility and Ill-defined Diseases ... ..	20	54	74	0.10	0.89
XVII—Deaths from Violence ...	230	195	425	0.60	5.12
Totals ... ..	4,225	4,070	8,295	11.6	100



## ANALYSIS OF CAUSES OF INFANT MORTALITY IN SUCCESSIVE QUINQUENNIA 1896-1965, AND THE YEAR 196

## (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 (including Diarrhoea)	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	819
1901/1905	118,801	20,353	1,546	644	2,516	3,484	5,187	5,732	565
1906/1910	118,313	17,739	1,613	465	2,052	3,146	3,902	5,520	539
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	120
1926/1930	95,701	9,002	978	109	401	2,553	1,670	2,981	81
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	63
1956/1960	79,226	2,149	31	—	24	384	82	1,576	30
1961/1965	78,924	2,006	19	2	20	409	83	1,406	52
1966	13,557	308	1	—	5	61	17	210	11



## (B)—Death Rates

Years	1 Birth Rate per 1,000 population	DEATH RATES PER 1,000 LIVE BIRTHS							
		2 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 (including Diarrhoea)	8 Malforma- tions Premature Birth, Maras- mus &c.	9 Exter- Caus
1896/1900	33.4	189	12.7	6.2	22.1	32.0	57.1	51.0	7.3
1901/1905	33.4	172	13.0	5.5	21.2	29.3	43.7	48.1	4.7
1906/1910	32.2	149	13.6	3.9	17.4	26.6	33.0	46.7	4.6
1911/1915	29.3	137	11.6	3.1	12.8	26.1	32.5	43.1	3.8
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



# ANALYSIS OF CAUSES OF MORTALITY

*Deaths from certain Groups of Diseases in each decade from 1871 to 1960, and during the separate years 1961-1966*

Years	(a) Infective diseases (less Diarrhoea, Influenza and Tuberculosis)	(b) Tubercular diseases	(c) Respiratory diseases (including Influenza)	(d) Digestive diseases (including Diarrhoea)	Total Deaths from (a), (b), (c) & (d)	(e) Cancer	Total Deaths from all causes
1871-1880	27,205 (19.2)	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

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



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

Name of Authority	Birmingham	Bradford	Bristol	Cardiff
Registrar-General's estimated population for 1966	1,102,570	297,100	429,370	259,700
Comparability factor—				
(a) Births ... ..	0.99	1.04	1.03	0.99
(b) Deaths... ..	1.13	0.97	0.93	1.12
Crude birth rate per 1,000 population ... ..	19.06	18.6	17.0	17.79
Birth rate as adjusted by factor ... ..	18.87	19.3	17.5	17.62
Crude death rate per 1,000 population ... ..	11.12	14.1	12.6	11.61
Death rate as adjusted by factor ... ..	12.57	13.7	11.8	13.01
Infant mortality rate per 1,000 live births ...	21.22	30.0	17.3	22.07
Neonatal mortality rate per 1,000 live births ...	14.18	18.8	11.8	15.36
Stillbirth rate per 1,000 total births ... ..	17.29	17.2	14.7	18.06
Perinatal mortality rate per 1,000 total births ...	29.36	34.9	25.2	30.17
Maternal mortality rate per 1,000 total births ...	0.28	0.88	0.5	—
Tuberculosis rates per 1,000 population				
(a) Primary notifications—				
Respiratory ... ..	0.53	0.64	0.177	0.34
Non-respiratory ... ..	0.10	0.18	0.061	0.05
(b) Deaths—Respiratory ... ..	0.04	0.07	0.030	0.06
Non-respiratory ... ..	0.00	0.01	0.007	0.01
Death Rates per 1,000 population from—				
Cancer (all forms) ... ..	2.22	2.29	2.371	2.35
Cancer of Lungs and Bronchus ... ..	0.57	0.47	0.557	0.55
Meningococcal infections ... ..	0.01	0.003	0.005	—
Whooping Cough ... ..	0.01	0.000	—	—
Influenza ... ..	0.06	0.125	0.086	0.03
Measles ... ..	0.00	0.007	—	—
Acute Poliomyelitis and Encephalitis ... ..	—	0.000	—	—
Diarrhoea (under 2 years) ... ..	0.45	0.017	0.007	0.008
Diarrhoea (under 2 years) (per 1,000 live births)	0.90	0.905	0.41	0.43



RATES, ETC., OF A NUMBER OF THE LARGER AUTHORITIES FOR 1966

Kingston upon Hull	Leeds	Leicester	Liverpool	Manchester	Newcastle upon Tyne	Nottingham	Sheffield
298,000	508,000	279,030	712,040	625,250	253,780	310,280	486,490
0.97	1.00	1.04	0.94	1.00	1.00	0.99	1.01
1.2	1.11	0.95	1.18	1.14	1.08	1.06	1.02
18.67	17.9	18.34	19.0	19.17	16.70	19.40	17.04
18.11	17.9	19.07	17.9	19.17	16.70	19.21	17.21
11.39	12.4	12.23	11.6	12.55	12.22	12.69	12.68
13.66	13.8	11.62	13.7	14.31	13.19	13.45	12.93
25.16	27.1	26.97	22.7	25.53	25.01	29.89	20.61
14.56	16.9	16.61	15.2	16.52	15.10	17.27	14.11
15.92	16.8	16.34	20.0	18.27	15.79	14.88	17.53
27.24	31.1	30.57	32.6	31.37	29.02	29.78	29.03
0.35	0.22	0.58	—	0.33	—	—	0.35
0.3	0.37	0.43	0.330	0.44	0.386	0.326	0.35
0.04	0.06	0.10	0.042	0.06	0.094	0.087	0.05
0.03	0.05	0.047	0.065	0.07	0.079	0.035	0.07
0.003	0.006	0.004	0.007	0.00	0.004	0.010	0.00
2.32	2.36	2.26	2.327	2.49	2.39	2.217	2.47
0.64	0.69	0.52	0.742	0.74	0.68	0.593	0.71
—	—	0.0036	0.003	0.01	0.004	0.003	0.00
—	—	—	—	0.00	0.004	0.003	0.00
0.12	0.04	0.043	0.022	0.10	0.032	0.061	0.10
—	—	—	0.003	—	0.004	—	0.00
—	—	0.0036	—	—	—	—	0.00
0.002	0.02	0.0108	0.013	0.03	0.016	0.028	0.01
0.1	0.97	0.59	0.664	1.50	0.94	1.33	0.84



# MATERNITY AND CHILD WELFARE

## PUERPERAL PYREXIAS NOTIFIED IN 1966

Occurring in Hospital	223
Occurring at Home	7

TOTAL 230

Uterine infection ... ..	70
Respiratory tract infection ... ..	43
Urinary tract infection... ..	44
Breast infection ... ..	7
Post operative caesarian section ... ..	6
Retained product ... ..	1
Infected perineum ... ..	1
Anaemia ... ..	1
Disseminated Lupus Erythematosus ... ..	1
Pyrexia of unknown origin ... ..	56

230

## MIDWIFERY SERVICE ENQUIRIES INTO HOME CONDITIONS—1966

### MOTHERS

Hospital Requests	Booked for Home Confinement	No Contact	Returned to Hospital Not Suitable
160	37	8	115

### BABIES

Hospital Requests	Suitable for Early Discharge	No Contact	Not Suitable for Early Discharge
5,551	3,975	265	1,311

TOTAL REQUESTS ... 5,711



WEIGHTS OF PREMATURE BABIES—1966  
CARED FOR BY SPECIALLY TRAINED MIDWIVES

	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.	1	—	—
4 lb. 7 ozs. to 4 lb. 15 ozs.	10	—	43
5 lb. to 5 lb. 8 ozs.	17	1	427
5 lb. 9 ozs. and over	—	—	212
<b>Totals</b>	<b>28</b>	<b>1</b>	<b>682</b>
Sets of twins	1	—	39
One of twins	—	—	11
Sets of triplets	—	—	—
Two of triplets	—	—	1

PATIENTS TRANSFERRED TO HOSPITAL—1966

*Mothers*

Postmaturity ... ..	74
Malpresentations ... ..	54
Prolonged labour ... ..	35
Ante partum haemorrhage ...	32
Premature rupture of membranes	31
Pre-eclamptic toxæmia ...	25
Anaemia ... ..	16
Social Reasons ... ..	16
Disproportion ... ..	15
Multiple pregnancy ... ..	14
Premature labour ... ..	13
R.H. Incompatibility ... ..	13
Miscarriages ... ..	10
Foetal distress ... ..	7
Post partum haemorrhage ...	4
Urinary complications ...	4
Bad obstetric history ...	4
Placenta praevia ... ..	3
Multiparity ... ..	4
Intra uterine death ... ..	3
Retained placenta ... ..	2
Perineal repair ... ..	2
Puerperal insanity ... ..	2
Others ... ..	10

393

*Babies*

Congenital abnormalities ... ..	7
Cyanosis and Asphyxia ... ..	5
Haemorrhagic disease ... ..	4
Prematurity ... ..	3
Respiratory complications ...	2
Calcium deficiency ... ..	2
Poor general condition ... ..	2
Retention of urine ... ..	1
Persistent vomiting ... ..	1
Loose stools ... ..	1

28

Total 421



REASONS FOR MIDWIVES  
CALLING IN MEDICAL AID—1966

*Mothers*

Perineal repair ... ..	68
Prolonged labour ... ..	53
Ante-partum haemorrhage ...	26
Post-partum haemorrhage ...	21
Malpresentations ... ..	20
Pyrexia ... ..	20
Premature rupture of membranes	19
Premature labour ... ..	14
Foetal distress ... ..	14
Pre-eclamptic toxæmia ... ..	12
Thrombosis and varicosities ...	11
Retained placenta and products	11
Anaemia ... ..	8
Post maturity ... ..	5
Urinary complications ... ..	6
Abortions ... ..	5
Disproportion ... ..	4
Chest complications ... ..	4
Psychiatric disorders ... ..	4
Breast complications ... ..	3
Multiple pregnancy ... ..	3
Multiparity ... ..	2
Intra-uterine death ... ..	2
Rhesus incompatibility ... ..	1
	<hr/>
	336
Total ... ..	443

*Babies*

Moist eyes ... ..	28
Asphyxia and Cyanosis ... ..	17
Septic infections ... ..	15
Congenital abnormalities ... ..	7
Jaundice ... ..	6
Monilial infections ... ..	5
Vomiting ... ..	4
Snuffles ... ..	4
Convulsions and twitchings...	4
Grunting respirations ... ..	4
Prematurity ... ..	3
Retention of urine ... ..	2
Poor general condition ... ..	2
Feeding problems ... ..	2
Relaxed stools ... ..	1
Melaena stools ... ..	1
Cold syndrome ... ..	1
Stillbirth ... ..	1
	<hr/>
	107

Doctor booked 56

Doctor not booked 389

Of these requests for medical aid 64 were for patients discharged from hospital before the tenth day.



## HOSPITAL DISCHARGES—1966

Hospital	Days	2	3	4	5	6	7	8	9	10	Total	Premature Births	Total
Broadgreen Hospital	...	154	110	48	25	15	17	1	—	—	370	53	423
Mill Road Hospital	...	342	237	111	62	92	108	83	5	2	1,042	215	1,257
Sefton General Hospital	...	247	245	178	100	313	460	208	38	18	1,807	159	1,966
Walton Hospital	...	109	65	33	180	342	266	110	20	16	1,141	108	1,249
Liverpool Maternity Hospital	...	28	52	128	362	601	506	215	37	13	1,942	104	2,046
Others	...	1	—	—	—	2	8	1	1	7	20	—	20
Total	...	881	709	498	729	1,365	1,365	618	101	56	6,322	639	6,961



# EPIDEMIOLOGY

## FOOD POISONING FOR 1966

(Including all salmonella infections but excluding *Typhoid* and *Paratyphoid*)

General outbreak= two or more unrelated cases due to a common cause.

Family outbreak = two or more cases related or in a household due to the same cause.

Sporadic case = single cases not connected with any other cases.

### FOOD POISONING—INCIDENTS AND CASES

Causative agent	GENERAL OUTBREAKS		FAMILY OUTBREAKS		SPORADIC CASES	TOTAL	TOTAL
	No. of separate out-breaks	No. of cases notified or ascertained	No. of separate out-breaks	No. of cases notified or ascertained	Notified or ascertained	No. of outbreaks and sporadic cases columns (1+3+5)	No. of cases columns (2+4+5)
	1	2	3	4	5	6	7
<i>S. typhimurium</i>			4	23	2	6	25
Other <i>Salmonellae</i>			3	10	1	4	11
<i>Cl. welchii</i>							
<i>Staph. aureus</i>							
Other causes							
Cause unknown							
TOTAL ...	—	—	7	33	3	10	36

DETAILS OF FOOD POISONING DUE TO *SALMONELLAE* OTHER THAN *S. TYPHIMURIUM*  
(The totals of this table equal the total of line 2 in Table 1 above)

Type of <i>Salmonellae</i>							
<i>infantis</i> ...			1	5		1	5
<i>poona</i> ...			1	3		1	3
<i>alachua</i> ...			1	2		1	2
<i>newport</i> ...					1	1	1



# SALMONELLA INFECTIONS (NOT FOOD BORNE) INCIDENTS AND CASES

Causative agent	GENERAL OUTBREAKS		FAMILY OUTBREAKS		SPORADIC CASES	TOTAL	TOTAL
	No. of separate out-breaks	No. of cases notified or ascertained	No. of separate out-breaks	No. of cases notified or ascertained	Notified or ascertained	No. of outbreaks and sporadic cases columns (1+3+5)	No. of cases columns (2+4+5)
	1	2	3	4	5	6	7
<i>S. typhimurium</i>			8	24	10	18	34
Other <i>Salmonellae</i>			2	5	26	28	31
TOTAL ...	—	—	10	29	36	46	65



DETAILS OF SALMONELLA INFECTIONS DUE TO SALMONELLAE OTHER THAN S. TYPHIMURIUM (NOT FOOD BORNE)

(The totals of this table equal the totals in line 2 of Table above)

Causative agent (Type of Salmonellae)	GENERAL OUTBREAKS		FAMILY OUTBREAKS		SPORADIC CASES	TOTAL	TOTAL
	No. of separate out-breaks	No. of cases notified or ascertained	No. of separate out-breaks	No. of cases notified or ascertained	Notified or ascertained	No. of outbreaks and sporadic cases columns (1+3+5)	No. of cases columns (2+4+5)
	1	2	3	4	5	6	7
infantis ...					5	5	5
panama ...			1	2	2	3	4
anatum ...					6	6	6
enteritidis ...					2	2	2
heidelberg ...					1	1	1
dublin ...					1	1	1
bovis morbificans...					1	1	1
stanley ...					1	1	1
derby ...					1	1	1
newport ...					1	1	1
brandenburg ...			1	3		1	3
illinois...					1	1	1
duisberg ...					4	4	4
TOTALS ...			2	5	26	28	31

DEATHS ASSOCIATED WITH FOOD POISONING

Male, aged 69 no causal agent.

Cause of death: "I (a) Coronary Atheroma, II Enteritis due to multiple duodenal diverticulitis."

Salmonella californica isolated from faeces on routine post-mortem. Considered to be silent carrier.



# TUBERCULOSIS

## NOTIFICATIONS—AGE GROUPS 1966

Age	Male	Female	Total
-1	—	—	—
1-	6	2	8
2-	—	2	2
3-	1	—	1
4-	1	—	1
5-	3	5	8
10-	4	7	11
15-	10	8	18
20-	12	6	18
25-	11	12	23
30-	7	12	19
35-	9	4	13
40-	19	8	27
45-	11	1	12
50-	18	5	23
55-	12	6	18
60-	20	7	27
65-	16	9	25
70-	6	3	9
75-	—	—	—
80+	—	1	1
Age unknown	—	1	1
Totals	166	99	265



## NOTIFICATIONS OF TUBERCULOSIS—1928-1966

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



**DEATHS FROM TUBERCULOSIS—1928-1966**

Year	Pre-School Children (0-4 Years)			School Children (5-14 Years)			Adolescents & Adults (15+ Years)			Total for all Ages		
	Pulmonary	Non-Pulmonary	Total	Pulmonary	Non-Pulmonary	Total	Pulmonary	Non-Pulmonary	Total	Pulmonary	Non-Pulmonary	Total
1928	27	68	95	37	41	78	957	69	1,026	1,021	178	1,199
1929	27	84	111	40	57	97	991	75	1,066	1,058	216	1,274
1930	91	7	98	45	35	80	983	69	1,052	1,049	181	1,230
1931	12	73	85	21	30	51	956	61	1,017	989	164	1,153
1932	14	67	81	21	34	55	934	69	1,003	969	170	1,139
1933	6	50	56	31	33	64	972	65	1,037	1,009	148	1,157
1934	13	49	62	16	24	40	838	56	894	867	129	996
1935	5	43	48	17	20	37	790	60	850	812	123	935
1936	9	48	57	14	25	39	690	53	743	713	126	839
1937	9	43	52	11	20	31	664	49	713	684	112	796
1938	6	45	51	11	11	22	649	47	696	666	103	769
1939	5	29	34	11	22	33	631	48	679	647	99	746
1940	7	45	52	12	22	34	742	55	797	761	122	883
1941	20	63	83	8	29	37	671	55	726	699	147	846
1942	10	45	55	11	21	32	632	58	690	653	124	777
1943	14	33	47	9	17	26	647	53	700	670	103	773
1944	12	32	44	7	12	19	578	38	616	597	82	679
1945	9	32	41	9	21	30	587	43	630	605	96	701
1946	4	29	33	4	20	24	571	29	600	579	78	657
1947	15	27	42	5	18	23	579	40	619	599	85	684
1948	8	33	41	4	16	20	618	36	654	630	85	715
1949	3	22	25	4	13	17	535	33	568	542	68	610
1950	3	24	27	2	8	10	476	32	508	481	64	545
1951	5	19	24	2	5	7	399	19	418	406	43	449
1952	1	13	14	—	4	4	268	19	287	269	36	305
1953	1	17	18	1	2	3	256	17	273	258	26	284
1954	1	4	5	—	2	2	231	6	237	232	12	244
1955	—	5	5	2	2	4	183	12	195	185	19	204
1956	2	1	3	—	—	—	135	6	141	137	7	144
1957	—	1	1	—	1	1	123	3	126	123	5	128
1958	—	1	1	1	1	2	108	5	113	109	7	116
1959	—	2	2	—	—	—	102	1	103	102	3	105
1960	—	—	—	—	—	—	81	3	84	81	3	84
1961	—	1	1	—	—	—	80	5	85	80	6	86
1962	—	—	—	—	—	2	74	5	79	74	7	81
1963	—	1	1	—	1	1	54	2	56	54	4	58
1964	—	—	—	—	—	—	38	3	41	38	3	41
1965	—	—	—	—	—	—	42	1	43	42	1	43
1966	—	—	—	—	—	—	46	5	51	46	5	51



TUBERCULOSIS CASES ON REGISTERS OF CHEST CLINICS—1966

Number of persons examined for the first time ... ..	4,820	Number found to be free of disease ...	2,788
Number found to be definitely tuberculous as detailed in 'A' below ... ..	293	Number found to be suffering from other conditions ... ..	230

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* ... ..	158	63	15	5	21	6	163	94	21	268
B.—CONTACTS examined during the year:										
(a) Definitely tuberculous ...	2	5	17	—	1	1	2	6	18	26
(b) Diagnosis not completed ...	2	1	2	—	—	—	2	1	2	5
(c) Non-tuberculous ...	321	487	1,372	—	—	—	321	487	1,372	2,180
C.—CASES written off the Register as Recovered ... ..	244	237	19	12	13	6	256	250	25	531
D.—NUMBER OF CASES on Register on 31st December 1966:										
(a) Definitely tuberculous ...	1,808	1,259	167	96	152	28	1,904	1,411	195	3,510
(b) Diagnosis not completed ...	2	3	6	—	—	—	2	3	6	11

Number of attendances of patients at the Chest Clinics during the year 1966 ...	16,579	Number of patients under medical treatment at home on 31st December, 1966	532
Number of visits paid by the Tuberculosis Medical Officer to the homes of patients during 1966 ... ..	74	Total number of visits paid to the homes of patients by Tuberculosis Visitors during 1966 ... ..	20,542
Total number of cases vaccinated with B.C.G. during 1966.		Includes newly born babies in Maternity Wards in Sefton General Hospital, Walton General, Mill Road and Liverpool Maternity Hospitals.	
Children ... ..	1,517		
Others ... ..	138		



# B.C.G. VACCINATION SCHOOL CHILDREN—1966

Number of School Children offered B.C.G. vaccination ...	...	...	...	...	...	...	...	10,299
Number of acceptors ...	...	...	...	...	...	...	...	9,159
Number Heaf-tested...	...	...	...	...	...	...	...	8,356
Number of positive Heaf tests ...	...	...	...	...	...	...	...	1,135
Number of children vaccinated with B.C.G. ...	...	...	...	...	...	...	...	7,221

# B.C.G. VACCINATION OF SCHOOL CHILDREN, HEAF TESTS—1956-1966

Year	Number Tested	Number Positive	Percentage of Number Tested Found Positive
1956	8,921	2,494	28.0
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



# MENTAL HEALTH SERVICE

## REFERRALS—1966

Sources of Reference	No. of Persons
General Practitioners ... ..	500
Hospitals—	
In-Patients on discharge ... ..	1,456
After Out-Patient or Day Treatment ... ..	73
Casualty and Reception Wards ... ..	234
Section 25 or 26 action after admission ... ..	149
Reports requested ... ..	76
Education Department (Mentally Subnormal Children or School Leavers)	196
Police and Courts ... ..	87
Relatives, Patients, Public Bodies, etc. ... ..	394
Patients already receiving community care, referred for hospital admission	131
Total ... ..	3,296

## ACTION TAKEN IN ABOVE CASES

Action Taken	No. of Persons
Admitted to Hospital—	
Mental Health Act, 1959 Section 29 (Emergency)... ..	711
Mental Health Act, 1959 Section 25 (Observation) ... ..	171
Mental Health Act, 1959 Section 26 (Treatment) ... ..	14
Mental Health Act, 1959 Section 60 (Court) ... ..	42
Informally ... ..	427
Action taken after admission to hospital—	
Section 25 and 26 applications made ... ..	91
Reports made on home circumstances ... ..	76
Placed on Community Care list	
(including 1,456 Psychiatric Hospital discharges) ... ..	1,677
No further action necessary ... ..	87
Total ... ..	3,296

\*This number represents only a proportion of total informal admissions; in many cases the Mental Health Service was not involved in admission



# AMBULANCE SERVICE

## INFECTIOUS PATIENTS—1966

Month	Admissions	Hospital to Hospital Transfers	Total	TYPE	
				Sitting Cases	Ambulance Cases
January ... ..	110	13	123	89	34
February ... ..	105	11	116	66	50
March ... ..	112	27	139	99	40
April ... ..	100	28	128	89	39
May ... ..	136	15	151	110	41
June ... ..	162	29	191	108	83
July ... ..	120	52	172	105	67
August ... ..	107	21	128	95	33
September ... ..	128	21	149	113	36
October ... ..	156	28	184	147	37
November ... ..	164	27	191	128	63
December ... ..	163	34	197	161	36
Total ...	1,563	306	1,869	1,310	559

Age of vehicles in years	Under 1	1-	2-	3-	4-	5-	6-	7-	8-	9-	Over 10	Total
	16	16	1	12	10	11	8	5	—	4	—	83



					1965	1966
Diesel Ambulances ...	...	...	...	...	24.6 m.p.g.	23.9 m.p.g.
Petrol Ambulances ...	...	...	...	...	15.6 m.p.g.	16.2 m.p.g.
Dual-Purpose Ambulances...	...	...	...	...	16.0 m.p.g.	15.2 m.p.g.
Sitting-case Ambulances ...	...	...	...	...	20.7 m.p.g.	20.9 m.p.g.
Vehicle Mileage ...	...	...	...	...	1,021,834	1,045,135
Fuel—Diesel ...	...	...	...	...	13,872 gallons	11,410 gallons
—Petrol ...	...	...	...	...	42,117 gallons	48,975 gallons
Oil ...	...	...	...	...	887 gallons	985 gallons

*Average mileage for the fleet was as follows:—*

Type of Vehicle	Average Annual Mileage		Percentage increase/ decrease on 1965
	1965	1966	
Ambulances Petrol ...	16,805	16,647	— 0.9%
Diesel... ..	15,545	13,631	— 12.3%
Sitting-case Ambulances ...	13,772	14,322	+ 4.0%
Sitting-case Cars ...	8,281	6,642	— 19.8%

*Fuel Consumption*

Stretcher case ambulances ...	Petrol	16.2 miles per gallon
	Diesel	23.9 „ „ „
Sitting-case ambulances ...	Petrol	15.2 „ „ „
Sitting-case cars ...	Petrol	20.9 „ „ „

The total petrol consumption during 1966 increased by 6,858 gallons or 16.2 per cent to 48,975 gallons and the diesel fuel consumption decreased by 2,462 gallons or 18 per cent to 11,410 gallons.



PATIENT REMOVALS—1966

NUMBER OF PERSONS CARRIED	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
<b>Non-infectious—</b>													
Out-patients ...	17,448	17,321	19,828	16,294	18,211	19,259	18,045	17,426	18,238	17,734	18,881	16,608	215,293
Hospital Admissions/ Discharges ...	3,362	2,735	3,213	2,921	2,969	3,047	2,604	2,863	2,742	3,053	3,213	3,537	36,259
Inter-Hospital Transfers	678	596	681	681	775	695	638	841	722	690	663	571	8,231
<b>Infectious—</b>													
Out-patients ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Hospital Admissions/ Discharges ...	110	105	112	100	136	162	120	107	128	156	164	163	1,563
Inter-Hospital Transfers	13	11	27	28	15	29	52	21	21	28	27	34	306
<b>Accident/Emergency</b> ...	1,986	1,863	2,018	2,045	2,125	1,954	1,985	2,053	2,003	1,998	1,964	2,154	24,148
<b>Other Persons</b> ...	511	427	421	395	418	466	377	575	467	1	—	3	4,061
Totals 1966	24,108	23,058	26,300	22,464	24,649	25,612	23,821	23,886	24,321	23,660	24,912	23,070	289,861
Totals 1965	22,197	21,114	24,279	21,095	22,631	22,387	22,255	22,084	23,151	23,654	23,753	22,720	271,320



TRANSPORT FOR THE HANDICAPPED—1966

Age of vehicles in years	Under 1	1-	2-	Over 3	Total
	7	7	—	15	29

MEDICAL EXAMINATIONS—1966

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 ... ..	11	—	—	—	11	—	—	—	22
Art Gallery ... ..	3	—	—	—	2	—	—	—	5
Baths ... ..	26	—	2	—	5	—	3	1	37
Building Surveyor's ... ..	—	—	—	—	6	—	—	—	6
Central Purchasing ... ..	—	—	—	—	24	—	—	—	24
Children's ... ..	3	—	2	—	98	3	6	4	116
City Analyst ... ..	—	—	—	—	4	—	—	—	4
City Architect's ... ..	1	—	—	—	16	—	—	—	17
City Engineer's ... ..	180	3	74	15	95	—	13	10	390
City Estates ... ..	6	—	2	2	45	—	2	4	61
City Lighting ... ..	14	—	—	—	10	—	5	2	31
City Planning ... ..	—	—	—	—	28	—	—	—	28
City Treasury ... ..	—	—	2	—	170	3	4	5	184
Education ... ..	94	6	10	—	465	—	14	59	648
Fire Service ... ..	3	—	1	—	37	—	1	—	42
Health... ..	43	1	3	—	496	4	13	11	571
Housing ... ..	14	1	2	—	48	1	7	10	83
Libraries ... ..	1	—	—	—	93	—	2	3	99
Magistrates ... ..	—	—	—	—	11	—	—	—	11
Markets ... ..	11	—	—	—	2	—	—	—	13
Mersey Tunnel ... ..	6	—	4	—	89	—	4	2	105
Museums ... ..	1	—	—	—	7	—	1	3	12
Parks & Recreation ... ..	34	1	5	—	32	—	4	10	86
City Transport ... ..	357	—	—	—	70	—	5	37	469
Police ... ..	17	—	—	—	165	6	2	4	194
Probation ... ..	1	—	—	—	10	—	—	—	11
Town Clerk's ... ..	—	—	—	—	51	—	1	1	53
Water ... ..	81	2	20	5	20	—	4	2	134
Weights & Measures ... ..	—	—	—	—	3	—	—	—	3
Works ... ..	317	5	11	8	74	—	10	7	432
Welfare ... ..	28	3	2	2	72	—	14	12	133
<b>TOTAL ... ..</b>	<b>1,252</b>	<b>22</b>	<b>140</b>	<b>32</b>	<b>2,259</b>	<b>17</b>	<b>115</b>	<b>187</b>	<b>4,024</b>

Total Fit ... .. 3,766

Cancelled ... .. 447

Total Unfit ... .. 258

Other Authorities ... .. 60



# ENVIRONMENTAL HEALTH CONTROL

## SUMMARY OF PROSECUTIONS (CASES HEARD)—1966

Act	Section	No. of Informations or Complaints	Penalties £ s. d.	Costs £ s. d.
SHOPS ACT AND FOOD AND DRUGS ACT, REGULATIONS AND BYELAWS				
Shops Act, 1950	Evening Closing	2	10 0 0	5 5 0
Shops Act, 1950	Sunday Closing	3	2 0 0	—
Food and Drugs Act, 1955	Selling Milk with Added Water	6	50 0 0	61 1 0
Food and Drugs Act, 1955	Food not of quality demanded	4	45 0 0	12 4 0
FOOD HYGIENE (GENERAL) REGULATIONS, 1960		25	198 0 0	—
		40	305 0 0	78 10 0



FACTORIES ACT, 1961—PART I OF THE ACT

1. *INSPECTIONS for purposes of provisions as to Health (including inspection made by the Public Health Inspectors—1966)*

Premises (1)	Number on Register (2)	Number of		
		Inspection (3)	Written Notices (4)	Occupiers prosecuted (5)
(i) Factories in which Sections 1, 2, 3, 4, and 6 are to be enforced by local authorities ...	744	78	2	—
(ii) Factories not included in (i) in which Section 7 is enforced by local authority	2,091	643	26	—
(iii) Other premises in which Section 7 is enforced by the local authority (excluding outworkers premises) ...	94	18	2	—
<b>TOTAL</b> ...	<b>2,929</b>	<b>739</b>	<b>30</b>	<b>—</b>

2. *Cases in which DEFECTS were Found—1966*

Particulars (1)	Number of Cases in which Defects were found				Number of Cases in which Prosecu- tions were instituted (6)
	Found (2)	Remedied (3)	Referred To H.M. Inspector (4)	By H.M. Inspector (5)	
Want of cleanliness (S.1) ...	1	1	2	1	—
Overcrowding (S.2) ...	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	2	—	—
Inadequate ventilation (S.4) ...	1	1	2	1	—
Sanitary Conveniences (S.7)—					
(a) Insufficient ...	2	2	—	2	—
(b) Unsuitable or defective ...	25	25	—	25	—
(c) Not separate for sexes ...	1	1	—	1	—
Other offences against the Act (not including offences re- lating to outwork) ...	12	12	—	—	—
<b>TOTAL</b> ...	<b>42</b>	<b>42</b>	<b>6</b>	<b>30</b>	<b>—</b>

Part VIII of the Act

OUTWORK — 1966

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., cleaning and washing Cosaques, Christmas stockings etc.	43	—	—	—	—	—
	79	—	—	—	—	—
<b>TOTAL</b> ...	<b>122</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>



CLEARANCE AREAS NOT YET CONFIRMED BY THE MINISTER AT 31ST DECEMBER, 1966

Area	Houses	Population
Queens Road (Everton) Clearance Area, 1964 ... ..	783	3,174
Caird Street (Everton) Clearance Area, 1964 ... ..	299	1,062
South Street Clearance Area, 1965... ..	830	2,850
Carlton Hill Clearance Area, 1965 ... ..	133	552
Threlfall Street Clearance Area, 1965 ... ..	128	395
Admiral Street Clearance Area, 1965 ... ..	12	43
Letitia Street No. 1 Clearance Area, 1965 ... ..	8	24
Letitia Street No. 2 Clearance Area, 1965 ... ..	8	19
Byles Street No. 2 Clearance Area, 1965 ... ..	6	27
Thames Street No. 1 Clearance Area, 1965 ... ..	292	1,095
Thames Street No. 2 Clearance Area, 1965 ... ..	4	16
Berwick Street Clearance Area, 1965 ... ..	187	688
Minto Street Clearance Area, 1965... ..	303	908
Pluto Street Clearance Area, 1965 ... ..	314	1,163
Sefton Park Road Clearance Area, 1965 ... ..	3	33
Tennyson Street Clearance Area, 1965 ... ..	440	2,464
Horsley Street Clearance Area, 1965 ... ..	377	1,342
Havelock Street Clearance Area, 1965 ... ..	446	1,515
Norwood Grove No. 1 Clearance Area 1965 ... ..	362	1,413
Norwood Grove No. 2 Clearance Area 1965 ... ..	8	36
Norwood Grove No. 3 Clearance Area 1965 ... ..	17	149
Norwood Grove No. 4 Clearance Area, 1965 ... ..	7	26
Norwood Grove No. 5 Clearance Area, 1965 ... ..	223	756
Norwood Grove No. 6 Clearance Area, 1965 ... ..	19	80
Flinders Street No. 1 Clearance Area, 1966 ... ..	517	2,155
Flinders Street No. 2 Clearance Area, 1966 ... ..	4	17
Ersline Street Clearance Area, 1966 ... ..	347	1,215
Pickering Street Clearance Area, 1966 ... ..	604	2,156
Richmond Terrace Clearance Area, 1966 ... ..	4	37
Woodville Terrace No. 1 Clearance Area, 1966 ... ..	58	229
Woodville Terrace No. 2 Clearance Area, 1966 ... ..	25	104
Cupid Street Clearance Area, 1966... ..	340	1,083
Stanfield Road Clearance Area, 1966 ... ..	1,076	3,607
Hamilton Road No. 1 Clearance Area, 1966 ... ..	5	12
Hamilton Road No. 2 Clearance Area, 1966 ... ..	7	33
Stockdale Street Clearance Area 1966 ... ..	12	20
Marlborough Street No. 1 Clearance Area, 1966 ... ..	9	34
Marlborough Street No. 2 Clearance Area, 1966 ... ..	6	27
Midghall Street No. 1 Clearance Area, 1966 ... ..	15	47
Midghall Street No. 2 Clearance Area, 1966 ... ..	2	15
Priory Grove Clearance Area 1966 ... ..	844	2,708
Hamilton Road No. 3 Clearance Area, 1966 ... ..	64	228
Lorraine Street Clearance Area, 1966 ... ..	15	51
Kinder Street Clearance Area, 1966 ... ..	47	192
Starkie Street Clearance Area, 1966 ... ..	12	52
Beacon Lane No. 1 Clearance Area, 1966... ..	375	1,163
Beacon Lane No. 2 Clearance Area, 1966... ..	209	719
Calder Street Clearance Area, 1966 ... ..	248	820
Kimberley Street Clearance Area, 1966 ... ..	187	1,222
Carlingford Street Clearance Area, 1966 ... ..	84	510
Kingsley Road Clearance Area, 1966 ... ..	8	20
Mere Lane Clearance Area, 1966 ... ..	7	27
Rubens Street Clearance Area, 1966 ... ..	105	331
Eldon Place Clearance Area, 1966 ... ..	19	43
Greenside No. 1 Clearance Area, 1966 ... ..	10	45
Greenside No. 2 Clearance Area, 1966 ... ..	4	4
Devon Street No. 1 Clearance Area, 1966... ..	7	22



CLEARANCE AREAS NOT YET CONFIRMED BY THE MINISTER AT 31ST DECEMBER, 1966

Area	Houses	Population
Devon Street No. 2 Clearance Area, 1966... ..	11	15
Westbourne Street Clearance Area, 1966 ... ..	6	22
Chester Street No. 3 Clearance Area, 1966 ... ..	4	14
Chester Street No. 4 Clearance Area, 1966 ... ..	4	39
Swiss Road Clearance Area, 1966 ... ..	3	9
Alvina Lane No. 1 Clearance Area, 1966 ... ..	26	113
Alvina Lane No. 2 Clearance Area, 1966 ... ..	19	72
Everton Valley No. 1 Clearance Area, 1966 ... ..	16	80
Everton Valley No. 2 Clearance Area, 1966 ... ..	2	15
Everton Valley No. 3 Clearance Area, 1966 ... ..	11	43
Everton Terrace No. 2 Clearance Area, 1966 ... ..	15	35
Netherfield Road North No. 5 Clearance Area, 1966 ... ..	12	37
Mark Street Clearance Area, 1966 ... ..	6	20
Totals ... ..	10,620	39,262

COMPULSORY PURCHASE ORDERS CONFIRMED—1966

Date Confirmed	Order	Houses	Families	Population
3.1.66	Bedford Street South Area ... ..	27	68	156
6.1.66	Vine Street No. 1 Clearance Area ... ..	16	27	82
11.1.66	Percival Street Clearance Area ... ..	34	36	127
28.1.66	Bamber Street Area ... ..	122	156	553
29.3.66	Gleave Street Area ... ..	173	204	647
9.5.66	Taylor Street Area ... ..	203	233	756
13.6.66	Leigh Street Clearance Area ... ..	61	65	206
14.6.66	Pinningtons Cottages Clearance Area ... ..	27	27	82
16.6.66	Falkner Street Area ... ..	596	1,252	3,617
29.6.66	Abyssinia Street Clearance Area ... ..	175	185	616
30.6.66	Oak Vale (Broadgreen) Clearance Area ... ..	17	17	63
22.7.66	Greig Street Clearance Area ... ..	225	240	721
31.8.66	Aubrey Street Area ... ..	495	589	1,621
16.9.66	Phythian Street Area ... ..	670	766	2,438
7.10.66	Chatsworth Street Area No. 2 ... ..	933	1,054	3,498
18.11.66	Copeland Street Clearance Area ... ..	89	101	342
20.12.66	Wellington Grove No. 2 Clearance Area ... ..	48	49	149
30.12.66	Village Street Area ... ..	278	426	1,289
Totals ... ..		4,189	5,495	16,963

CLEARANCE ORDER CONFIRMED—1966

Date Confirmed	Order	Houses	Families	Population
4.7.66	Mount Vernon Street No. 3 ... ..	5	11	19



# CLEAN AIR ACT, 1956

## INSPECTIONS, OBSERVATIONS, ETC.

### *Particulars of Inspections—1966*

Total Number of Inspections to Secure Smoke Control	...	...	...	...	...	...	...	...	28,613
Incidental Visits	...	...	...	...	...	...	...	...	6,929
Special Visits	...	...	...	...	...	...	...	...	7,383
Re-Visits	...	...	...	...	...	...	...	...	6,157
Advisory Visits	...	...	...	...	...	...	...	...	9,804
Total Number of Appliances Examined	...	...	...	...	...	...	...	...	15,108

### *Observations—Industrial Chimneys*

Routine Observations	...	...	...	...	...	...	...	...	116
Special Observations	...	...	...	...	...	...	...	...	230
Total Minutes of Excess Smoke Recorded	...	...	...	...	...	...	...	...	215

### *Shipping*

Routine Observations	...	...	...	...	...	...	...	...	262
Total Minutes of Excess Smoke Recorded	...	...	...	...	...	...	...	...	148

## CLEAN AIR ACT, 1956 SECTION 3

### *Approval of New Furnaces, 1966*

Notices of intention to install received	...	...	...	...	...	...	...	95
Application for approval received	...	...	...	...	...	...	...	50
Installations approved	...	...	...	...	...	...	...	50

## CLEAN AIR ACT, 1956 SECTION 10

### *Heights of New Chimneys, 1966*

Plans examined to check chimney height	...	...	...	...	...	...	...	115
Plans approved	...	...	...	...	...	...	...	97
Plans approved after chimney height increased	...	...	...	...	...	...	...	17
Plans withdrawn	...	...	...	...	...	...	...	1



# ATMOSPHERIC POLLUTION MEASUREMENT—1966

## Standard Deposit Gauge

The results are quoted in tons per square mile per month and the averages are as follows :—

Location of Instrument										Tons per Square Mile
Aigburth Vale	...	...	...	...	...	...	...	...	...	12.25
Clarence Dock	...	...	...	...	...	...	...	...	...	24.29
Dunbabin Road...	...	...	...	...	...	...	...	...	...	14.32
Hatton Garden	...	...	...	...	...	...	...	...	...	34.71
Love Lane	...	...	...	...	...	...	...	...	...	22.68
Mill Lane (West Derby)	...	...	...	...	...	...	...	...	...	14.57
Rocky Lane (Childwall)	...	...	...	...	...	...	...	...	...	14.33

# ESTIMATION OF SULPHUR TRIOXIDE POLLUTION—1966

## Lead Peroxide Method

The daily average for the year is quoted in milligrams per 100 square centimetres.

Clarence Dock	...	...	...	...	...	...	...	...	2.65
Dunbabin Road...	...	...	...	...	...	...	...	...	2.02
Mill Lane (West Derby)	...	...	...	...	...	...	...	...	2.13



ATMOSPHERIC POLLUTION MEASUREMENT—1966

*Smoke and Sulphur Dioxide Volumetric Filter  
Measurements are in micrograms per cubic metre*

	SMOKE												SULPHUR												
	J.	F.	M.	A.	My.	Jn.	Jy.	A.	S.	O.	N.	D.	J.	F.	M.	A.	My.	Jn.	Jy.	A.	S.	O.	N.	D.	
Average Value	...	150	70	52	96	39	25	38	37	87	93	73	CRESSINGTON PARK												188
Highest Value	...	434	296	134	213	116	56	58	155	161	313	366	415	865	483	210	307	301	194	305	218	312	436	379	
Lowest Value	...	17	6	13	8	7	1	2	2	1	19	15	11	107	91	38	78	56	48	35	35	61	99	62	
Average Value	...	172	99	95	66	47	29	13	33	57	111	110	CROXTETH												128
Highest Value	...	467	474	238	243	105	83	47	60	128	312	456	563	398	321	251	258	277	241	205	200	430	309	356	
Lowest Value	...	26	43	39	32	25	11	7	13	9	21	22	45	103	124	72	106	92	101	39	82	69	82	85	
Average Value	...	102	134	84	120	45	34	26	44	51	44	21	HATTON GARDEN												292
Highest Value	...	451	398	515	390	109	55	54	67	188	114	111	101	880	737	397	727	300	328	264	336	547	476	744	
Lowest Value	...	51	28	19	23	7	3	7	0	3	4	3	3	246	176	145	168	91	78	70	92	76	58	176	
Average Value	...	185	99	84	112	55	45	32	48	83	110	117	WOOLTON												156
Highest Value	...	507	392	187	239	109	158	64	102	281	229	438	441	539	403	306	442	334	329	332	443	697	490	828	
Lowest Value	...	59	38	36	44	25	17	15	14	14	44	38	38	132	133	104	139	118	129	94	52	112	99	41	



## SUMMARY OF RODENT INFESTATIONS AND DISINFESTATIONS OF BUILDINGS AND LANDS DURING THE YEAR 1966

Description of Premises	Infestations				Reinfestations during the Year				Category		Total infestations and reinfestations	Total remedied
	Premises	Rats	Rats and Mice	Mice	Premises	Rats	Rats and Mice	Mice	Major	Minor		
Shops ... ..	605	199	4	402	36	12	—	26	—	643	643	523
Factories ... ..	266	135	8	123	21	12	—	10	—	288	228	241
Warehouses ... ..	202	128	3	71	13	8	—	6	—	216	216	184
Dwelling-houses ... ..	2,294	1,152	2	1,140	36	23	—	17	—	2,334	2,334	2,159
Other buildings and lands ... ..	1,128	543	10	575	82	27	1	63	—	1,219	1,219	854
Food premises (included in above)...	(755)	(263)	(5)	(487)	(5)	(3)	(—)	(2)	(—)	(760)	(760)	(499)
<b>TOTAL</b> ... ..	<b>4,495</b>	<b>2,157</b>	<b>27</b>	<b>2,311</b>	<b>188</b>	<b>82</b>	<b>1</b>	<b>122</b>	<b>—</b>	<b>4,700</b>	<b>4,700</b>	<b>3,961</b>



QUANTITY OF FOOD CONDEMNED FOR DISEASE  
OR FOUND UNFIT FOR HUMAN CONSUMPTION—1966

	Tons	Cwts.	Qrs.	Lbs.
Beef, Mutton, Veal and Pork ... ..	145	3	2	26
Offal ... ..	359	4	3	0
Fish (Wet) ... ..	11	9	3	0
Fish (Dry) ... ..	1	1	0	0
Poultry ... ..	—	11	3	3
Game ... ..	—	—	2	24
Rabbits and Hares ... ..	—	—	3	1
Fruit ... ..	54	4	0	25
Vegetables ... ..	88	9	1	6
Canned Goods ... ..	31	6	0	21
Sundries ... ..	3	0	1	2
	694	12	1	24

CARCASES AND OFFAL INSPECTED AND  
CONDEMNED IN WHOLE OR IN PART—1966

	Cattle Excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed 493,638	35,391	17,912	4,443	309,388	126,504
Number inspected 493,638	35,391	17,912	4,443	309,388	126,504
<i>All diseases except tuberculosis and cysticerci</i>					
Whole carcasses condemned	3	65	350	1,647	355
Carcasses of which some part or organ was condemned	2,598	6,194	249	86,791	8,733
Percentage of the number inspected affected with diseases other than tuber- culosis and cysticerci	7.3%	34.9%	13.5%	28.6%	7.2%
<i>Tuberculosis only</i>					
Whole carcasses condemned	1	—	—	—	3
Carcasses of which some part or organ was condemned	52	14	—	—	1,144
Percentage of the number inspected affected with tuberculosis	0.15%	0.8%	—	—	0.9%
<i>Cysticercosis</i>					
Carcasses of which some part or organ was condemned	6	2	—	3	—
Carcasses submitted to re- frigeration	6	2	—	3	—
Generalised and wholly con- demned	—	—	—	1	—



Quantity of Food Consumed per Person  
on Board Ship on Pacific Coast—1905

Food	Quantity	Value	Per Person
Wheat	140	1.40	1.40
Barley	300	3.00	3.00
Oats	11	.11	.11
Indian Meal	1	.01	.01
Beans	11	.11	.11
Peas	1	.01	.01
Flour	1	.01	.01
Butter	1	.01	.01
Eggs	1	.01	.01
Meat	1	.01	.01
Fruit	1	.01	.01
Vegetables	1	.01	.01
Alcohol	1	.01	.01
Tobacco	1	.01	.01
Drugs	1	.01	.01
Total	491	4.91	4.91

Quantity of Food Consumed per Person  
on Board Ship on Pacific Coast—1906

Food	Quantity	Value	Per Person
Wheat	140	1.40	1.40
Barley	300	3.00	3.00
Oats	11	.11	.11
Indian Meal	1	.01	.01
Beans	11	.11	.11
Peas	1	.01	.01
Flour	1	.01	.01
Butter	1	.01	.01
Eggs	1	.01	.01
Meat	1	.01	.01
Fruit	1	.01	.01
Vegetables	1	.01	.01
Alcohol	1	.01	.01
Tobacco	1	.01	.01
Drugs	1	.01	.01
Total	491	4.91	4.91