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ON THE HEALTH OF THE

# CITY OF LIVERPOOL

FOR

1968

BY THE

MEDICAL OFFICER OF HEALTH









# REPORT

ON THE HEALTH OF THE

# CITY OF LIVERPOOL

FOR THE YEAR 1968

BY

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

Medical Officer of Health

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# PREFACE

I have the honour to present my 17th Annual Report as Medical Officer of Health of the City of Liverpool and the 121st report in the series. It records a year of steady progress with new services being developed to meet new demands and, to apply new knowledge. Yet, so much more remains to be done.

During 1968 the birth rate in Liverpool continued to fall and reached a figure of 17·2 compared with 17·8 in the previous year. This trend, which has been noted in the past, has been characteristic throughout the whole of the country and has meant a considerable further easing of pressure, especially on the domiciliary maternity services as there were only 11,847 births in 1968 compared with 12,583 the previous year and 13,557 in 1966.

At the same time the illegitimate rate has continued to increase, the figure in 1968 being 11.06 compared with 10.3 in the previous year. Again this increase has been seen in all large urban authorities in the United Kingdom. These figures are lower than those of Manchester, Birmingham, Newcastle upon Tyne and the Greater London area, but are higher than Sheffield, Bristol and Edinburgh.

The remarkable change in the domiciliary midwifery service is shown clearly in the following table of domiciliary deliveries:

1962	_	4,768
1963	_	4,096
1964	_	3,648
1965	_	2,726
1966	_	2,031
1967	_	1,462
1968	_	1,121

This means that during 1968 the number of institutional deliveries in Liverpool was over 90 per cent of the births and emphasises the remarkable change in the pattern which has occurred during the past few years, for only three or four years ago, the number of domiciliary deliveries was 27 per cent compared with less than 10 per cent at the present time.

The work of the health visitors has continued very satisfactorily during the year. The opening of the family health centre at Livingston Drive and the new child health centre at Hartington Road has helped considerably in providing modern up-to-date premises for community child health.

Health visitors made 143,617 effective visits during the year together with 31,297 non-effective visits. Changes included the introduction of the Guthrie test for phenylketonuria in place of the urinary phenistix test and an extension of the work of health visitors with general practitioners and with the elderly and handicapped. Co-operation has continued at a high level between health visitors and many hospitals in the fields of rehabilitation, diabetes, neurological conditions and geriatrics. The work at the child health clinics dropped a little during the year with a reduction of attendances of mothers and children, but there was an increased number of attendances for cervical smears. The response, however to cervical cytology generally has not been as great as had been hoped.

The district nursing service has continued on a very satisfactory basis during the year. Although the number of visits undertaken showed a slight decrease of about two per cent, there has been an increase in the proportion of elderly patients treated. Many of these require general nursing care and the visits, on average, take longer than in the past. A new training regime for district nurses was introduced during the year and is functioning quite satisfactorily. There has been no main change in the day nursery provision by the department during the year although the number of child minders and play groups has continued to increase. One of the outstanding problems in the day nursery service has been the serious situation developing in the Upper Canning Street Day Nursery, as the buildings surrounding it have mostly now been demolished and the general standard of the old building occupied by the day nursery is very unsatisfactory. It is most important that the new day nursery premises planned in Bedford Street for this area proceed as quickly as possible and, during the year, it was possible to hasten this project due to the announcement by the Government of their Urban Development Programme.

It was not an easy year for the Home Help Service as difficulty occurred with recruitment which meant that the average number of home helps employed during the year was reduced to 615. The total number of new cases dealt with by the home help section was 2,372, the majority of referrals coming from general practitioners and hospitals.

The epidemiological pattern of infectious diseases in the City during 1968 changed very little overall from the previous year. There were, of course, the usual variations seen—for instance, scarlet fever, measles, tuberculosis and dysentery cases were down compared with the previous year, but whooping cough and food poisoning infections increased. In addition, three cases of poliomyelitis were notified. These were the first cases in the City since 1964. Generally, the trends are satisfactory. It is interesting to note the number of cases of infective jaundice which are recorded for the first time. This disease became notifiable on the 15th June, 1968, and in the period from that date to the end of the year, 197 cases were reported.

Immunisation figures in relation to diphtheria were disappointing. During the year there was a falling-off in the number of completed immunisations to 7,179 compared with 9,955. In comparing these figures it must, of course, be remembered that there was quite a sharp reduction during the year in the number of new births and, therefore, a reduction in the numbers who could be immunised. There was also an alteration in the schedules. There is still, however, no doubt that the figures are disappointing and there can be no complacency about them. Similar trends were seen in tetanus and smallpox vaccinations.

Since June 1968, immunisation against measles was made available at clinics and by general practitioners and during this period a total of 5,600 immunisations were carried out although the programme had to be halted in October due to the large scale increase in poliomyelitis immunisation following the three cases which occurred in the City at that time. Vaccinations for international travel have continued during the year and a total of 9,614 persons received vaccinations and immunisations from the department during this period.

During the year there was a reduction in the number of cases of tuberculosis to 252 and this is the lowest figure recorded in the City.

It is satisfactory to record that there has been a marked reduction in the number of emergency cases under Section 47 of the National Assistance Act, 1948, assessed during the year. During 1968, twenty applications were received compared with 40 in the previous year, but in only five instances was compulsory action necessary (compared with eight in the previous year). In the remaining cases, it was found possible to persuade the old person to go into hospital voluntarily.

There was little significant change in the amount of venereal disease in the City although the number of cases of syphilis fell quite sharply. However, such a variation has been seen in recent years, and as many of these infections are contracted abroad, the changes are not really significant. There was a slight increase in the number of cases of gonorrhoea in the City, this being the fourth successive increase since 1965.

During the year, all the hostels at New Hall, Fazakerley, were opened, the last of these buildings having been completed in November. The build-up to the full complement of 148 patients had only just started at the end of the year. In the text of the annual report interesting examples are given of the residents who were living in the hostels. In many instances, the hostels have been successful in leading to the rehabilitation of people who have spent many years previously in hospitals for the subnormal patient.

The work with the mentally ill and subnormal continued satisfactorily during the year although some difficulty has been experienced locally in reaching a full complement of officers. It is, however, satisfactory to report that by the end of the year the total number of people visited reached 3,181.

The ambulance service had a satisfactory year and alterations were made to increase efficiency. This has been done through the concentrated efforts of both the control staff and the hospital transport officers so that the removal of patients has been rationalised. As a result of this work, the number of miles covered by the ambulance vehicles during the year was reduced by approximately five per cent.

During the year, following the publication of the report of the Working Party, certain changes were introduced into the ambulance service including the alteration of the colour of ambulances from cream to white, new stretcher gear being adopted and light rescue equipment provided, and the contents of first-aid satchels and dressings standardised.

The occupational therapy and rehabilitation services continued to develop very satisfactorily during 1968. One of the very obvious changes has been the greatly increased turn-over of patients. Approximately 600 new cases have been visited during the year by the domiciliary occupational therapists and many of these have been seen by the Deputy Medical Officer of Health at home for further assessment and, in many instances, attendance at the rehabilitation centres.

Detailed case histories are given in the text of the report illustrating the work being carried out in these units. It is also satisfactory to report that there has been an increased liaison developed during the year with the College of Occupational Therapy at Huyton and students from this College are seconded to the units to gain experience. This has had two advantages: (a) the units obtain extra assistance from the students; and (b) there is a greater incentive amongst ex-students to join the staff, and, in this respect, it is most satisfactory to report that a number of satisfactory applicants have applied for posts advertised. At the end of the year the staff of this service was complete and stood at fourteen full-time occupational therapists.

The medical assessment work for the re-housing of applicants on medical grounds has continued satisfactorily during the year and a total of 6,551 cases were dealt with. Out of these, 275 were recommended for special priority and 310 for transfers on the grounds of medical urgency. In addition, 235 cases were awarded special points on medical grounds. Details of some of these cases are given in the text of the report.

The work of the medical examinations section has continued to develop during the year and a new suite on the top floor of the Health Department in Hatton Garden was completely occupied and proved most satisfactory for this work. In the year, a total of 4,536 medical examinations were carried out in the various categories.

The environmental work of the department has continued at the usual concentrated high level. The detailed inspection of substandard housing accommodation has continued resulting in 3,475 houses in 57 clearance areas being classified as suitable for demolition having regard to the standards of fitness laid down in the Housing Act, 1957. Twelve public enquiries were held during the year involving 3,219 houses, eighteen compulsory purchase orders were made involving 4,823 house and eleven clearance areas were confirmed.

It is satisfactory to report that, with the exception of very few special cases recently notified, all offices and shops premises registered with the local authority have received a general inspection. This means that, a total of 29,521 general and additional inspections have been made since the Act came into operation in 1964 and a total of 25,694 infringements have been reported.

During the year an alteration in the timing of the atmospheric pollution programme occurred due to the restriction of finance. No further smoke control orders were made during the year but one became operative in September. Because of the shortage of finance it will be necessary to defer the operation of certain smoke control areas at present being considered.

During the year, it has become obvious that the new Food Hygiene (Market Stalls and Goods Vehicles) Regulations, 1966, which became operative on the 1st January, 1967, have set a greatly improved standard for all forms of stalls, mobile shops and vehicles. Following instructions of the Health Committee, special attention has been given to food hygiene infringements both in relation to food premises and street trading, as a result 15,218 visits were made and 4,405 infringements of the Food Hygiene Regulations dealt with either by warning letters or by court proceedings. This represents a greatly increased effort compared with the previous year.

Noise nuisances have become, during the past few years, an increasing feature of the work of this section of the Health Department. Although generally there is a trend, at the present time, to accept the gradual increase in the level of background noise both in and outside our own homes, it is not unusual for a repetitive noise to become very irritating especially if it is continued late at night or early in the morning. Noise which may be generally accepted during the day-time becomes quite intolerable at night. Factories which, to increase production, have gone on to a 24-hour shift basis, have been a constant source of complaints and have often involved protracted investigations late at

night and in the early hours of the morning. Although managements are usually very co-operative and willing to carry out recommendations, it is not always possible to find the complete solution to noise problems. Excessive noise may be caused by worn or badly sited machinery or by careless action of operatives, in addition, the design of the building may have had no concern with acoustic aids. In addition to the noises of factories mentioned above, other complaints of noise investigated during the year included the following cases:

The barking of dogs;

The exodus of members from social clubs in residential areas late at night, often accompanied by the slamming of car doors;

The sound of air compressors in garages;

The noise of pneumatic drills, air compressors and soil excavation machinery on building sites.

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

With the limited resources available progress has been maintained, but it has meant limiting services to cope with the most essential demands, and this results in added strain on the most efficient and hard working staff of the department. I wish to record my thanks to all the members of the Health Department for their continued efforts and loyal support during the year. I would also like to thank the Chairman of the Health Committee Alderman J. Norton and the Deputy-Chairman for their assistance and also the members of the Health Committee for their co-operation and consideration.

I am.

Your obedient servant,

Medical Officer of Health.

andrew B. Semple

# VITAL STATISTICS

Area (land and inland water)—acres   27,819   27,819   27,819   20,819   20,819   20,810					1966	1967	1968
Population (Estimated by Registrar-General)	Area (land and inland water)-acres				27,819	27,819	27.819
Deaths (all causes)          8,295         8,148         7,958           Death rate per 1,000 (unstandardised)          11.6         11.1         11.1         11.1         11.1         11.1         11.1         11.1         11.1         11.1         11.1         <	Population (Estimated by Registrar-Generation)	al)					
Death rate per 1,000 (unstandardised)	Deaths (all causes)						
Live Birth rate per 1,000 population	Death rate per 1,000 (unstandardised)						
Live Birth rate per 1,000 population	Live Births				13,557	12,583	11,847
Stillbirths            277         223         219           Stillbirth rate per 1,000 total (live and still) births          20-0         17.4         18-2           Total Births (live births and still births)          13,834         12,806         12,066           Infant Deaths (under one year)           308         277         262           Infant Mortality rate per 1,000 live births           22-7         22-0         22-1           """">"""">"""" 1,000 legitimate births           22-1         21-6         19-9           """"">Neo-Natal Mortality rate (under 28 days) per 1,000 related live births           15-2         14-9         14-6           Early Neo-Natal Mortality rate (under one week) per 1,000         related live births             12-8         13-0         12-8           Perinatal Mortality rate (stillbirths & deaths under one week) per 1,000 total live and stillbirths              12-8         13-0         12-8           Perinatal Mortality rate per 1,000 total births	Live Birth rate per 1,000 population	***			19.0	17.8	17.2
Stillbirth rate per 1,000 total (live and still) births       20.0       17.4       18.2         Total Births (live births and still births)        13,834       12,806       12,066         Infant Deaths (under one year)         308       277       262         Infant Mortality rate per 1,000 live births         22.7       22.0       22.1         """">"""">""" 1,000 legitimate births         28.8       25.5       39.7         Neo-Natal Mortality rate (under 28 days) per 1,000 related live births          15.2       14.9       14.6         Early Neo-Natal Mortality rate (under one week) per 1,000 related live births            15.2       14.9       14.6         Perinatal Mortality rate (stillbirths & deaths under one week) per 1,000 related live births              12.8       13.0       12.8         Perinatal Mortality rate (stillbirths & deaths under one week) per 1,000 total live and stillbirths <td>Percentage of illegitimate live births</td> <td></td> <td></td> <td></td> <td>9.2</td> <td>10 -3</td> <td>11-1</td>	Percentage of illegitimate live births				9.2	10 -3	11-1
Total Births (live births and still births)           13,834         12,806         12,066           Infant Deaths (under one year)				***	277	223	219
Infant Deaths (under one year)   .		) births	3		20.0	17.4	18-2
Infant Mortality rate per 1,000 live births					13,834	12,806	12,066
""" """ """ """ """ """ """ """ """ ""					308	277	262
""" "" "" "" "" "" "" " " " " " " " "							22.1
""" "" "" "" "" "" "" "" "" "" "" "" ""	" " " 1,000 legitimate	births			22-1	21-6	19.9
Neo-Natal Mortality rate (under 28 days) per 1,000 related live births	" " " 1,000 illegitimate	births			28.8	25.5	39.7
Early Neo-Natal Mortality rate (under one week) per 1,000       12.8         Perinatal Mortality rate (stillbirths & deaths under one week) per 1,000 total live and stillbirths 32.6       30.2       30.7         Maternal Deaths	Neo-Natal Mortality rate (under 28 days)	per 1,0	00 re	lated			
Early Neo-Natal Mortality rate (under one week) per 1,000       12.8         Perinatal Mortality rate (stillbirths & deaths under one week) per 1,000 total live and stillbirths 32.6       30.2       30.7         Maternal Deaths	live births				15.2	14-9	14-6
related live births            12·8       13·0       12·8         Perinatal Mortality rate (stillbirths & deaths under one week) per 1,000 total live and stillbirths <td>Early Neo-Natal Mortality rate (under one</td> <td>week)</td> <td>per 1</td> <td>,000</td> <td></td> <td></td> <td></td>	Early Neo-Natal Mortality rate (under one	week)	per 1	,000			
week) per 1,000 total live and stillbirths       32.6       30.2       30.7         Maternal Deaths           1       1         Maternal Mortality rate per 1,000 total births           0.078       0.083         Deaths from:—       Pulmonary Tuberculosis          46       44       39         Death rate per 1,000 population (unstandardised)          5       5       5         Death rate per 1,000 population (unstandardised)        0.007       0.007       0.007       0.007         Respiratory Diseases          1,360       1,331       1,221         Death rate per 1,000 population (unstandardised)        1.9       1.9       1.8         Cancer (all forms)           1,657       1,706       1,772	related live births				12.8	13.0	12.8
Maternal Deaths	Perinatal Mortality rate (stillbirths & d	eaths 1	under	one			
Maternal Mortality rate per 1,000 total births        —       0.078       0.083         Deaths from:—       Pulmonary Tuberculosis         46       44       39         Death rate per 1,000 population (unstandardised)        5       5       5         Death rate per 1,000 population (unstandardised)        0.007       0.007       0.007         Respiratory Diseases         1,360       1,331       1,221         Death rate per 1,000 population (unstandardised)        1.9       1.9       1.8         Cancer (all forms)          1,657       1,706       1,772	week) per 1,000 total live and stillbirth	S			32-6	30-2	30.7
Deaths from:—       Pulmonary Tuberculosis          46       44       39         Death rate per 1,000 population (unstandardised)          5       5       5         Non-pulmonary Tuberculosis          5       5       5         Death rate per 1,000 population (unstandardised)         1,360       1,331       1,221         Death rate per 1,000 population (unstandardised)        1.9       1.9       1.8         Cancer (all forms)           1,657       1,706       1,772	Maternal Deaths				_	1	1
Pulmonary Tuberculosis          46       44       39         Death rate per 1,000 population (unstandardised)          5       5       5         Death rate per 1,000 population (unstandardised)              1,360       1,331       1,221         Death rate per 1,000 population (unstandardised)        1.9       1.9       1.8         Cancer (all forms)          1,657       1,706       1,772		ths			-	0.078	0.083
Death rate per 1,000 population (unstandardised)        0.065       0.062       0.057         Non-pulmonary Tuberculosis          5       5         Death rate per 1,000 population (unstandardised)        0.007       0.007       0.007         Respiratory Diseases          1,360       1,331       1,221         Death rate per 1,000 population (unstandardised)        1.9       1.9       1.8         Cancer (all forms)          1,657       1,706       1,772	Deaths from:—						
Non-pulmonary Tuberculosis        5       5         Death rate per 1,000 population (unstandardised)        0.007       0.007         Respiratory Diseases         1,360       1,331       1,221         Death rate per 1,000 population (unstandardised)        1.9       1.9       1.8         Cancer (all forms)          1,657       1,706       1,772	Pulmonary Tuberculosis	***			46	44	39
Death rate per 1,000 population (unstandardised)        0.007       0.007       0.007         Respiratory Diseases          1,360       1,331       1,221         Death rate per 1,000 population (unstandardised)        1.9       1.9       1.8         Cancer (all forms)          1,657       1,706       1,772					0.065	0.062	
Death rate per 1,000 population (unstandardised)        0.007       0.007       0.007         Respiratory Diseases          1,360       1,331       1,221         Death rate per 1,000 population (unstandardised)        1.9       1.9       1.8         Cancer (all forms)          1,657       1,706       1,772	Non-pulmonary Tuberculosis				5	5	5
Respiratory Diseases          1,360       1,331       1,221         Death rate per 1,000 population (unstandardised)        1.9       1.9       1.8         Cancer (all forms)          1,657       1,706       1,772	Death rate per 1,000 population (unsta	ndardis	ed)		0.007	0.007	0.007
Death rate per 1,000 population (unstandardised) 1.9 1.9 1.8 Cancer (all forms) 1,657 1,706 1,772					1,360	1,331	1,221
Cancer (all forms) 1,657 1,706 1,772	Death rate per 1,000 population (unsta	ndardis	ed)				
					1,657	1,706	1,772
	Death rate per 1,000 population (unsta	ndardi	sed)		2.3	2.4	

#### BIRTHS

During the year, 11,847 live births were registered within the City, which represents a birth rate of 17·2 per thousand of the estimated mid-year population. The number of illegitimate live births was 1,310 this being 11·1 per cent of the total live births. This figure was a further increase in the percentage of illegitimate births, which is higher than in 1945, the previous peak year. The birth rate within the City continued to be higher than the average for England and Wales, which for the year 1968 was 16·9 per thousand.

#### STILLBIRTHS

The 219 stillbirths registered in the City during the year represent a stillbirth rate per thousand total live and stillbirths of 18·2. The stillbirth rate among illegitimate babies was 25·3 and among legitimate babies 17·3 per thousand.

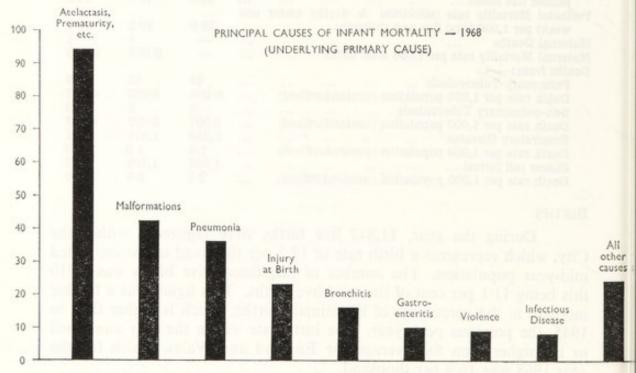
#### MORTALITY

There were 7,958 deaths registered within the City during the year, 4,089 males and 3,869 females. This gives a general death rate of 11.6 per thousand, which is the same as that for the preceding year.

The number of deaths from cancer of the respiratory system was 575. Deaths from tuberculosis during the year were 44 as compared with 49 in the previous year. The trends of mortality of certain specified diseases are given in the tables in the statistical appendix.

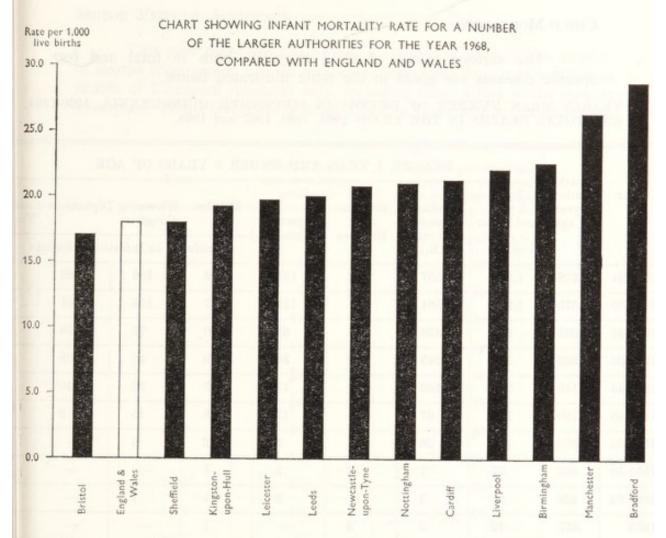
#### INFANT MORTALITY

The infant mortality rate during the year was 22·1 per thousand live births as compared with 22·0 for the previous year. A total number of 262 infant deaths occurred, of which 52 were illegitimate children. This represents a legitimate infant mortality rate of 19·9 per thousand and an illegitimate infant mortality rate of 39·7 per thousand. The neonatal mortality rate (under 28 days) was 14·6 as compared with 14·9 for the previous year, whilst the early neonatal mortality rate (under one week) was 12·8 as compared with 13·0 per thousand related live births. The principal causes of infant mortality are represented in the diagram below.



Atelactasis, pre	matu	rity, et	c	 	 133-5
Malformations				 	 126-130
Pneumonia				 	 91, 92
Injury at birth				 	 131, 132
Bronchitis				 	 89, 93
Gastroenteritis				 	 5
Violence				 	 138-150
Infectious disea	se			 	 1-44, 72
All other causes	3			 	 remainder

These code numbers are from the eighth revision of the W.H.O. Manual, published 1967, and used for the first time this year.



#### 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 1968 the rate was 30.7 compared with 30.2 in 1967.

#### CHILD MORTALITY

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

YEARLY MEAN NUMBER OF DEATHS IN SUCCESSIVE QUINQUENNIA, 1920-1964, AND TOTAL DEATHS IN THE YEARS 1965, 1966, 1967 and 1968.

	Deaths		DEATHS	S, 1 YEAR	AND UNI	DER 5 YE	ARS OF A	ЭE		
Year	Year under 1 year of age an	under 1 year	Total, 1 year and under 5 years	Infectious Diseases (including	Respira- tory	Digestive	Measles	Whooping Cough	Diphtheria	Scar
		of age	T.B.)	Diseases Diseases		Inclu	ded in Infect	tious Diseas	es	
1920-24	2,278	1,349	557	513	121	202	109	62		
1925-29	1,879	1,252	564	461	121	227	118	61		
1930-34	1,601	890	456	278	63	200	72	79		
1935-39	1,283	487	243	147	30	79	46	58		
1940-44	1,140	366	160	94	17	27	23	45		
1945-49	1,100	168	67	36	13	8	15	9		
1950-54	553	100	26	22	5	2	4	_		
1955-59	432	57	7	12	5	1	_	_		
1960-64	426	52	3	11	3	1	1	-		
1965	327	42	3	6	_	1	_	_		
1966	308	49	2	11	3	1	iota_taty	KIME.		
1967	277	42	4	8	4	1	1	_		
1968	262	32	1	4	_	_		_		

## DEATHS FROM CANCER

The total number of deaths from cancer during the year was 1,772 as compared with 1,706 in 1967. The number of deaths from cancer of the respiratory tract increased from 503 to 575.

# MOTOR VEHICLE ACCIDENTS

This year there has again been a significant drop in the number of deaths from motor vehicle accidents. 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	<b>E</b> 81	12
1963	[86	17
1964	105	21
1965	115	20
1966	115	25
1967	101	17
1968	85	16

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

# MATERNITY AND CHILD WELFARE

#### HANDICAPPED CHILDREN'S REGISTER

The register of children suffering from a congenital abnormality or other handicapping condition was maintained during 1968.

Three hundred and six children were notified compared with 457 in 1967, and the abnormalities occurred in the different systems as shown below:—

CENTRAL NERVOUS SYS							
Defects of the Brain	(includi	ing Ce	rebral p	palsy)	***		1
Anencephalus							13
Hydrocephalus		***			***		14
Spina Bifida							11
Other defects spinal	cord						13
-						-	
							52
						_	
EYE, EAR							
Defects of Eye not of	therwise	speci	ified	***	***	***	1
Cataract							1
Accessory auricle							6
Other defects of ear					***		3
						-	-
							11
						-	
ALIMENTARY SYSTEM							
Defects not otherwis	e specifi	ied	***			***	3
Cleft lip							3
Cleft palate							7
Cleft lip and cleft pa	late						7
Hiatus hernia. Diar		tic he	rnia				1
Oesophageal atresia							1
Intestinal obstruction							3
Anal atresia							3
Other defects of Alin							7
and Entries and test						-	
							35
						-	-
HEART AND GREAT VES							
Congenital Heart Dis	sease			***	***	***	47
Tetralogy of Fallot		***	***			***	1
Defects of aortic arch			***		***	***	1
Interatrial septal def			t foran	ien ove	ile		1
Interventricular sept	al defec	t	***		***	***	10
Persistent ductus art							5
Other defects of hear	rt and g	reat v	essels				5
						-	
							70
						-	
D							
RESPIRATORY SYSTEM							
Defects of nose (arhi	nia, cho	anal a	atresia (	or sten	osis)	***	2
Defects of trachea		***					1
Defects of lung	***	***					1
						_	
							4
						-	-

URO-GENITAL SYSTEM Defects not otherwise specified					
Defects not otherwise specified					
					2
Polycystic kidney, all forms					1
Other defects of bladder and uret	hra				i
Hypospadias, epispadias					3
Other defects of male genitalia					1
Defects of female genitalia					1
					9
					-
LIMBS					
Defects of upper limb not otherw	rise spe	cified	***	***	1
Defects of lower limb not otherw	ise spec	eified			1
Polydactyly		***			8
Syndactyly					6
Dislocation of hip			***		38
Talipes			***		28
					00
					82
OTHER SKELETAL					
Other defects of spine					,
Osteogenesis imperfecta			***	***	1
ostogenesis imperiecta				***	2
					9
					3
				10	
OTHER SYSTEMS					
Other defects of face and neck			The state of	1000	1
Defects of muscles				***	i
Vascular defects of skin, subcutan	eous ti	ssues a	nd mu	cous	
membranes (including lymphati	e defec	ts)			11
Other defects of skin (including ic	hthyos	is cong	enita)		3
Defects of endocrine glands					1
				-	
				-	17
				_	17
OTHER MALEOPMATIONS				5	17
OTHER MALFORMATIONS	burth.	YE	DIOE	- -	17
Congenital malformations not oth	erwise	specifie	ed	8-	1
Congenital malformations not oth Multiple malformations not other	erwise wise sp	specified	ed	8-	1 7
Congenital malformations not oth Multiple malformations not other Mongolism	erwise wise sp	specified		6- 	1 7 10
Congenital malformations not oth Multiple malformations not other	erwise wise sp	ecified			1 7
Congenital malformations not oth Multiple malformations not other Mongolism	erwise wise sp	ecified			1 7 10 5
Congenital malformations not oth Multiple malformations not other Mongolism	erwise wise sp	ecified			1 7 10
Congenital malformations not oth Multiple malformations not other Mongolism	erwise wise sp	ecified			1 7 10 5
Congenital malformations not oth Multiple malformations not other Mongolism	erwise wise spe 	ecified			1 7 10 5
Congenital malformations not other Multiple malformations not other Mongolism Other specific syndromes	wise sp	ecified			1 7 10 5 23
Congenital malformations not oth Multiple malformations not other Mongolism Other specific syndromes  Totals Central nervous system	erwise wise spe	ecified			1 7 10 5 23
Congenital malformations not other Multiple malformations not other Mongolism Other specific syndromes  Totals Central nervous system Eye and ear	wise sp	ecified			1 7 10 5 23
Congenital malformations not other Multiple malformations not other Mongolism Other specific syndromes  Totals  Central nervous system Eye and ear Alimentary system	wise sp	ecified			1 7 10 5 23 52 11 35
Congenital malformations not other Multiple malformations not other Mongolism	wise sp			-	1 7 10 5 23 52 11 35 70
Congenital malformations not other Multiple malformations not other Mongolism	wise sp				1 7 10 5 23 23 52 11 35 70 4
Congenital malformations not other Multiple malformations not other Mongolism	wise sp				1 7 10 5 23 23 52 11 35 70 4 9
Congenital malformations not other Multiple malformations not other Mongolism	wise sp				1 7 10 5 23 23 52 11 35 70 4 9 82
Congenital malformations not other Multiple malformations not other Mongolism	wise sp				1 7 10 5 23 23 52 11 35 70 4 9 82 3
Congenital malformations not other Multiple malformations not other Mongolism	wise sp				1 7 10 5 23 23 52 11 35 70 4 9 82 3 17
Congenital malformations not other Multiple malformations not other Mongolism	wise sp				1 7 10 5 23 23 52 11 35 70 4 9 82 3

#### REGISTER OF CHILDREN AT SPECIAL RISK

The register of children likely to develop a handicapping condition was continued during 1968. The condition of the children was reviewed at six-monthly intervals, and the name of any handicapped child transferred to the special register of handicapped children. After two years, if a child has remained healthy, the name is removed from the register.

Two thousand one hundred and forty children were added to the list during the year, and 4,569 children remained on the register at the end of the year.

#### FAMILY PLANNING

In November, 1966, the first four local authority clinics were opened, and the service has expanded since that time. One session per week was held during 1968 at Everton Road, Netherfield Road, Upper Parliament Street, Livingston Drive, Dovecot, Belle Vale, Rathbone Road, Queens Drive and Croxteth Clinics. A further session was held at Norris Green Child Health Clinic but this was discontinued when the premises were out of use following flooding caused by burglars. It is hoped to recommence this session in 1969.

Although a formal domiciliary service is not yet available, many visits were paid to families who found difficulty in attending centres, but who requested advice.

During 1968, 515 women attended for the first time, and the number of attendances for all women was 1,438.

# CERVICAL CYTOLOGY

During 1968, cervical cytology sessions were held at local authority premises in the city, and at two factories. As in previous years, the sessions were not well attended during January and February. The monthly variations are shown in the following table:—

January	 218-including one factory
February	 193
March	 246
April	 232
May	 382-including one factory
June	 297
July	 291
August	 283
September	 268
October	 387
November	 358
December	 333
Total for Year	 3,488

# Smear Reports

Number of smears which were technically unsatisfactory and were repeated		73
Number of smears showing some abnormality requiring hospital observ (not thought to be carcinoma in situ)	ration	17
Number of smears showing carcinoma in situ (hospital treatment in all cases)		1
Number of frank carcinoma of cervix		6

During the year, 1,418 women were referred to their own doctors or to hospital for treatment for other disorders discovered at examination.

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

Erosion of cervix				 	714
Fibroids				 	28
Cervical polyps				 	64
Vaginal discharge				 	330
Vaginitis (mainly	senile)			 	63
Prolapse needing	treatme	nt		 	4
Low haemoglobin	reading	g (anae	mia)	 	5
Breast neoplasms	-mainl	y beni	gn	 	4
Menstrual disorde	ers			 	41
Others				 	165

# MIDWIFERY SERVICE

During the year 346 midwives notified their intention to practise midwifery in the City. This was eight more than in 1967. Notifications from hospital midwives numbered 286, those from domiciliary midwives 44, and sixteen were from nursing homes.

The number of domiciliary births was 1,121, compared with 1,462 last year. The number of patients nursed at home after hospital confinement was 6,210; in 1967 the number was 6,353. This shows a decrease in domiciliary births of 341 from the previous year, and a decrease of 143 patients nursed at home after hospital confinement.

A table is given showing the number of patients discharged from each hospital and the day of discharge. The total was 6,814, but of these 604 were premature babies who were cared for by three specially trained midwives.

#### Medical Aid

The midwives called in medical aid for 225 cases for different abnormalities. In 135 cases a doctor had already been booked for maternity medical service. Of the 225 cases, 154 were for patients discharged early from hospital for domiciliary attendance, and 71 were for patients delivered at home. Details are given in the statistical appendix.

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

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

During the year the training superintendent retired and a domiciliary midwife was appointed to this post. During 1968 six other midwives left the staff, one of them due to retirement. Four new midwives were appointed to the staff.

In accordance with the wishes of the Central Midwives Board, during 1968 all the midwives were given instruction in endotracheal intubation of the newborn infant, and also infiltration of the mothers' perineum with local anaesthesia. In December, 1968, the midwives were taught to take blood samples from infants for the Guthrie Blood Test, so that this procedure could be carried out between the 6th and 14th day of life on all babies born in the City. The procedure is to commence in January, 1969.

# Training of Part II Pupil Midwives

The training scheme continued with pupil midwives from Sefton General Hospital, Liverpool Maternity Hospital, Mill Road Maternity Hospital and Broadgreen Hospital. An average of 29 pupil midwives each quarter worked under the supervision of their teaching district midwives, and tutorials and practical teaching were given by the supervisor of midwives, the tutor and the training superintendent. One hundred and sixteen pupils took the course and 109 qualified as midwives. At the end of the year, 35 were still in training. During 1968, 36 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 27 students every three months spent a morning visiting with a midwife, and attended a child health clinic in the afternoon.

#### Accommodation

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

# Transport

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

# Equipment

The continued use of autoclaved pre-packed bowls and instruments, plus the use of disposable equipment proved very satisfactory. Disposable foil garments were introduced during 1968. These were used to maintain an infant's body heat in emergencies, such as transporting a premature or feeble newborn infant to hospital, and proved very satisfactory for this purpose.

#### Ante-Natal Care

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

Since July, 1968, midwives have attended the Health Centre at Cantril Farm for ante-natal sessions, and very good co-operation was maintained at the centre between midwives and general practitioners, and also good liaison with the Lancashire County midwives who attend the same sessions.

Midwives attended 1,243 sessions with family doctors, 158 sessions at medical officers' clinics and 2,150 at their own clinics. Visits to homes of patients numbered 12,780. One hundred and sixteen analgesia demonstrations were given by midwives at local authority parenteraft classes.

# Domiciliary Deliveries

The total home confinements were 1,121, which was a decrease of 341 from last year.

After confinement, midwives paid 24,031 visits to their booked cases, 29,263 to mothers and babies discharged from the hospitals before the end of the lying-in period, and 4,399 to patients referred from hospitals for the assessment of home conditions.

The decrease in the number of assessments for early discharge from hospital was not proportionate to the number of patients discharged early. Assessments were 1,029 less than in 1967, early discharges only 143 less than in 1967. This was due to the fact that the arrangement to assess the home conditions of all patients booked for the Liverpool Maternity Hospital, in case they had to be discharged early owing to pressure on beds, was discontinued. However, this procedure had to be reinstituted in the latter part of 1968 as the Liverpool Maternity Hospital frequently found it necessary to discharge patients on the fourth and fifth day, and in many cases the domiciliary midwives found the home conditions to be unsatisfactory when they visited. This should result in a considerable increase in the numbers of home condition assessments in 1969.

# Postgraduate Courses

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

#### The Transfusion Unit

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

# Reasons for calling the unit were: -

Retained placenta		 8
Post partum haemorrhag	ge	 5
Breech presentation		 1
Asphyxia livida		 1

Five patients were transferred to hospital, and ten were able to remain at home.

### Emergencies

Midwives were called to emergencies by the ambulance service on 64 occasions. Two of the patients were having miscarriages, the remainder were patients who were booked for hospital, but called the ambulance too late, or patients who had received no ante-natal care. In all, 50 mothers were transferred to hospital in labour, or immediately after delivery, and fourteen mothers and babies were nursed at home.

# Co-operation with Hospital Services

Co-operation between the domiciliary and hospital midwifery services continued to be very good, an example of this was shown by the liaison during the period of the gastro-enteritis outbreak in Broadgreen Hospital during February and March, 1968.

As soon as the presence of infection was confirmed, two midwives were nominated to visit only those patients discharged from Broadgreen Hospital. During the period in which the hospital was closed, ante-natal patients could no longer be admitted for observation, and this treatment had to be provided by the general practitioner and the domiciliary midwife, under the instructions of the consultant obstetrician. A domiciliary midwife therefore, attended all the hospital ante-natal clinics and undertook the supervision of patients in their own homes. One of these patients who was expecting triplets was delivered later in hospital of three healthy infants.

Reasons for the drop in home confinement figures can be attributed not only to early discharge home from hospital, and the rehousing of families to homes outside the City, but also to greater care in the selection of patients for home confinement. The midwives make every effort to persuade patients who may be at risk to be confined in hospital. These include patients who have a bad obstetrical history and those who already have three or more children.

The way in which domiciliary midwives have adapted themselves to the changing pattern of district midwifery is remarkable. Although they regret that the home delivery figure has dropped so much in recent years, they are very conscious of the importance of the care of the patient who is discharged home early from hospital. Owing to the shortened hospital stay of many mothers and babies, the hospital staff do not have the time to spend sorting out the many social problems which arise, and the district midwife provides a very necessary service in this field, as well as in the care of the physical well-being of mother and child.

### Premature Babies

Thirty-two premature babies were born at home, of these, four were transferred to hospital and the remaining 28 were able to be nursed at home; 604 premature babies born in hospital were later discharged to the care of the specially trained midwives. Among those babies discharged from hospital were 41 sets of twins, eight babies who were one of twins and two sets of triplets. The midwives caring for premature babies made 617 visits to home deliveries, and 2,391 visits to those discharged from hospital. They also visited 137 homes before the babies were discharged to advise the mothers on conditions suitable for small babies.

# Equipment loaned was as follows: -

Cot				 1
Hot water	bottles	and	covers	 20
Premature	baby	gow	ns	 8
Premature	baby	vests		 8

#### MATERNAL DEATHS

One maternal death occurred among Liverpool residents during 1968. This lady died, one month after the delivery of her baby, from a pulmonary embolus. There was no evidence of previous thrombophlebitis, and this patient had not at any time taken an oral contraceptive.

# HEALTH VISITING SERVICE

Twelve months have gone by since the Family Health Centre at Livingston Drive opened. This centre has lived up to all expectations, and at the end of the year it was being used to capacity. One of the most important functions is educational, for not only do the families surrounding the centre attend, but postgraduate and mature

students also attend to observe the work and learn of the services provided by the local health authority. This is a most valuable aspect of the health visitors' work, and the opportunity is welcomed to meet and talk to colleagues in other medical and social fields. Without this liaison and co-operation some of our work would not be possible.

In April, 1968, another long-awaited event took place; the laying of the foundations for a new centre in Hartington Road, which it is hoped will be completed early in 1969. These premises, like Livingston Drive, will replace a church hall, where for the past 30 years clinics have been conducted, and which is now falling rapidly into decay.

Since 1965, there has been no poliomyelitis in Liverpool, but towards the end of this year, 1968, a case developed. Immediately all the health visiting staff began house-to-house visiting in the affected areas, three near the city centre, and one in Speke. The staff took oral poliomyelitis antigen to offer to everyone at home, and advised others to obtain immunisation at their nearest centre as early as possible. Despite adverse weather conditions, the work was successful. Approximately 35,000 doses of vaccine were given, the spread of infection checked, and the incident confined to three cases of poliomyelitis.

# Training

Thirty-one students commenced training in September for the 1968/69 course, but because of domestic reasons, three withdrew. Of those who remained, seven were sponsored by Lancashire County, two each by Wigan, Birkenhead and Caernarvon, one each by Cheshire County, Bootle, Denbigh and St. Helens. The remaining nine were sponsored by Liverpool. This is a very intensive course of training, specially designed to meet the changing needs of society, and one which requires students to be academically suitable to assimilate all the new knowledge and practices taught to them. Twenty-six students sat the examination at the end of the 1967/68 course, and all were successful at the first attempt. Five of the Liverpool students were appointed to the staff.

#### Staff

In all, seven new appointments were made to the staff and two were re-appointed, but at the end of the year the number of health visiting staff was the same as at the end of 1967; five had left due to pregnancy, one to be married, and one died, leaving a total of 105. The staff, therefore, at the end of the year was made up as follows:—

- 1 Superintendent Health Visitor
- 1 Deputy Superintendent Health Visitor
- 1 Assistant Superintendent Health Visitor
- 1 Principal Tutor
- 1 Tutor

17 Group Advisers

16 Field Work Instructors

53 Health Visitors

- 1 Part time Health Visitor
- 4 Full time State Registered Nurses
  - 9 Part time State Registered Nurses,

Despite the shortage of staff, eighteen members attended educational courses for periods ranging from two days to two weeks, in all parts of the country. The staff enjoyed the courses, and benefited from them.

#### Care of Children

The number of babies born to mothers residing in Liverpool, has fallen this year by nearly a thousand, 11,847 were born in 1968 as against 12,583 born in 1967. Two hundred and twenty-nine babies moved into the City shortly after birth, and altogether 11,957 were visited for the first time to ensure that the progress made whilst in hospital or in the care of the domiciliary midwife was being maintained. Nine hundred and ninety-two babies were born prematurely, and 896 of these survived for more than one month. These babies, together with all those born under adverse conditions are classed as "Babies Born at Risk", and require extra special attention, as do those born with a congential abnormality or other handicapping condition. Visits to these babies were more prolonged because often parents were anxious and needed to be reassured. Many had to be taught how to handle a handicapped child, and some, sadly, to accept an abnormal child.

'Effective visits numbered 143,617 and non-effective visits 31,297, making a total of 174,914 visits, to children under the age of five years. These visits were, of course, to watch and advise on the normal stages of progress of a child's pre-school life, but more important, to observe any deviation from normal progress. In the event of the latter, it is important to get help and advice as quickly as possible, and to facilitate this, the School Health Department is available. Again this year there was a slight increase in the need for this specialist advice, 658, as against 600 in 1967, cases were referred for the following types of investigation:—

			1968	1967
Mental and physica	1	 	38	33
Hearing tests		 	48	40
Educational tests		 	44	34
Speech defects		 	37	33
Eye defects		 	318	292
Orthopaedic defects		 	173	168
Total		 	658	600

Routine testing for phenylketonuria was carried out on infants on three occasions during the first six weeks of their lives, two phenistix tests and one urine or blood Guthrie test. It will be remembered that in July, 1967, an investigation in conjunction with Alder Hey Children's Hospital was started, to determine the acceptance and reliability of Guthrie tests on blood samples obtained by health visitors. This proved highly successful and was accepted by the parents in the Everton area, so that the procedure was continued throughout 1968 and 2.073 blood samples were obtained from babies in that area. Nine thousand, eight hundred and fourteen urine samples were obtained from babies residing in the remaining areas of the city, and altogether 11,887 tests were made. From this number, one positive case was discovered at the early age of two weeks, and treatment was started immediately.

The last five years has shown a steady reduction of about 1,000 fewer babies being born each year, and since 60,668 pre-school children have been visited during the year, it would seem that most are under the health visitors' supervision. The remaining 13,877 cases under supervision were of a special nature, and of necessity took up a tremendous amount of the health visitors' time. These cases are mainly families with problems and the elderly.

# Visits to Elderly

The consultant geriatricians continued to make great demands on the services of the health visitor. Nearly all cases on the waiting list of one hospital are referred for the health visitors' opinion as to whether the case is urgent or otherwise for admission to hospital. Many admissions were deferred because sons and daughters were made more aware of their responsibilities to their parents, and the implementation of the domiciliary services to assist them in their responsibilities. Where admission was necessary, it was arranged or hastened as a result of co-operation with the hospital team. Nearly 10,000 visits were paid to the elderly and the problem of improving living conditions while patients were in hospital was only one of many which took up a great deal of time, and co-operation with other departments was necessary if a satisfactory result was to be achieved. One hundred and twenty-four elderly men and women were sent away for varying periods of convalescence.

#### Families with Problems

Much of the work with these families would not be possible if the health visitors did not have a good relationship with other workers in the social field. Again this year nearly 5,000 calls went out for help to such agencies as:—

> General Practitioners Ministry of Social Security Welfare Department

Children's Department
Mental Health Service
Health Inspectors
Probation Office
National Society for the Prevention of Cruelty to Children
Home Help Service
Moral Welfare
Education Welfare
Occupational Therapists
District Nurses and Chiropodists

#### Convalescence

Twenty-two mothers and 90 children went away for varying periods of up to three months, to be rehabilitated or to recover from illness. Until this year this was a service arranged through the agency of the Child Welfare Association, but is now undertaken wholly by the local health authority, and escort duty was provided by members of the health visiting staff for children who were travelling alone.

# Vaccination and Immunisation

As previously stated, there was a small outbreak of poliomyelitis towards the end of the year, and this of course boosted the number of people who were given doses of poliomyelitis vaccine, nevertheless, the overall picture has improved. In addition to the 35,000 doses given during the poliomyelitis outbreak, 23,168 doses were given at the normal clinic sessions, an increase of 4,413 on the 1967 figure. Inoculations against diphtheria whooping cough and tetanus fell, but this may be explained by the continued fall in the birth rate.

Vaccination against smallpox and measles continued to be very disappointing; 2,053 children were vaccinated against smallpox and only 1,426 against measles. It would seem that parents are reluctant to have this type of prophylactic treatment, in spite of the continued teachings of the health visitors.

# SPECIAL WORK

#### Diabetes

The health visitor conducting this follow-up work is well known, and her help is much in demand. She continued to visit consultants' clinics at hospital, and visited nearly 600 persons suffering from diabetes during this year. In addition to this she has taken part in the educational field by talking to all types of students.

# Neurological Conditions

This well established field suffered a set-back in August of 1968 when the health visitor who has been doing the work for six years

retired. Her successor, however, has worked enthusiastically to maintain the excellent relationship between the hospital and the local authority, and she has continued to visit patients in their homes.

#### General Liaison

Hospital liaison continued at ante-natal and paediatric units. The hospital and health visiting staffs work well together, and much good work is achieved by this happy relationship. This state of affairs has improved by the fact that more hospital staff are attending courses on Community Health, Management and Communications at the Mabel Fletcher Technical College and the William Rathbone Staff College. These courses include a visit to one of the Family Health Centres, and a lecture by one of the senior health visitors. This leads to increased co-operation and the use of domiciliary services for the benefit of the public. Student nurses and pupil midwives are regular visitors to our centres where, like the postgraduate students, they are told of the health visitors' work. Medical students, D.P.H. doctors, child care students, social science students are only some of the many others who ask for information on the service. Church groups and other organisations often ask health visitors to talk to them at their evening meetings. In all 75 talks were given during 1968.

#### V.D. Welfare

The nurse undertaking this contact and follow-up work of women and children suffering from venereal disease has worked enthusiastically throughout the year. This is work which, because of its nature, requires time, patience and tact. The following is a summary of her work:—

		1968	1967	
Number of cases written to		314	282	
Number of letters despatched		576	506	
Number of cases reporting after receipt of letter		231	192	
Number of letters returned (dead letter office)		21	17	
Number of cases visited		193	275	
Number of visits made		870	1,073	
Number of cases reporting after visiting		97	183	
Number of cases promising, but failing to attend	17	19		
Number of cases removed or not known at address g	39	48		
Number of cases not contacted		28	21	
Number of cases refused to attend		8	2	
Number of cases transferred to other clinics		4	1	

# MATERNITY AND CHILD HEALTH CLINICS

The number of centres operating throughout the City in 1968 was 28. At these, 62 child health sessions and ten ante-natal sessions were held each week.

One thousand, seven hundred and sixty-eight women made 5,009 attendances for pre- and post-natal examinations by medical officers or midwives and for blood tests.

Eight hundred and ninety-four expectant mothers attended mothercraft and relaxation classes conducted by the health visitors at fourteen of the local authority centres, two Mother and Baby homes and Mill Road Maternity Unit. These 894 expectant mothers made 4,037 visits. Cytology sessions were held at nineteen centres and at the end of the year, 57 sessions were held over each five-week period. Three thousand and thirty-two cervical smears were taken at these sessions for examination at the Liverpool University, Broadgreen Hospital, Walton Hospital and Sefton General Hospital.

The following is a summary of the centre activities: -

		1968	1967
Total number of centres at which ante-natal clinics were held .		10	10
Number of clinic sessions held per week (medical) Number of cases attending ante-natal clinics (doctors'		10	10
		891	1,355
Total attendances at ante-natal clinics (medical officers' sessions	()	1,515	1,415
Total attendances at post-natal clinics		40	35
Total number of midwives' ante natal-clinics		16	17
Total number of new cases attending midwives' ante-natal clinical	3	877	980
Total attendance at midwives' ante-natal clinics		3,494	5,281
Number of centres at which health visitors conducted relaxation	n		
and mothercraft classes		17	17
Number of mothers attending mothercraft and relaxation classe	8	884	921
Number of attendances at above		4,037	3,930
Number of mothers attending who were booked for hospits	1		
delivery		851	890
Total number of centres at which child health clinics were held		28	28
Number of clinic sessions held per week		62	62
Number of new cases—under one year		7,727	7,971
one to five years		1,001	665
Total number of children who attended	1	6,028	16,817
Total attendances—under one year	5	3,262	59,385
aged 1—2 years	1	0,207	10,303
aged 2—5 years	1	4,178	11,295
Total number of centres at which cytology clinics were held		19	19
Total number of sessions held		439	459
Total number of smears taken		3,032	2,936
Total number of sessions at which Family Planning clinics were h	eld	10	_
Total number of sessions per week		10	_
Total number of women who attended for advice		543	_

# CHIROPODY SERVICE

During 1968 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 health clinics and aged persons' clubs.

Two full-time and 28 part-time chiropodists undertook this service.

						1968	1967
Total number of	treatn	nents g	iven			40,033	39,198
At clinics						36,135	35,695
At home						2,830	2,829
At hostels to	aged ar	nd han	dicappe	ed pers	ons	1,068	674
Total number of	patien	ts		***		10,732	9,429
Total number of	domic	iliary	patients	3		1,173	950
Total number of	patien	ts at c	linics e	te.		9,559	8,479
Total number of	session	ns				5,817	4,978
Total number of	clinic	session	s			5,665	4,830
Total number of	session	ns in h	ostels			152	148

# DISTRICT NURSING SERVICE

Throughout the year the district nursing service continued to extend its nursing care to members of the public who were ill in their own homes. One of the most interesting developments in 1968 was the treatment of selected surgical day cases. These patients were operated on in the morning in hospital and returned to the care of the district nursing sister the same day. The types of operations performed varied, and included hernia repairs, resection of varicose veins and appendicectomies. This represented a major advance in the treatment of such patients, calling for a high degree of nursing skill. Liverpool once again has proved its forward-looking policy of being among the first to participate in such a scheme.

#### Staff

The recruitment of district nurses remained steady, and the staff figures, as shown below have been maintained at a fairly constant level throughout the year.

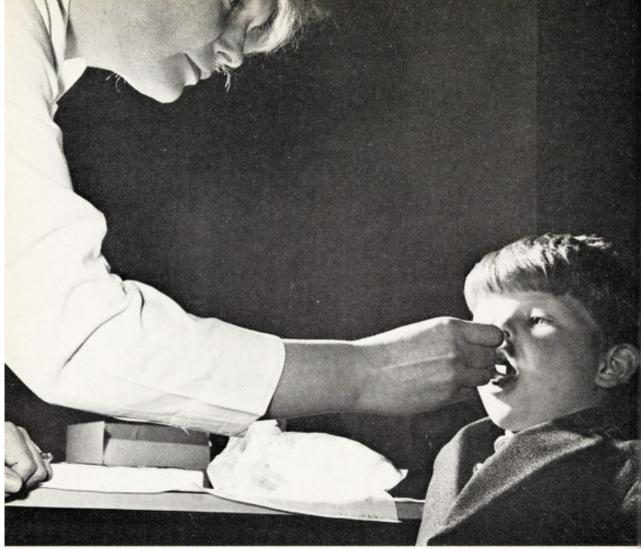
- 1 Senior Superintendent
- 1 Puty Senior Superintendent
- 1 Tutor
- 3 Area Superintendents
- 6 Assistant Area Superintendents
- 70 Qualified District Nurses
- 15 State Registered Nurses



Special Session for Handicapped Children

Family Group in a Day Nursery





Poliomyelitis Immunisation





- 32 State Enrolled Nurses
- 2 Full-Time Nursing Auxiliaries
- 14 Part-Time Nursing Auxiliaries

## Visits

This was probably due to the fact that well over fifty per cent of patients were sixty-five years of age and over, and many of these required general nursing care; such visits required as long as an hour and a half. Further, during the prolonged bus strike, fewer patients were referred and less urgent cases had to be visited less frequently, as travelling was difficult for the nursing staff. It is worth noting that the district nursing sisters who relied upon public transport showed extreme patience during this trying time, and their colleagues who had their own transport deserve praise for the unselfish way in which they assisted them.

Comparable tables of work undertaken by the district nursing service are as follows:—

					1968	1967
Patients			***		12,649	13,684
Visits					392,866	402,401
Number of patients a	ged 65	years or	over		5,941	6,011
Number of visits to s	uch pat	tients			210,563	215,657
Number of late night	visits				4,566	5,851
Number of injections	as a pe	ercentage	of total	visits	30.31%	32.53%

# Training

The Ministry of Health approved Liverpool Health Authority as a training centre for district nurses in April, 1968. The practical examination has been superseded by a viva and overall assessment of the students' performance during the entire course. Though this causes extra work for senior staff engaged in training, the final result is most satisfactory. The written examination is now set by the Ministry.

During 1968, 29 nurses undertook the course in district nursing. Twenty-five of these were staff students and the remainder were from other authorities. A further ten students attended for theoretical instruction for a period of three weeks in the first instance, and twelve study mornings thereafter.

The district nursing service continued to receive hospital students, and programmes were arranged for 379 finalists to make visits of observation with the district nursing sisters.

Visits were again made to Liverpool district nursing service by senior nursing officers seeking advice and information on various aspects of the general administration.

## DAY NURSERIES

The twelve day nurseries run by the Corporation continued to provide places for approximately 670 children, all of whom were admitted because of special needs. There was an increase in the number of short stay cases and in the number of children from immigrant families. Many of these families do not speak English, and require considerable help from the day nursery staff.

The daily average of nursery attendances fell below the expected level during the year. The bus strike of over twelve weeks in the early part of 1968 was the reason for many of the absentees. A further low attendance was recorded later in the year when local strikes occurred in industry.

# Handicapped Children

The integration of handicapped children in our day nurseries has been very satisfactory, as the number of handicapped children in any one nursery, or nursery group, was limited. The children have readily accepted and helped them and the handicapped children have made great progress both mentally and physically. We look forward to the building of a new nursery for handicapped children whose handicap is too great to be helped by attendance at the existing day nurseries.

The health of the children in the day nurseries has remained very good with little incidence of infection. There was concern at one time in the Spring over prolonged outbreaks of sonne dysentery at a nursery in the dock area of the City. The nursery was subjected to intense inspection, but there was no evidence that the source of the disease was on the premises.

The number of private day nurseries and playgroups continued to increase. The number registered at 31st December, 1967, was 56, and on that same date in 1968, was 66.

# HOME HELP SERVICE

Four thousand, four hundred and thirty-eight cases of sickness and infirmity were assisted during 1968 by an average number of 615 home helps.

## REFERRALS

The total number of new cases referred to the section was 2,372. These were from the following sources:—

General Practitioners and I	Hospital	S	 1,075
Health Visitors and District	Nurses		 205
Welfare Department			 338
Ministry of Social Security			 199
Self and family			 468
Other sources			 87

#### CHARGE FOR SERVICE

The standard charge was increased to 6s. 8d. per hour in April, 1968. The scale of allowances for applicants applying for a reduction from the charge was adjusted on two occasions to correspond with social security pensions and allowances.

It is of interest to note that, of 4,438 cases, only 680 were chargeable.

#### DISTRICT OFFICES

It is intended that a district office for the home help service will be included in the new maternity, and child health centre in Hartington Road, Liverpool, 8 to be occupied in March, 1969. Accommodation is included also in four new centres planned in various parts of the City. This arrangement will benefit the section greatly especially as the destruction of telephones and curtailment of transport have increased the isolation of the home help from the City office.

#### TYPES OF CASE ASSISTED

## Problem Families

A family referred by the Children's Officer consisted of an unemployed man of 23 years, whose wife was in hospital, and three small children. He was a gambler and the children and home were in a poor state. The two cleaners employed in the section dealt with the arrears of washing and housework for two days and a home help followed to concentrate on the care of the children. They were ill fed and with the help of a health visitor a diet was instituted. The home help attended daily until the mother had been home from hospital for two weeks and

was considered fit to assume responsibility. This case was unusual in that neither of the parents showed any interest in the presence of the home help or the improvement in the conditions.

Another of the younger families assisted was known both to the Health Department and to the N.S.P.C.C. The father was employed, the mother inadequate and, of their four children, one was resident with a grandparent. The baby aged seven weeks was very puny. Again the cleaners were installed and a home help followed. She attended each day for nine weeks teaching as well as giving practical help. Gradually conditions improved and the parents began to decorate the interior of the home. Places were found in a day nursery for the children and the help was withdrawn.

#### Illness

Among the younger patients was a widow with three children. She was referred by the medical social worker on discharge from hospital following the removal of a brain tumour. Daily service commenced in October, 1968 and continues, she progresses slowly.

#### Chronic Illness

Service was provided for a widow of 58 years whose two adult sons were severely handicapped by muscular dystrophy. Help had been given since 1967 and the amount was increased as she became more tired. One son attended a day centre but the other was unable to reach the garage where his car was kept. The service continues.

# Aged, Chronic Sick

We have a happy story to relate of a mother and daughter aged 98 and 70 years who have been assisted since 1958 because the younger woman is badly crippled with arthritis. They lived in an area due for demolition and were fretful about removal from a district so familiar to them. On the day of removal a home help was present to facilitate their departure and another was at the new address to help with the installation. They quickly realised the change was an improvement on their old living conditions, and as the living room of their flat overlooks a 'bus stop, there is life and movement to see. Their home help is a very good cook and the mother is happily looking forward to her 99th birthday in June, 1969.

#### DISTRICT ORGANISERS

Because the home help spends more time with a family or elderly person than any other domiciliary worker the underlying needs and problems of the patient become known to her.

These can be material needs or personal problems which have in the past included symptoms of serious illness not divulged to the general practitioner. In consequence, the duties of the district organiser cannot consist only of visiting patients to arrange service and supervision of home helps but must include discussion with general practitioners, relatives, officials of the Ministry of Social Security and other practical services.

In 1968 each district organiser was responsible for an average case load of 260 patients and the deployment and supervision of 56 home helps.

## HOME HELPS

There are eleven home helps with more than fifteen years' service plus 148 with more than five years' service.

In 1968, 203 home helps were recruited and 242 left the service. Of those who left:—

Twenty-eight were discharged as medically unfit; Ten were retired at 65 years; Nine removed from the City; Fifteen were unsuitable; One hundred and eighty for other reasons.

The attraction of social security benefits was strong and given as the reason for the resignation of those whose husbands became eligible for pensions or allowances.

The 'bus strike of 1968 placed a heavy strain on the home helps who responded magnificently to this challenge.

#### CLEANERS

The two women employed since January, 1967, to work in dirty homes prior to the home helps taking over have been constantly employed principally in the homes of hospital patients before their discharge. Their employment has solved a problem that had been present for many years. They worked also in the homes of resident applicants who because of ill health or apathy were living in dirty surroundings. The period of work varied from one to six days depending on the conditions of the home and they always worked together as a team.

# **EPIDEMIOLOGY**

The number of cases of notifiable infectious disease occurring in 1968 compared with 1964, 1965, 1966 and 1967 is shown in the table below.

	Notified Cases 1964	Notified Cases 1965	Notified Cases 1966	Notified Cases 1967	Notified Cases 1968
Scarlet Fever	638	628	808	536	185
Whooping Cough	666	425	944	494	609
Measles (excluding rubella)	7,124	7,319	5,094	5,771	4,444
Poliomyelitis	1	_	-	10-1-10	3
Tuberculosis, respiratory	273	249	235	234	219
Tuberculosis, non-respiratory	28	34	30	29	33
Diphtheria	1	pld_spr	-	111 <u>7</u> 111	_
Smallpox	_	-	-	-	_
Meningococcal Infection	15	16	7	3	3 (A
Meningitis Acute	_	_	_	-	2(E
Acute Encephalitis, post-infectious		2	1	1	
Dysentery	313	259	372	425	341
Ophthalmia Neonatorum	88	79	62	70	70
Puerperal Pyrexia	315	265	230	287	269 (A
Acute Pneumonia (primary or influenzal)	208	205	158	182	70 (A
Paratyphoid Fever	3	12	5	1	1
Typhoid Fever	- H K	- on	1	1	1
Food Poisoning	31	72	59	78	139
Erysipelas	17	21	26	20	13 (A
Malaria (contracted abroad)	11	6	3	5	5
Anthrax	_	_	_	2	-
Infective Jaundice		_	_	_	439 (0

 <sup>(</sup>A) Nine months' figures only (January—September). Ceased to be notifiable from 1st October, 1968.
 (B) Newly notifiable from 1st October, 1968.
 (C) Newly notifiable from 15th June, 1968.—Includes 242 voluntarily notified, (Jan.—June), 197 statutorily notified (June—Dec.).

Changes in Notification Procedures

Infective Jaundice was made notifiable on 15th June, 1968.

The Health Service and Public Health Act 1968, Part III and the Public Health Infectious Diseases Regulations 1968 both came into effect on 1st October, 1968, and made certain changes in the law relating to infectious diseases.

As a result the following diseases are no longer notifiable:

Acute influenzal pneumonia.

Acute primary pneumonia.

Acute rheumatism.

Erysipelas.

Membranous Croup.

Puerperal Pyrexia.

The following diseases are newly notifiable:-

Acute Meningitis (formerly only Meningococcal Infection was notifiable).

Leptospirosis.

Tetanus.

Yellow Fever.

Exclusion of Children from School

The total number of children excluded from school on account of infectious disease was 80. The average period of exclusion was 30 days. There was a considerable range in the period of exclusion, the longest period being 71 days and the shortest five days.

### DYSENTERY

During 1968, 341 cases were notified. The following table gives the number of cases of dysentery notified between 1955 and 1968.

1955	920
1956	369
1957	484
1958	931
1959	407
1960	515
1961	335
1962	296
1963	383
1964	313
1965	259
1966	372
1967	425
1968	341

When a case is notified the patient 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 the disease can be adequately prevented. In some circumstances exclusion can lead to unnecessary hardship, either where the person is excluded from work and so suffers, or where because a child is excluded from school, the parent is unable to go to work.

#### POLIOMYELITIS

During October a limited outbreak of paralytic poliomyelitis due to infection by poliovirus type I occurred in Liverpool. Three children were affected by paralysis and many of their immediate contacts became carriers.

The first case to be reported was a baby girl of nine months who was admitted to Fazakerley Isolation Hospital with an acute febrile illness and paralysis of one arm. She made an uneventful recovery and was discharged after six weeks to the Royal Southern Hospital for further physiotherapy.

The family were living in poor conditions in a slum clearance area in Liverpool, 8. As soon as the diagnosis was suspected, a vigorous cleaning up and disinfecting campaign was launched.

The family contacts were a father working as a long distance lorry driver, a mother, a biscuit packer, and five other school children. Four adults in the home of a grandparent also made regular contact with the baby. One was a young woman receiving in-patient treatment for a gynaecological complaint in Sefton General Hospital.

Faecal specimens were collected from all the contacts, the mother was excluded from work and polio vaccine was issued to the surrounding area, the places of work of the contacts, and the hospital where the contact was an in-patient.

The diagnosis of poliomyelitis was made one evening and by the next lunch time some three thousand doses of oral polio vaccine had been issued to the persons in the surrounding area. Door to door visiting was carried out by health visitors, chest diseases visitors, public health inspectors and school nurses and this was supplemented by issues of vaccine to places of work and schools and at the main clinic in the area.

Investigations showed the mother and two of the children in the family to be carriers of Poliovirus I, the same organism being isolated from the affected child. The mother, who was a food handler, was excluded from work for three weeks, and the children were excluded from school for the same period. No secondary cases occurred in the contacts of this family.

The second case to be reported came from the same area as the other child but there was no obvious contact. A little girl of two was admitted to the Royal Children's Hospital from their out-patients' department with pyrexia and weakness of the legs. For the ensuing week, in spite of detailed investigation, the diagnosis failed to become apparent. Eventually the child's lower limbs were found to be paralysed and a diagnosis of paralytic poliomyelitis was obvious. At this stage the child was transferred to Fazakerley Isolation Hospital. Poliovirus type I was isolated from the faeces. She was discharged from hospital after three months. She still required calipers for both legs, but was walking well on them, and attended the Royal Southern Hospital for further care.

The patients and staff in the hospital were given oral polio vaccine with the exception of those on steroid therapy, who would thus have poor antibody response. This group were given gamma globulin.

The oral polio vaccine blanketing operation in the district already covered was appropriately extended.

The home contacts were numerous. The child moved between a series of child minders in three different adjacent flats, in addition to sleeping in her parents' home. The mother worked as a cleaner in a Maternity Hospital. She was excluded from work and vaccine was issued to the hospital for staff and patiens. The father worked as a building worker on outdoor work. There were five siblings.

A sister of nine was found to be an excretor of Poliovirus I. She had no signs or symptoms. As with the general policy on dealing with these carriers, she was returned to school after three weeks. Numerous attempts were made to obtain a further faecal specimen without success.

Among the many contacts were a woman of lifty-one employed in a cafe, an aunt of twenty-eight employed as a cleaner in a Maternity Hospital and a young woman of twenty working as a drug packer. They were excluded from work for three weeks, or found work not involving food or drug handling.

Vaccine was issued to the personnel at the places of work of all these contacts.

The third case was a boy of five living in Speke. He had been off school for a fortnight with malaise, headaches and slight pyrexia attributed by his family to mild "flu", when he developed a paralysis of his left leg. As soon as this was seen he was admitted to Fazakerley Isolation Hospital, where he underwent an uneventful recovery. He was discharged after ten weeks. He was fitted with a full-length caliper for the left leg, and a below-knee iron for the right and will attend the Royal Liverpool Children's Hospital for further care. Poliovirus type I was isolated from his faeces.

At the house where he was taken ill were his grandmother, a housewife of forty-eight, a grandfather of fifty-four who had been off work for fifteen weeks following a fracture of the femur, one other adult and a child. This other adult worked at cake boxing. She was excluded from food handling for three weeks.

At his parents' home were his mother, a housewife of twentysix, and father, a ganger of twenty-six also. The mother was expecting a baby any day and was booked for hospital delivery. There were also three pre-school children. All the children in these two homes were found to be excretors of Poliovirus type I.

As was done in the Liverpool, 8 area, school and food handling contacts were excluded for three weeks. An extensive blanketing operation was carried out. As well as door-to-door visiting a vehicle with a loud hailer was used street by street. This proved a very worthwhile adjunct.

## FOOD POISONING AND SALMONELLA INFECTION

There was an increase in the incidence of food poisoning and salmonella infection during the year.

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

The total number of cases coming to the attention of the Department was 139. Of these, 30 occurred in a series of eleven family outbreaks and 71 occurred in isolation. There was also one general outbreak in which there were 38 cases.

A table giving the organisms found in notified cases is listed on the next page.

Organism			Num	nber of persons from whom organism was isolated
Salmonella adelaide				1
Salmonella bredeney		***		1
Salmonella copenhagen				1
Salmonella dublin				2
Salmonella indiana				3
Salmonella kiambu				1
Salmonella montevideo				1
Salmonella panama				12
Salmonella takoradi	***			1
Salmonella typhimurium				32
Salmonella virchow	***			83
Salmonella wien				1
				The state of the s
				139

The general outbreak occurred at a function attended by about 120 people, at which spit-roasted chicken was eaten. The agent causing the outbreak was salmonella virchow. Symptoms included headaches, rigors, sharp rises in temperature, abdominal pain, diarrhoea, nausea and vomiting. Considerable lassitude followed the disease. The severity and duration of the illness varied considerably.

In addition to the persons who suffered symptoms, eight carriers of the organism were found, employed in the shop which had supplied the food. This was closed for thorough cleaning. The positive members of the staff were excluded until clear.

Contributory factors in this outbreak were the inadequate time (two hours) allowed for thawing the frozen chickens obtained by the shop from the packing station; the inadequate time (one and a half hours) allowed for cooking; the indiscriminate placing of raw birds on the same spit as partially-cooked birds; slow cooling after cooking, and storage at too high a temperature; inadequate working space and poor hygiene in the food shop.

This outbreak again emphasises the need to allow adequate time for thawing frozen birds, and the necessity for thorough cooking. It also underlines the need for a high standard of hygiene in food shops and an awareness on the part of the management of the dangers associated with poor hygiene. (A detailed account of this outbreak was given in the British Medical Journal, 28th December, 1968.)

## ENTEROVIRUS SURVEY

The enterovirus survey has now covered a period of eight years. Since the length of time required to identify viruses may be more than a year, previous reports of enteroviruses isolated in the survey have been incomplete, and so a corrected summary has been prepared which is reproduced on pages 136 and 137.

#### TYPHOID AND PARATYPHOID

One case of each of these diseases occurred during the year. A

careful investigation was made of the two cases, but the sources of infection could not be traced. None of the contacts became infected.

#### INFECTIVE JAUNDICE

Doctors in Liverpool were asked to notify cases of this disease voluntarily from January, 1968, and in June notification was made statutory; 439 cases in all were notified during the year. There were also five deaths from this cause.

As many as possible of the notified cases were visited by Public Health Inspectors, Health Visitors or School Nurses, a special form being completed for each case. A summary of the 355 completed forms received is reproduced below. This shows that only about one-fifth of the total suffered from severe illness, the remainder being described as mild or moderate. Less than a sixth of the total had received injections, and only five had received transfusions, during the previous six months. The distribution of cases during the year showed that the disease was fairly evenly spread over the whole city.

V-1			055	Description of Land Pro-	
Number of completed form	s retur	nea	399	Duration of Jaundice:	00
Clinical Features:				Nil	29
(Patients suffering from	onr	one		Under I week	96
of the following)	any	one		1—2 weeks	121
		a la		Over 2 weeks	109
Jaundice, dark uri			353		
			999	Period in bed	
Anorexia, diarrhoea,			0.41	Nil	87
vomiting, malaise			341	Under 1 week	92
Enlarged liver, abdon	unai p	ain	256	1—2 weeks	105
No. of cases falling into any	110	or 2		Over 2 weeks	71
groups:	, 1, ~ .	0. 0			
1			13	Biochemical tests performed	
2			93	Yes	120
3			249	No	192
			240	Not known	43
Severity:					
Mild			131	Injections given in last 6 months	54
Moderate			125		0.77
Severe			69	Transfusions given in last 6 months	5
Not stated			30	z and	
			11.00	Food handlers:	
Number suffering from:				Cases	3
Anorexia			194	Family Contacts	66
Nausea			240	2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
Diarrhoea			101	Blood Donors:	
Malaise		***	224	0	9
Vomiting			281	77 17 17 17	55
Jaundice			328	Family Contacts	99
Enlarged liver			39	Known contacts of cases	101
Abdominal pain			246		121
Dark Urine			302	(apart from family contacts).	
Pale Stools					

## WINTER EPIDEMIC SPOTTING

Sickness remained below the 1967 level for almost the whole of the year. There were four deaths from influenza, three of which occurred during the first few weeks of January, and the other in April.

# IMMUNISATION AND VACCINATION

DIPHTHERIA IMMUNISATION

The number of persons receiving a primary course of diphtheria immunisation in 1968 was 7,179 which is approximately 25 per cent lower than the 9,955 immunised in 1967. A decrease could be expected with the extension of the recommended immunisation schedule from three to nine months, and with the continued falling number of births.

During 1968 a total of 1,678 primary courses and 3,245 booster doses were carried out in schools, figures lower than those of the previous year.

The number of primary courses carried out in maternity and child welfare clinics was 2,155, less than half the 1967 figure; in addition 3,346 were performed by general practitioners. The number of booster doses done in maternity and child welfare clinics, 787, was an increase on the 1967 figure of 489, and the numbers carried out by general practitioners also increased from 1,370 to 1,644 in 1968. These figures, together with 3,245 boosters done in schools, give an overall total of booster doses of 5,676, a little lower than the figure of 6,961 achieved in 1967.

The proportion of the work of immunisation carried out by general practitioners has continued to increase.

TABLE A

Maternity and Child Welfare 6,861 5,789		1961 0961	1962	1963	1964	1965	1966	1967	1968
	180,81 68		5,016	5,263	5,710	6,023	5,843	4,799	2,155
Schools 2,316 3,245	-	1,332	1,464	1,362	2,732	1,401	1,818	1,698	1,678
General Practitioners 5,761 5,102			3,523	3,399	3,397	3,405	3,189	3,458	3,346
TOTAL 14,938 14,136	36 25,946	13,186	10,003	10,024	11,839	10,829	10,850	9,955	7,179

TABLE B

## DIPHTHERIA IMMUNISATION-1968

				Year of	Birth	
	Where Immunised		1964-68	1960-63	1953-59	Total
	0 00 1001		(0—4 yrs.)	(5—8 yrs.)	(9—15 yrs.)	(0—15 yrs.)
Primary	Maternity and Child Welfare Clinic	s	1,984	150	21	2,155
Course	General Practitioners		3,019	263	64	3,346
118,8	Schools		1	1,602	75	1,678
with	Total		5,004	2,015	160	7,179
Booster	Maternity and Child Welfare Clini	cs	22	716	49	787
Doses	General Practitioners		453	1,102	89	1,644
	Schools		. 3	3,047	195	3,245
ylazno	Total		478	4,865	333	5,676

# WHOOPING COUGH IMMUNISATION

The number of primary courses of whooping cough immunisation in 1968 was 5,211 compared with 1967, when 8,017 were completed. The same trend as was seen for diphtheria immunisation is evident here.

The level of booster doses remained fairly constant, being 1,499 as compared with 1,449 in 1967.

TABLE C

#### WHOOPING COUGH IMMUNISATION-1968

				Year of	Birth	
1417	Where Immunised	1964-68 (0—4 yrs.)	1960-63 (5—8 yrs.)	1953-60 (9—15 yrs.)	Total (0—15 yrs.)	
Primary Course	Maternity and Child Welfare Clinics General Practitioners		1,941 2,953	66 227	9	2,016 3,195
HAT	Total		4,894	293	24	5,211
Booster Doses	Maternity and Child Welfare Clinics General Practitioners		13 424	251 755	15 41	279 1,220
444	Total		437	1,006	56	1,499

### TETANUS IMMUNISATION

The level of tetanus immunisation in 1968 was approximately 25 per cent less than in 1967. A total of 7,168 primary courses was completed compared with 9,975 in the previous year. This would be expected as primary tetanus immunisation is in the main carried out with triple antigen. In addition, 5,711 booster doses were carried out compared with 7,005 the previous year; of these 3,245 were administered in schools.

			Year of	Birth	
	Where Immunised	1964-68	1960-63 (5—8	1953-60 (9—15	Total
13	0,0 1002	 yrs.)	yrs.)	yrs.)	yrs.)
Primary Course	Maternity and Child Welfare Clinics	 1,980	150	22	2,152
Course	General Practitioners	 2,994	274	70	3,338
	Schools	 1	1,602	75	1,678
raico y	Total	 4,975	2,026	167	7,168
Booster Doses	Maternity and Child Welfare Clinics	 22	717	51	790
Doses	General Practitioners	 464	1,109	103	1,676
	Schools	 3	3,047	195	3,245
216	Total	 489	4,873	349	5,711

## TABLE E

PRIMARY COUL	RSES C	F ANT	IGEN						
Diphtheria/tet	anus/	whoopi	ng coug	gh and	poliom	yelitis	 	 ***	-
Diphtheria/tet	anus a	and wh	ooping	cough			 	 	5,209
Diphtheria an	d teta	nus					 	 	1,929
Tetanus							 	 	30
Measles							 	 	5,600

## SMALLPOX VACCINATION

Infant vaccination has remained low in 1968, only 4,525 primary vaccinations against smallpox being carried out. The figure for 1967 was 4,601.

The number of vaccinations for the purposes of persons travelling abroad has also decreased from 10,509 in 1967 to 9,614 in 1968.

	1964	1965	1966	1967	1968
Births	15,625	14,553	13,557	12,583	11,847
Total Primary Vaccination	3,722	4,691	5,275	4,312	4,290
Total Re-vaccinations	349	343	640	289	235
Total	4,071	5,034	5,915	4,601	4,525
Total Vaccinated at Clinics	1,962	2,621	3,295	2,195	2,192
Total Vaccinated by General Practitioners	2,109	2,413	2,620	2,406	2,333
Total	4,071	5,034	5,915	4,601	4,525

## POLIOMYELITIS VACCINATION

The number of children under sixteen receiving primary courses of poliomyelitis vaccinations has dropped from 11,088 in 1967 to 9,746. The number of booster doses (all ages) was very much increased (from 8,170 to over 150,000) because of the occurrence in October of three cases of poliomyelitis, further reference to which will be found in the Epidemiology section of this report.

TABLE G
POLIOMYELITIS IMMUNISATION—1968

Completed Primary Courses

			Ye	ar of B	irth			Total	0
Where Immunised	1968	1967	1966	1965	1964	1960-63	under 16	under 16	Over 16
Maternity and Child Welfare Clinics	15	3,291	518	1,221	109	179	28	5,361	48
General Practitioners	711	1,683	300	117	73	102	25	3,011	27
Schools	-	_	_	1	290	1,002	81	1,374	-
Total	726	4,974	818	1,339	472	1,283	134	9,746	75
		1	Reinford	ing Do	ses				
Maternity and Child Welfare Clinics	-	-	4	10	83	5,408	16	5,521	_
General Practitioners	3	130	185	112	969	3,147	769	5,315	_
Schools		_	_	3	266	13,756	649	14,674	_
Other	-	100 S	-	Tone	-	-	DUE S	-	
Total	3	130	189	125	1,318	22,311	1,434	25,510	*

<sup>\*</sup>In addition, approximately 150,000 doses were issued during the blanketing operation described in the Epidemiology section of this report.

## MEASLES

Since June, 1968, vaccination against measles has been made available at maternity and child welfare clinics and schools, and by general practitioners. During the six-month period a total of 5,600 vaccinations was carried out but the programme had to be halted in October, due to the blanket operation for poliomyelitis immunisation in the south end of the city.

TABLE H
MEASLES VACCINATION

	Mon	th	Clinies	General practitioners	Schools	Totals
1968	June		4	41	-	45
	July		442	573	1,660	2,675
1	August		342	543	-	885
8	Septembe	r	268	351	m - I	619
(	October		275	282	761 - [	557
1	November		390	163	001 - T	553
1	December		75	60	131	266
7	Γotals		1,796	2,013	1,791	5,600

 $\begin{array}{c} {\rm TABLE~J} \\ {\rm MEASLES~VACCINATION} \\ {\rm Vaccinated~by~General~Practitioners~and~at~elinics} \end{array}$ 

	Born in 1968	Born in 1967	Born in 1966	Born in 1965	Born in 1961–64	Others	Total
June	1	2	10	9	22	- 1	45
July	9	56	100	100	728	22	1,015
August	4	100	180	152	426	23	885
September	8	123	158	136	186	8	619
October	8	148	148	125	126	2	557
November	10	179	149	113	97	3	553
December	5	49	37	21	20	3	135
Vaccinations at schools	- 81		_	68	1,713	10	1,791
Totals	45	657	782	724	3,318	74	5,600

## VACCINATIONS FOR INTERNATIONAL TRAVEL

A total of 9,614 persons received vaccination and immunisation for international travel at the clinic which is held every afternoon for this purpose. This is slightly lower than the number who attended in 1967, possibly because of the fall in the number of holiday travellers consequent upon currency regulations.

Of the total attending, 3,151 were immunised against yellow fever and 4,479 against smallpox, 645 received doses of T.A.B. vaccine and 1,339 received doses of cholera vaccine.

TABLE K

VACCINATIONS FOR INTERNATIONAL TRAVEL-1968

Month	Yellow Fever Number of Persons	Smallpox— Number of persons vaccinated	T.A.B.— Number of full courses	Cholera— Number of full courses	Total
January	 226	324	25	97	672
February	 204	375	31	62	672
March	 226	413	40	87	766
April	 248	460	42	89	839
May	 255	493	63	98	909
June	 214	495	62	106	877
July	 609	534	137	221	1,501
August	 278	402	85	122	887
September	 211	291	43	99	644
October	 272	310	32	169	783
November	 237	202	47	122	608
December	 171	180	38	67	456
Totals	 3,151	4,479	645	1,339	9,614

#### ANTHRAX IMMUNISATION

Anthrax immunisation is offered by the Health Department to persons at special risk, these being those working in such establishments as tanneries, glue, gelatine and bonemeal factories and woollen mills, who are regularly handling such materials as wool, camel hair, horse hair, hides and hoof and horn meal, particularly those imported from India, Pakistan, the Middle East, China, Africa, Asia, Central and South America.

TABLE L Anthrax Immunisations

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

# CONTROL OF RADIATION HAZARDS

REGISTERED USERS UNDER RADIOACTIVE SUBSTANCES ACT 1960.

One additional user was added to the Register of Users during 1968.

Use of Radioactive Sources in Schools, Establishments of Further Education and Training Colleges

Forty-one schools are now using radioactive materials.

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

# RADIOACTIVE SEALED SOURCES-INDUSTRIAL ESTABLISHMENTS

Nat	ure o	f Source	e		Si	ze of Source	Number of Sources
Carbon 14					1 0·5 0·75	microcurie	1 1 1
Caesium 137					0.5	millicuries	
Caesium 197					10	,,	1
Iridium 192					500	,,	1
Strontium 90					469	,,	1
Thallium 204					24	,,	1
				nm	30	,,	1
Thulium 170					300	,,	1
Tritium					60	,,	1

## RADIOACTIVE SEALED SOURCES-EDUCATIONAL ESTABLISHMENTS

Nature of	Source	9	Size o	of Source	Number of Sources
Americium 241		***	 0·125 m	icrocuries	23
Cobalt 60			 5	,,	32
Plutonium 239			 0.1	,,	12
Radium 226			 5	,,	30
Strontium 90			 0.125	,,	24
			9	,,	21
			1	,,	14
			5	**	1

# MEDICAL CARE OF IMMIGRANTS

MEDICAL ARRANGEMENTS FOR LONG-STAY IMMIGRANTS

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

On receipt of each advice note of the arrival of an immigrant in Liverpool arrangements are made for a health visitor to call at the address given. Quarterly returns of figures relating to the visits are made to the 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 284 persons.

Successful first visits made relating to 202 persons. There were also 6 successful first visits relating to advice notes received towards the end of 1967.

Not Liverpool addresses: 19 persons.

Not traced during the period: 63 persons.

## TUBERCULOSIS

#### STATISTICS

The number of new cases found during the year decreased once again to 252, consisting of 219 pulmonary and 33 non-pulmonary cases. These figures represent a reduction of eleven compared with 1967 and give an incidence rate of 0.32 per 1,000 for cases of pulmonary tuberculosis and 0.05 per 1,000 for cases of non-pulmonary tuberculosis. The figures for 1967 were 0.33 per 1,000 and 0.04 per 1,000 respectively.

During the year 545 cases were removed from the Register consisting of 512 pulmonary and 33 non-pulmonary. These included those who had recovered during the year. The number of cases on the Register at the beginning of the year was 3,057 (excluding seventeen where diagnosis had not been completed). Of these 2,788 were pulmonary and 269 non-pulmonary. This gave a prevalence rate per 1,000 population of 4.05 pulmonary and 0.39 non-pulmonary, with an overall tuberculosis prevalence rate of 4.44 per 1,000 at mid-year.

The total number of cases remaining at the end of the year was 2,570 comprising 2,311 pulmonary and 259 non-pulmonary and excluding a total of sixteen cases where diagnosis had not been completed. Thus, it may be seen that the overall reservoir of cases is continuing to decrease. The number of new cases found as the result of illness was 182 which is 24 less than the previous year. The number of new cases found by examination of apparently healthy persons was 70. The proportion of cases detected in apparently healthy persons has shown a slight increase from the previous year.

Of the new cases of pulmonary tuberculosis 146 were male and 73 female, 66.6 per cent of the total being male and 33.4 per cent female. Details of age and sex distribution are given in the statistical section. The total of 44 tuberculosis deaths in 1968 comprises 39 from pulmonary tuberculosis and five from non-pulmonary tuberculosis. These figures represent death rates of 0.057 per thousand for pulmonary tuberculosis and 0.007 per 1,000 for non-pulmonary tuberculosis, making an overall rate of 0.064 per 1,000 for all forms.

## AFTER-CARE AND PREVENTION

The full complement of tuberculosis visitors is sixteen. One new visitor was appointed during the year to fill a vacancy caused by a resignation and later in the year a further vacancy was caused by the death of a visitor who had given many years of loyal service. As in previous years visits have been concentrated on cases of greatest need, on re-visiting cases where social and housing conditions were affecting the disease or where persons were awaiting re-housing. The aim has been to concentrate a greater amount of time on fewer cases in an

attempt to remove pockets of infection which might otherwise serve to decelerate the eradication of tuberculosis. Parallel with the measures against tuberculosis increasing attention is being paid to other pulmonary conditions such as bronchitis, emphysema, bronchiectasis, carcinoma of the lung and post-operative conditions.

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

Although legal action through the court under Section 172 was not resorted to during the year, the existence of this Section has nevertheless been of great value, lending persuasion as it does in cases who might otherwise refuse hospital treatment.

Section 172 has now been repealed, however, and in future cases where legal action is contemplated, the use of Section 169 of the Public Health Act, 1936, which applies to infectious diseases generally, will be considered.

Each year shows an encouraging reduction in the number of unco-operative patients and it is reasonable to assume that this is largely
due to intensive health education. In those cases where lack of cooperation is a feature, the root cause is often found to be a latent fear
of the disease itself and in this connection, tuberculosis for many newly
diagnosed patients still retains its image of 30 years ago. Fortunately
this fear is usually allayed by painstaking explanation, firm assurance
of the effectiveness of modern treatment and an overall compassionate
approach. This approach invariably leads to a good relationship between
patient and doctor or visitor throughout what is still a comparatively
long illess and is especially valuable at times of difficulty, when for
example a patient absconds from hospital or is reluctant to continue
chemotherapy for the prescribed course following discharge from
hospital.

#### B.C.G. VACCINATION

During the year B.C.G. vaccination of new-born babies continued in both the chest clinics and maternity wards of the Sefton General, Walton, Mill Road, Broadgreen and Liverpool Maternity Hospitals. The total number of babies vaccinated throughout all these units in the City was 364. In addition 81 University students were given B.C.G. vaccination at Walton Hospital.

## B.C.G. VACCINATION OF SCHOOL CHILDREN

Vaccination was offered to 10,739 school leavers and 9,667 parents signed the consent form. The number Heaf tested in schools was 7,394 and the number of positive Heaf tests was 1,130 (15.4 per cent). This number included 490 (6.6 per cent of total tested) who had previously had B.C.G. or a history of tuberculosis. The number of

children given B.C.G. vaccination was 5,392 being 72.9 per cent of the total number tested and 50.2 per cent of the number to whom vaccination was offered. The corresponding percentages in 1967 were 79.2 and 67.3 respectively.

Tuberculin testing and B.C.G. vaccination were cancelled in 23 schools during the Autumn Term 1968 (1,562 appointments) due to an outbreak of poliomyelitis in the City. This is reflected in the figures given above. No students at Teacher Training Colleges received B.C.G. vaccination during the year, although facilities were offered.

## Summary

(1)	Number of school children	offered	B.C.G.	vacci	nation	 10,739
(2)	Number of acceptors					 9,667
(3)	Number Heaf tested					 7,394
(4)	Number of positive Heaf to	ests.				 1,130
(5)	Number of children vaccin		th B.C.	G.		 5,392

## 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, and two mobile units cover South West Lancashire and Wirral in addition to 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.

Numbers X-rayed by the three units in 1968 were as follows: -

No. 1 Unit (Hood Street) ... 31,862 No. 2 Unit (Lancashire) ... 46,673 No. 3 Unit (Cheshire) ... 42,372

Of the 31,862 examinations made by No. 1 Unit, 7,372 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.

During the year, 48 cases of active pulmonary tuberculosis were discovered by the Hood Street unit; of these 36 were Liverpool residents. A further twelve active cases resident in the City were discovered by the mobile units making a total of 48 Liverpool cases brought to light by the Mass Radiography Service.

#### TUBERCULOSIS WELFARE

During 1968, 23 cases have been the subject of reports to 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 and supplies the necessary information. In addition constant liaison is maintained with the Ministry of Labour Rehabilitation Centre in order to assist in suitable cases.

During 1968 one patient had occupational therapy at home and four attended occupational therapy units.

## WORK OF THE CHEST CLINICS

An analysis of the work done during 1968 at the four Chest Clinics is given in the statistical section. The Chest Physicians have kindly contributed the following reports:—

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

"During 1968 notifications of new tuberculosis cases in the Liverpool area, covered by the North Clinic, fell from 61 to 51 and the number of deaths from tuberculosis fell from 36 to 24 and rose from 18 to 20 where tuberculosis patients died from other causes. Ninety-two patients were removed from the Register as recovered and the total number in the Register has now come down from 893 to 788. New contacts examined rose from 429 to 754 but only three of these were found to have active tuberculosis. Total attendance at the Clinic was 5.073 as compared with 5.371 in 1967. One hundred and sixty children were vaccinated with B.C.G. and 394 tuberculin tests were performed. About two thirds of the attendances at the North Chest Clinic are now due to patients not suffering from tuberculosis, but although the Tuberculosis Register now seems comparatively small, a large amount of preventive work is still being done. This includes the examination of all children found to have a positive tuberculin test at school, in the area covered by this Clinic and the institution of prophylactic chemotherapy in those who are found to be strongly positive, together with examination of their family contacts.

This procedure occasionally leads to the discovery of an unknown active case of tuberculosis in the community. In our view this work remains of the highest importance in the eradication and control of tuberculosis."

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

"During the year a further 251 patients were removed from the Register as cured and the number of those under routine supervision has steadily diminished year by year. Due to effective modern treatment, very few patients now require supervision for more than six or seven years and, of the hundreds of patients discovered in the mass radiography campaign of 1959, there is now only a handful still requiring precautionary supervision.

It is disappointing to find 142 new patients with active disease during the year, 121 of these with pulmonary disease, an increase of nineteen compared with last year. There is also a rise in the numbers of those with non-pulmonary disease.

Cure of the disease can be anticipated and only two patients died from tuberculous infection during the year—in one of these long-standing severe disability was an important factor in determining the fatal result and the other patient was discovered to have extensive disease, from which he died three days after admission to hospital.

Of the 121 respiratory tuberculosis patients, 58 had positive sputum and a few patients under supervision from earlier years relapsed with positive sputum and these were treated in hospital, with eight exceptions, until they were no longer potentially infective. Five of the other eight were treated at home because of ideal domestic circumstances and the other three refused treatment, other than at home.

Casting a wide net among the contacts of new patients, 665 were examined, of whom 55 per cent were found to have been infected with the tubercle bacillus, as evidenced by a positive tuberculin test, but only nine of these required attention other than supervision, and 97 per cent of the contacts who were suitable for B.C.G. protective vaccination received it.

Despite fewer patients on the Register and the difficulties of travel in the bus strike, there was a considerable increase in the number of patients seen with non-tuberculous chest disorders and the total attendances of 5,104 patients at the clinic was very little changed."

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

"The work of the clinic has continued on much the same lines with a steady reduction in the Tuberculosis Register and a reduction in the number of sputum positive cases during the year. As a result of the decline in tuberculosis the number of tuberculin tests and B.C.G. vaccinations has shown a similar falling trend.

Although the total case load of the clinic has fallen because there is only one chest physician now, the number of non-tuberculosis cases dealt with is more than twice the number of tuberculosis cases (excluding skin testing and B.C.G. inoculations).

Although the continual decline in tuberculosis continues we cannot yet be complacent as new cases are still coming to light at the rate of two every three weeks."

# Dr. S. Kalinsky, Central Chest Clinic, writes: -

"During 1968, 283 cases were examined for the first time. Of these 36 were suffering from tuberculosis, 100 were suffering from other chest conditions and 147 were contacts of tuberculosis cases. In addition, 462 other persons paid visits to the Clinic including 390 already on the Register. B.C.G. vaccinations numbered 134, 68 of these having been given at the Clinic and 66 at the Liverpool Maternity Hospital."

## EMERGENCY CARE OF THE ELDERLY

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

These cases are assessed with great care, due regard being given to the medical, social and environmental aspects, every effort is made to provide adequate support in the home, whatever the need, in order to maintain an independent existence for these elderly persons as long as possible. Quite often efforts are successful. During the course of the past year the Department was asked to assess a total of twenty cases. Compulsory removal under the provisions of the National Assistance Act 1948, Section 47 and Amendment Act 1951 was invoked only five times.

Most cases, visited, because of illness or general senility, can no longer be cared for at home and require hospital or residential accommodation for recovery or the maintenance of reasonable health. Whenever this occurs, the medical and welfare problems are fully discussed with the person, and an offer of suitable premises away from home is made. Patient attempts are made to persuade the person concerned to accept this treatment on a voluntary basis. Where the offer is refused and the need urgent, compulsory removal is arranged under the National Assistance Acts.

The following are examples of two cases assisted of a contrasting nature:—

- (a) An elderly man was living in one room at the top of a derelict house situated in a demolition area. The windows of the rooms were defective and rain and snow were coming in. In addition, the bedding and living conditions were insanitary. This man had collapsed in the street and been taken home. He was suffering from the delusion that he was a night watchman. He could not be persuaded to go into hospital voluntarily and Section 47 had to be invoked.
- (b) In contrast an elderly man, who was severely ill and whose wife was not capable mentally or physically of looking after him, was persuaded to go into hospital without any need for the invoking of the compulsory provisions of the National Assistance Acts.

# VENEREAL DISEASE

INCIDENCE OF SYPHILIS

The combined male and female total shows a fall of nearly 50 per cent on the figure for 1967, the male total being the lowest since 1962. In one male case only did re-infection occur.

Statistics over the years are as follows:-

Age in	19	46	196	32	196	3	19	64	196	35	196	66	196	7	196	38
years	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Under										987		Tree (				
15	-	2	-	-		-	-		-	-	-	-	-	-		
15-17	9	15	1	-	2	_	2	1	2	-	1		4	4	1	1
18-20	40	71	6	1	9	3	18	5	12	3	9	5	12	12	8	5
21-25	177	111	19	3	24	2	36	6	42	14	20	6	18	14	16	7
26 - 30	149	57	11	3	14	4	20	3	23	2	15	3	20	3	14	8
31-35	136	41	9	-	9	2	9	-	14	1	10	4	12	6	5	1
36-40	73	23	4	1	5	-	3	1	7		7	3	11	4	4	1
41–45 46 and	32	5	4	-	-	1	5	1	5	1	5	3	16	4	5	2
over	39	6	4	2	3	1	3	-	8	-	7	-	15	4	5	-
Total	655	331	58	10	66	13	96	17	113	21	74	24	108	51	58	25
Total M & F	98	36	68	3	79	)	11	3	13	4	98	3	15	9	83	3

### INCIDENCE OF GONORRHOEA

For the third successive year, a slight increase on the total of that preceding, in males, there was an increase of nearly 4 per cent, in females, 6.5 per cent on the 1967 totals.

Re-infection in males occurred in 194 instances— 1,354 infections—1,160 individuals.

> Re-infection in females occurred in 53 instances— 520 infections—467 individuals.

Statistics over the years are as follows: -

Age in	19		196		196		19		190		196		196		190	
years	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Under							14-171-4									
15	-	4	_	1	-	2	-	-	-	-	_	1	1	1	1	2
15-17	21	17	42	25	37	31	49		23	21	26	45	27	56	24	58
18-20	262	79	184	86	204	85	228	129	143	94	164	126	176	120	198	140
21-25	978	141	429	106	427	122	541	140	418	149	400	157	392	148	428	168
26-30	870	88	294	36	302	57	377	66	281	59	334	74	383	109	324	8:
31 - 35	513	53	148	20	149	23	170	29	130	19	157	28	123	24	181	4
36-40	259	29	79	13	85	10	91	8	70	10	90	21	89	22	105	20
41-45	135	5	44	6	49	3	70	2	51	7	48	8	64	3	50	5
46 and			2,000		100000			277	1.77						-	
over	74	6	42	4	64	3	43	5	35	6	59	3	48	5	43	4
Cotal	3,112	422	1,262	297	1,317	336	1.569	422	1,151	365	1.278	463	1,303	488	1,354	520

## CONTACT TRACING

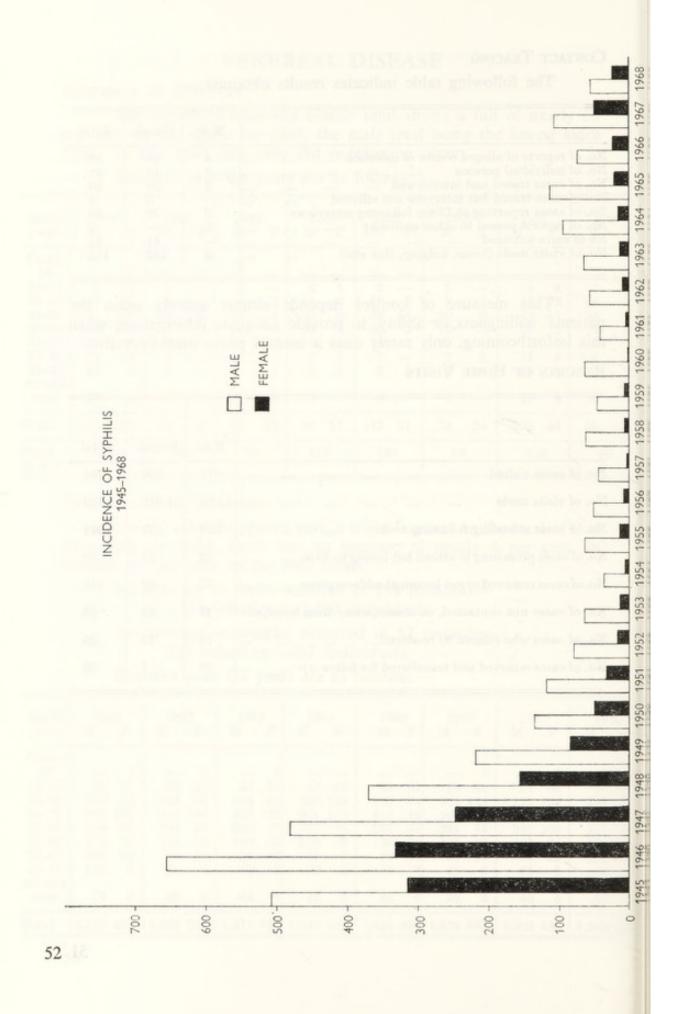
The following table indicates results obtained: -

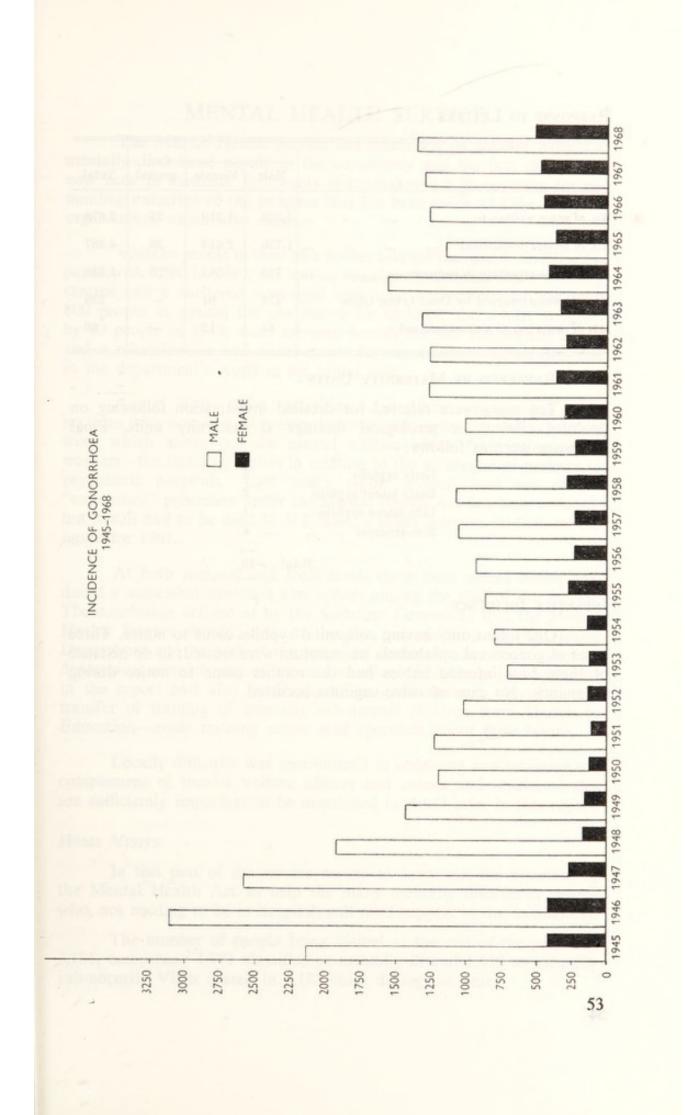
	Male	Female	Total
No. of reports of alleged source of infection	. 4	48	52
No. of individual persons	. 4	44	48
No. of cases traced and interviewed	. 2	28	30
No. of cases traced but interview not effected		5	5
No. of cases reporting at Clinic following interviews	. 2	26	28
No. of reports passed to other authority	. 2	-	2
No of cases untraced		11	11
No. of visits made (home, lodging, club etc.)	. 9	143	152

This measure of control depends almost entirely upon the patients' willingness, or ability, to provide adequate information; when this is forthcoming, only rarely does a contact prove unco-operative.

## RESULTS OF HOME VISITS

		Male	Female	Total
No. of cases visited		414	290	704
No. of visits made		1,082	1,048	2,130
No. of cases attending following visits		229	139	368
No. of cases promising to attend but failing to do so		22	27	49
No. of cases removed or not known at address given		72	69	141
No. of cases not contacted, no access, away from home	, etc.	47	38	85
No. of cases who refused to re-attend		16	10	26
No. of cases removed and transferred for follow-up		28	7	35





## RESPONSE TO LETTERS

			Con-	
	 Male	Female	genital	Total
No. of cases written to	 1,332	1,319	27	2,678
No. of letters despatched	 1,736	2,615	36	4,387
No. of cases reporting in response	 715	585	26	1,326
No. of letters returned by Dead Letter Office	 174	64	-	238
No. of cases traced and transferred	 54	12	_	66

## CASES REFERRED BY MATERNITY UNITS

Ten cases were referred for detailed investigation following on doubtful clinical or serological findings at maternity units. Final diagnoses were as follows:—

Early syphilis		 3
Early latent syp	 2	
Late latent syph	nilis	 1
Non-venereal		 4
	Total	 10

## INFANTILE INCIDENCE

One infant only having congenital syphilis came to notice. Three cases of gonococcal ophthalmia neonatorum were treated; in no instance of these four infected babies had the mother come to notice during pregnancy. No case of vulvo-vaginitis occurred.

# MENTAL HEALTH SERVICE

The Mental Health Service has continued its welfare work for mentally disordered people in the community and the fact that it has now been in existence for twenty years makes it a fit occasion for reminding ourselves of the progress that has been made and the complex organisation which now exists.

Visits to people in their own homes totalled just under 18,000 compared with 3,500 in 1949; the service has eight junior and senior training centres and a sheltered workshop with total accommodation for over 800 people as against the one centre for children and adults attended by 80 people in 1949; there are now hostels for 148 sub-normal adults and a rehabilitation and social centre for the mentally ill, services not in the department's scope in the initial year.

Along with these activities, and their many-sided connections with hospitals, voluntary societies, etc., goes the still important work which marks out the mental welfare officer from other social workers—the statutory duties in relation to the admission of patients to psychiatric hospitals. Last year's report showed how use of the "emergency" procedure under the Mental Health Act has been reduced; but it still had to be used in 316 cases, a slight increase, in fact, on the figure for 1967.

At both national and local levels there were events which produced a somewhat unsettled atmosphere among the staff of the service. The conclusion arrived at by the Seebohm Committee that the Mental Health Service should cease to be the responsibility of the Health Department and be part of the proposed comprehensive social services department certainly caused much discussion. Another point mentioned in the report and also foreshadowed in parliamentary speeches—the transfer of training of mentally sub-normal children from Health to Education—made training centre staff speculate about their future.

Locally difficulty was encountered in obtaining and retaining the complement of mental welfare officers and causes and results of this are sufficiently important to be mentioned in detail later in this report.

#### HOME VISITS

In this part of the service we try to carry out the intention of the Mental Health Act to help the many mentally disordered people who, not needing to be in hospital, still need support in the community.

The number of people being visited at the end of the year was 3,181, comprising 1,771 classified as mentally ill and 1,410 as mentally sub-normal. Visits ceased in 1,185 cases during the year.

Information is supplied by hospitals of mentally ill people being discharged and in many cases (1,250 during the year) the department's own liaison officer has visited the hospital and discussed immediate needs before the discharge takes place. Every effort is made to pay frequent visits during the first few crucial weeks, after discharge.

All officers agree that, as regards the mentally ill, their work has been intensified; they not only have to attend to the patients' social, tamily and financial needs, but must in many cases be on the look-out for those who tend to discontinue the drug treatments which have enabled them to be discharged far earlier than was the case in former days.

In dealing with the mentally sub-normal they perhaps have a less arduous task these days. First of all it is now rare indeed to find that a sub-normal person is neglected or cruelly treated by parents; next, the officer can offer more positive help—years ago he had so little to offer in concrete terms that he was sometimes received with abuse or no more than tolerance but with the success of workshop and hostels at New Hall the anxieties of families for the future of the adult sub-normal relative have been largely allayed.

Visiting of mentally sub-normal children and their parents has been concentrated for many years in the hands of one officer who acts as a liaison between parents and the training centres. Miss Archer is nearing retirement age, and this may be a good time and place to pay tribute to her outstanding work. She has had no easy task. Many parents feel the exclusion of their child from school to be a stigma and are only too willing to find fault with the mental health service. It has been her triumph that she has convinced them that the child's welfare and training are in good hands. Her tact and understanding have been matched by a gentle firmness whilst the practical help and advice she has given, often in her own time, have been well "over and above the call of duty". She is certainly one social worker to whom that over-used word "dedicated" can be applied.

The repercussions of staff changes on the visiting service must be mentioned. Acceptance by the patient and relatives that the mental welfare officer is their friend is essential if any lasting sucess is to be achieved. If, as has sometimes happened recently, there is a succession of different officers the atmosphere one has built up is gone and the next has to start again. Continuity is the essence of the service.

Too much must not be expected, in any event, of a visiting service. In a recent case a woman recently discharged from hospital committed suicide. She had been visited immediately after her discharge by an officer who had reported that his visits were not acceptable and he had therefore stopped calling. The newspaper report

of the occurrence carried an implied criticism of the service, quite unjustified when it is realised that the officer has no power whatsoever to visit against the patient's wish and that, whether he has a large or small case-load, he cannot be on hand all the time.

### VOLUNTARY AND OTHER ORGANISATIONS

The Liverpool Society for Mentally Handicapped Children continued to provide useful services for severely mentally sub-normal people complementary to those of the City Council, notably in running evening social clubs and the daily centre, Mencap House, which the Council supports with a grant and provision of free transport. The department "uses" nearly all the voluntary societies of the City at some time or other and this report would not be complete without acknowledgement of their valuable help.

### HOSPITAL ADMISSIONS

Last year's report discussed fully the reduction in compulsory admissions to hospital which has occurred in the last few years. This trend has continued but it does appear that we may now be approaching the lowest point to be expected for emergency admissions.

The Committee again considered the perennial problem of the severely sub-normal person in need of hospital care. Though the waiting list of such people has been greatly reduced in recent years it has never disappeared. At the beginning of the year it was 44, at the end 29, and of this latter number over half had been on the list for more than 12 months.

The progress made by the Regional Board in dealing with this problem is appreciated—it has provided over 1,000 additional beds since 1948. At the same time when it is realised that the extension of the City Council's own training centre and hostels services has resulted in a reduced demand for hospital care it seems reasonable that the Regional Board shall ensure that really urgent cases are admitted to hospital without any delay. The Health Committee again approached the Board on this matter.

### SHORT-TERM CARE FOR MENTALLY SUB-NORMAL

This is another service which has reduced the demand for extended hospital care. Apart from the case in which a family crisis results in an urgent need for a mentally sub-normal dependant to be away from home for a period, parents now expect that the constant burden of caring for such a person shall be lightened to enable them to have a holiday. In this connection 211 people were accommodated, in most cases for a fortnight, during the year as follows:—

In	Regional Board hosp	oitals				148
At	Orchard Dene (home	run by	volun	tary	society)	24
At	New Hall hostels					14
At	other establishments					25

### RELATIONS WITH EDUCATION DEPARTMENT

The Education Department may soon be playing a larger part in the welfare of severely sub-normal children and it may be useful to mention here the present area of co-operation between it and the Mental Health Service.

The Mental Health Act, continuing previous legislation in principle, made the Health Department responsible for children "unsuitable for education in school" and each month a number of children, found to be in this category after careful examination and assessment are referred. In order to start the initial contact on a personal basis, the officer who is likely to be responsible for future visits delivers the letter notifying parents of the Education Committee's decision. It can be a difficult interview but the officer has the opportunity to answer questions and explain the facilities available.

An analysis of the action taken in respect of 34 children notified during the first nine months of the year shows that by the end of the year nineteen had started at a day training centre; four had been assessed and were due to start shortly; four had been admitted to hospital for extended care; two had left Liverpool; in five cases consideration had not been finalised.

The Mental Health Act gives parents the right to ask for reexamination of a child with the object of determining whether sufficient progress has been made to enable the child to be given a trial at school. Five children at training centres were re-examined during the year and two were admitted to special schools. One of these children is of considerable interest. He is the son, now aged 12, of a single woman, herself very dull mentally, who has had six other children, all by different fathers. His retardation was recognised at the early age of six months. At two years of age he showed no interest, had no control, could not walk or talk and, after examination by an Education Medical Officer, was referred to the Mental Health Service. He was visited thereafter in the one room which he and his mother shared with her growing family and by 1960, when he was four, he had evidently made good progress as the officer reported that he could run messages, though he still could not talk.

In 1961 he commenced at a training centre where his progress was carefully watched and fostered. Six years later he was re-tested and, though a marked speech defect made him difficult to understand, it was evident that he merited a trial in school. A year later he is still at school and making satisfactory progress.

One factor that emerges is that, despite his mother's appalling problems, her amoral nature and her backwardness, the boy was treated affectionately. At one time she did ask for him to be admitted to a hospital but when the time came, withdrew the application. It is an unfinished story, but a hopeful one.

### ESTABLISHMENTS ADMINISTERED BY THE MENTAL HEALTH SERVICE

Training Centres—	
Junior:	Places
Princes Road	80
Dovecot	60
Garston	60
Laburnum, New Hall	60
Cherry, New Hall	60
Oak, New Hall	40
Adult:	
Poplar, New Hall	72
Hawthorn, New Hall	
Lilac, New Hall	72
Workshop, New Hall (mentally sub-normal adu	ılts) 300
Hostels, New Hall (mentally sub-normal adults)	148
Occupational and Social Centre for mental	
Johnson Street	20

#### TRAINING CENTRES

As regards children the happy position has been reached that nearly every child referred as unsuitable for education in school can be given a vacancy in a training centre. This gives great satisfaction to those officers who can look back on the appalling state of affairs in the 'fifties when a waiting list of hundreds had built up.

With adults the limit of present accommodation is being reached; there is, however, another building at New Hall which can be opened in due course. Further accommodation will be available when the plan to convert the old sick bay at New Hall into a special training unit is completed. At the end of the year tenders for work were being received. Forty-eight sub-normal people (children and adults) suffering from additional handicaps will be accommodated. Some will be transferred from other training centres (where they are now in special classes) and others will be attending a centre for the first time. Pending the opening of this unit, Oak House at New Hall is being used temporarily for the same purpose.

The optimum number for each New Hall centre had previously been fixed at 60 but with certain re-arrangements it was agreed that up to 72 should be taken in each of the adult centres at present in use.

Mencap House continues to take severely sub-normal young children who, in due course, are placed in training centres.

The fact that there were no outstanding events at training centres does not mean that the year was any less productive than previously. The small classes, informality and emphasis on practical training have been detailed in previous reports; it merely needs to be said here that the work went forward steadily and without fuss and that every consideration is given to the differing characteristics of individuals.

There is some anxiety on the part of the staff of the centres that the enthusiasm of parents for the proposed transfer of children's training to Education Authorities may give them too extravagant hopes for the future. It is true that Education Departments have educational resources beyond those which could reasonably be set up by Health Departments for small groups (the number of severely sub-normal children in Liverpool at 31st December, 1968, was 354) but the use of even the most advanced techniques cannot, it is felt, lead to the spectacular results which seem to be expected in some quarters.

#### SHELTERED WORKSHOP

It has again been possible to maintain a regular supply of work for the 300 mentally sub-normal adults who attend the sheltered workshop at New Hall. It should be made clear that all the money received is paid without deduction to those attending and that so far it has amounted at best to no more than about 30s. 0d., for a good worker, in a week. A "points" system is used in making payments, according to capacity, attendance, effort, etc.

In 1968 the total amount paid by the various firms and organisations for whom the work, mainly on sub-contract processes, was done was £7,807. It can be seen that when this is divided among 200 to 300 people there is no question of the sheltered workshop being a profitmaking concern. Its profit lies in the sense of purpose it gives to people

whose lives might otherwise be idle and aimless; it has given them a niche in the community which cannot but increase their happiness.

The fact that so few workers can eventually be placed in open industry (five were so placed during the year) may surprise people who do not realise the very limited capacity of most of those who attend. Great care is exercised before such a step is taken as an unsuitable job can have a worse effect than no job at all.

Of the 301 on the roll at the end of the year 101 had previously attended a junior training centre and 138 had passed through a special school and been referred on leaving. The remaining 62 live in the adjacent hostels, which will now be discussed.

### NEW HALL HOSTELS

At the end of the year all the hostels were open, the last six buildings having been completed in November. The build-up to full use of the total accommodation, for 148, had, however, only just started and the number of residents had reached 96.

Of these, 68 had been transferred from hospitals for the mentally sub-normal and the remaining 28 admitted from their homes. Residence ceased in only three cases, one woman returning to the parental home, one to the hospital from which she came and one man died.

The age groups of residents at the end of the year were :--

Age 18—20 : 6 41—50 : 18 ,, 21—30 : 21 51—60 : 21 ,, 31—40 : 20 Over 60 : 10

The history of the oldest resident, Thomas, born in 1894, shows well the case for having hostels. Thomas went through special school to the leaving age (then 14) got a few simple jobs but could not keep them, and because his parents were dead and his brother, the only relative interested in him, went to sea, Thomas was admitted first to the "workhouse" as a place of safety, then on a magistrate's order to Seafield House as a "feeble minded person found without visible means of support".

This all happened in 1916. Thereafter for 50 years he remained in an institution and his only spell of community life during all this time seems to have been one week's holiday spent at the invitation of his sister, an invitation that was never repeated. Furthermore, for most of the time he was the subject of a "detention order" until transferred to informal status after the passing of the Mental Health Act, 1959.

At New Hall he has settled down well, expressing his appreciation of the freedom and the fact that he is able to spend his own money. For his age he is surprisingly active and enjoys dancing and badminton. This account is not given to belittle the sub-normality hospitals which, in the social climate of the time, had a thankless task in caring for the thousands of sub-normal people who were not provided for within the community. Nor should it be forgotten that the hospitals are still essential—there are many such people quite unsuitable for hostel life. But to Thomas, and many like him, hostel life offers more variety, interest and "ordinary living"—his story epitomises the case for hostels, expensive to run though they may be.

#### STAFF

The service now has a staff of over 200 and, in common with many other local government departments, cannot always get or retain the staff it needs; particularly is this the case with social workers and hostels staff.

The detrimental effect this has on patients has already been mentioned but it would seem useful to include here a general note on the social worker situation. This has been radically changed by the emergence of a full-time course leading to a nationally recognised qualification, the Certificate in Social Work, possession of which enables an officer to move more easily than formerly from one branch of social service to another.

So far as Liverpool is concerned, the consequence has been that officers, seconded on full-pay to the two-year course, have come back after qualifying, stayed the obligatory two years and then promptly left for other posts which, though they may be equally important, carry perhaps less personal responsibility and certainly less risk than a post of mental welfare officer.

At the end of the year there were six officers away on the C.S.W. course. Of eleven previously seconded seven qualified and left for other posts, three did not complete the course and two, having qualified, remain in the department, one of them being still in the obligatory period of service. It is likely that these two also will seek other posts.

If this flight away from the Liverpool service continues it may well be necessary to consider whether the City can afford to continue secondment on the present substantial scale. From what has been said above it will be appreciated that there is a complementary difficulty about recruitment of mental welfare officers. There has not been a single application from a person with the C.S.W. qualification since the courses were instituted in 1961! Moreover, another source has virtually dried up—nurses with psychiatric training are no longer applying as they are now receiving higher salaries as nurses.

A trainee scheme under which in-service training was followed by promotion in twelve to eighteen months had to be abandoned when the City Council adopted the national conditions regarding trainees which meant, in effect, no promotion without qualification.

At the end of the year a basis was being sought for new terms which would ensure that persons appointed would be able to carry out statutory duties within a reasonable period.

Turning to hostels staff, i.e. houseparents in charge of a group of up to 24 mentally sub-normal residents, the difficulty reflects the general employment situation—that when jobs in industry are freely available, few people are attracted to residential employment. Every inducement has been offered at the New Hall Hostels—the salary scale is generous and conditions are excellent—but response to advertisements is poor in number and quality.

All authorities are experiencing this difficulty and cases have been reported of hostels out of use for lack of staff. It is hoped that this will not be necessary at New Hall but there seems to be no easy solution to the problem.

### MENTAL HEALTH CENTRE, JOHNSON STREET

This centre continued, in somewhat restricted space, to offer occupational therapy and social contacts for mentally ill people, about 30 attending each day. There was no change in the pattern of activities or in the type of people using the centre—in fact most of them are regular attenders over a long period. Towards the end of the year a proposal that a building in the West Derby area should be jointly used as another mental health centre and by the Welfare Department was under consideration.

# AMBULANCE SERVICE

CASE LOAD OF PATIENTS

The total number of patients carried throughout the year amounted to 266,932, a decrease of 16,523. Attempts were made to increase efficiency and the concentrated efforts of the control staff and hospital transport officers have once more shown that the demand for ambulance transport can be controlled. However, to attempt to keep up this pressure is a considerable strain and if the demand on the service is to be controlled and maintained at a level that allows the ambulance service to provide an efficient service in conjunction with the hospital appointment systems, Hospital Management Committees will need to take a more active part.

The ambulance vehicles travelled 982,373 miles, a decrease of 57,433 miles on last year. This is only the first time in the history of the service that a decrease in both patients and mileage has been recorded and it has been brought about largely by hospital transport officers co-ordinating journeys through liaison with ambulance control and avoiding duplication of mileage, thus adding to the efficiency of the service generally.

### AMBULANCE TRAINING AND EQUIPMENT

Following the publication of the report of the working party attempts were made throughout the year to follow where possible the recommendations of both parts I and II of the report as follows:—

- 1. The colour of ambulances is being changed to white.
- 2. New stretcher gear has been adopted.
- 3. Light rescue equipment has been provided.
- Contents of first-aid satchels and dressings has been standardised.

The training of Ambulance staff has been in accordance with the Ministry recommendations at our own training school. Whilst Part II of the working party report made some 71 recommendations it was not considered necessary to adopt many of the recommendations on equipment until a more definite lead is given at Ministry level. It has been a disappointment that progress has been so slow although, in fairness, the progress made has been directed to the training of staff and instructors and the formulation of instructors notes.

In addition to the training of ambulance staff on non-residential courses, twelve cadets were recruited in February, 1968 and passed the preliminary examination of the Institute of Certified Ambulance Personnel. Seven cadets recruited in 1967 passed the Diploma examination in April, 1968 and became fully operational members of the service. In addition, three drivers passed the preliminary examinations and four drivers and one Sub-Officer passed the Diploma examinations.

# OCCUPATIONAL THERAPY

During 1968 few major changes have taken place in this section. The senior member of staff in charge at Rumney Road Occupational Therapy Unit resigned for domestic reasons but her place was filled by internal promotion and other vacancies among junior staff have been filled with the minimum delay. It is felt that the first-hand knowledge of this department obtained by students of occupational therapy during their training is one reason why vacancies are quickly filled. The South side of the City continues to be without an Occupational Therapy Unit but plans are on the drawing board for the construction of a purpose-built day centre in which the handicapped can be helped by both Health and, Welfare Departments. Work has not proceeded on the Old Smithy at Speke for various reasons, as even with a large capital outlay the premises would have many disadvantages, and in view of the proposed purpose-built centre the useful life of the Old Smithy would be short.

Approximately 600 new cases have been visited during the year by the domiciliary occupational therapists. Many of these following a visit by the Deputy Medical Officer of Health at home have been given a course of treatment at one of the Day Units, and some have made single visits to a unit for assessment in the use of special aids and equipment. Many have been assessed and equipped with aids without visiting a unit.

### Social Activities

Social activities which are open to all patients have been a week's holiday in Wales, various day outings to Trentham Gardens, Chester Zoo, etc., theatre and cinema visits, Christmas parties, shopping visits and a Carol Service. Social Clubs at Rumney Road for wheelchair patients and at Johnson Street for psychiatric patients have provided weekly meetings with a variety of activities. The young people's holiday this year took the form of a visit to a school holiday centre near Denbigh. This was generally agreed to be more successful than the Youth Hostel holiday of the previous year. One reason was that accommodation was not shared and there was less need to conform to rules and timetables orientated for able-bodied young people. Other reasons were a better geographical situation and the provision of an outline programme of activities with visits to the local dam and Forestry Commission workings. It is proposed to make another visit in 1969. Suitable accommodation for the holiday for older patients still proves very difficult to find. Extensive investigation by the Head and Deputy Head Occupational Therapists has revealed one possibility at Barmouth to which a small party of disabled may be taken in 1969.

### REHABILITATION UNITS

The two existing day units at Rumney Road and Longmoor Lane continue to deal with a variety of handicapped people. Throughout the year the Deputy Medical Officer of Health has interviewed each prospective new patient at home before admission and on various occasions during their treatment programme and on discharge.

# Longmoor Lane Unit.

During 1968, 36 patients have been discharged, some to employment, some to Welfare Department Handicraft classes and some to remain at home, having been assessed and suitably equipped, according to their residual disability. From time to time they are visited by the domiciliary service to ensure that the situation is still adequately controlled.

At the unit the rehabilitation bathroom is now fully functional, being equipped with a bath and shower and is used both for assessment and for bathing patients whose domestic circumstances make this impossible at home. A bath attendant attends weekly to assist the more handicapped patients.

A new activity which has proved very popular among the younger patients has been horse riding instruction. This has been extremely beneficial especially to those whose disabilities are due to poliomyelitis or cerebral palsy. An occupational therapist has accompanied the group each week to a local riding school where instruction is given to disabled riders, and great improvement has been noted in the physical and psychological condition of the patients.

Due to alterations at the swimming baths at New Hall this activity has been curtailed but it is hoped to resume in 1969 when improved facilities—such as a hoist—should make it possible for the very severely handicapped to use the pool.

Printing, housecraft, woodwork, gardening, weaving continue to be extensively used in the rehabilitation programme as shown in the following case histories:—

Miss D. aged 21 years, had a long history of admission to psychiatric hospitals both as an in-patient and a day-patient due to an anxiety state. Her main problem was a fear of using public transport or of going out unaccompanied. On first attending the unit she was encouraged to go to the nearby shops. Initially she was accompanied by a member of staff but gradually she overcame her fear sufficiently to travel to the unit by public transport. She joined in individual and group activities and gained confidence especially during cookery sessions. These revealed the source of considerable anxiety as Miss D. was engaged to be married and was consequently very concerned about

all aspects of household management. Familiarity with these duties relieved this particular facet of her anxiety and after attending the unit for some months she felt confident enough to find herself a job in her former occupation as a typist and to look forward to her future as a working housewife.

Mr. T. aged 20 years suffered from a congenital heart disease and a right hemiplegia with speech defect, the result of meningitis at the age of seven. On leaving a school for physically handicapped children at the age of fifteen years he underwent heart surgery and made a good recovery from this operation. He was then assessed for employment at an Industrial Rehabilitation Unit but due to his slowness, speech defect, lack of initiative, etc., was thought to be unemployable until after further rehabilitation; for this reason he was sent to the occupational therapy unit. His attendance commenced early in 1967 and from early days he travelled by public transport. In order to encourage good work habits Mr. T. attended daily and his time of arrival was checked. He worked on hand press printing which provided good opportunity for assessment of concentration, dexterity, ability to work in a group, etc. He also participated in educational and recreational activities such as play reading and the less energetic types of games. Gradually his independence increased and in 1968 it was felt that he was ready for employment in some light routine work. With the help of the Disablement Resettlement Officer a job as a lift attendant was found and Mr. T. was discharged at the end of 1968.

# Rumney Road Unit

This unit has an average of 21 patients attending daily. Thirty new patients were admitted during the year and 25 discharged. As in previous years the difficulty of discharging patients causes a hold-up in the admission of new cases. There is a very active woodwork section at this unit where, in addition to making many aids for patients, numerous hard toys, blanket boxes, etc. are produced. This activity is very popular with the men where ingenuity enables even the most severely handicapped to produce a worthwhile finished product.

During the year an automatic washing machine has been purchased and, after incredible difficulties, the thermostat on the cooker has been repaired. These items have enabled domestic rehabilitation to be used more realistically at the unit, as illustrated by the case of Mrs. M. a patient suffering from multiple sclerosis. She first attended the centre in 1966 and, as is inevitable with this disease, her condition has slowly deteriorated. She is now totally confined to a wheelchair and can stand only with help. At the unit she has practice in all activities of daily living such as cooking, washing of clothes, etc., and has proved that she is quite capable of doing these household tasks independently, provided everything is accessible from her wheelchair. Co-operation between the Housing Department, the Domiciliary Occupational Therapy

Section and the City Architect's Department, has resulted in accommodation being found in a flat where after lowering the sink unit and making other simple alterations, Mrs. M. will be able to manage most household tasks without assistance.

John J. is a young boy of thirteen years suffering from the effects of a head injury received in a road accident. He was unconscious for four months and when first attending the unit he suffered from spasticity of legs and arms; his speech was slurred and his eyesight poor. After initial assessment treatment was given to strengthen his limbs and improve co-ordination. This involved the use of walking aids and the Oliver machine—a refined form of bicycle fretsaw. Ball games were used. Dressing and feeding practice were given and also writing and reading, as a home teacher was continuing John's education. Pencils and pens had to be adapted for use with John's poor grip and athetoid movement. During the nine months of attendance at the unit he gradually improved until he could walk without aid, dress and undress, feed himself and be generally independent if care were taken. On discharge he was fit to attend a school for physically handicapped children.

#### Johnson Street Unit

This unit, for the mentally ill living in the community, has had another full year. Whilst the aim of treatment remains rehabilitation and a return to employment it has been found that there is a need to provide more basic long-term rehabilitation. Most cases reported to the unit have been ill for many years and can only become acceptable to the community after a long period of rehabilitation. The programme at the unit aims to provide tasks which will re-establish good work habits and also provide a variety of recreational and social activities. Discharge is often difficult due to the increasing competition for unskilled work in the community.

Mr. E. is a chronic alcoholic living in a local authority home. Before the commencement of attendance at Johnson Street he spent his days aimlessly drifting from one public house to another, but at the unit he attends regularly and punctually and is willing and helpful. He appears to have no friends or relations but is now well established as a member of the group at Johnson Street and this acceptance has undoubtedly helped him to depend less on alcohol. He has even succeeded in obtaining a part-time job and is certainly less troublesome to his fellows at the hostel.

#### DOMICILIARY OCCUPATIONAL THERAPY

The treatment of patients has again been concerned with the supply of aids and adaptations to the homes of handicapped people. In many cases assessment and rehabilitation is best carried out at one of the units using the Domiciliary Occupational Therapist as liaison

between the unit and home, but home treatment is often indicated as the following case histories show:—

Mrs. R., aged 68 years, suffers from a disease of the nervous system which had rendered her completely helpless, requiring the twice daily visit of two district nurses. The patient and her husband-who has a heart complaint—were living in an upstairs flat without facilities for a wheelchair. In October, following co-operation between the Housing Department and the Occupational Therapy Section, Mrs. R. and her husband were moved to a ground floor flat which had been adapted for use of a wheelchair patient. After a few weeks Mrs. R. showed a marked improvement in mobility and general interest in life. She was able to go into the kitchen and do some washing and help in the preparation of meals. By use of the electric hoist in the bedroom Mrs. R. needed only one nurse to get her up and put her to bed and now Mrs. R. is being taught by the domiciliary occupational therapist to transfer herself from bed to chair and back again and also on and off the toilet. A chair on castors has been supplied to encourage the use of her legs, and she is now so much improved that she can stand for a few seconds with help. Treatment is continuing with a view to teaching her to walk for a few steps. The patient now only requires the help of one nurse once a day and it is hoped that she will soon be completely independent.

Miss P. aged 64 suffers from valvular disease of the heart and in spite of surgery her activities are severely restricted. She lives in a multi-storey block of flats and when first visited by the occupational therapist was very depressed and lonely having had to retire prematurely from her work as a Civil Servant. Miss P. stated firmly that she was not interested in handicrafts and therefore felt that occupational therapy had little to offer her. It was pointed out that handicrafts were only one of the tools used by occupational therapists in the process of rehabilitation and that each patient was assessed individually. In the case of Miss P. it was suggested that she should learn to type. A typewriter was loaned, basic instruction given and Miss P. showed a keen interest, perseverance and the ability to work on her own. The occupational therapist visited weekly and it became apparent that having mastered the technique of typing, some use for her skill was needed. Miss P. was attracted by a course in free lance journalism sponsored by the British Council of Rehabilitation. After satisfying the School of Journalism that she was capable of assimilating the course the Liverpool Education Department agreed to pay the course fees. Miss P. is finding great interest in the lessons. She has been stimulated to take more interest in newspapers, radio and library visits and is much happier. Publication as yet eludes her but she remains optimistic.

Co-operation between domiciliary and unit occupational therapy is illustrated in the case of Mrs. O, the 27-year-old mother of two small

children who when referred to the occupational therapy section, was suffering from right hemiplegia and aphasia. After a course of physiotherapy in hospital no further improvement was anticipated so Mrs. O. attended an occupational therapy unit to be trained to cook, dress, etc., with one hand. It was apparent that various aids would be required such as a one-handed potato peeler, chip cutter, tin opener, bread buttering board, suction egg cup, etc. with non-skid mats to hold mixing bowls and a spike board. Dressing aids such as elastic shoe laces, velcro straps and buckles were applied to her clothing and the domiciliary occupational therapy ensured that Mrs. O. could use all these things at home. Attendance at the unit also helped Mrs. O. to accept her disability.

### CLASS FOR CHILDREN WITH SPINA BIFIDA

These have continued throughout the year and have been visited by representatives of several adjacent Health Departments wishing to start similar clinics. Members of staff are attending courses in child development and gradually throughout the period, ideas and experiments have been used to improve the treatment. It has recently become possible to increase the attendance at the clinic from fortnightly to weekly and it is confidently expected that this will be of great benefit to the children.

In comparing physically handicapped children with the normal child it is apparent that the physically handicapped child is much less aware of himself and very lacking in co-ordination and ability to socialise.

This is probably because the child is over-protected and lacks the opportunity in early years of exploration and discovery. Under the direction of the Deputy School Medical Officer treatment has therefore been planned to provide such opportunities as well as walking and balancing practice. Sand and water play, painting, sense training toys and percussion bands have been used. Some of the children especially those with the Spitz Holzer valve appear to be hyper-sensitive to noise and therefore the band has to be used with care. Individual treatment is carried out with each child working through the Frostig programme for the development of visual perception and to encourage accurate hand/eye co-ordination.

The children are gradually showing less inclination to cling to their mothers as they become more familiar with the staff of three occupational therapists, one health visitor and one district nurse. The number of children attending has now increased and includes other cases of physical handicap such as cerebral palsy and congenital deformity.

#### HOUSING

Unfortunately the building of the specially designed bungalows for physically handicapped people did not proceed as hoped in 1968. This was due to the fact that the cost compared with that of an ordinary three-bedroomed Corporation house was deemed too high. The Medical Officer of Health and the City Architect were asked to reconsider the plans with a view to economies in size and amenities. This has now been done and a new plan, at a lower cost, will be submitted to the City Council in the near future.

The Occupational Therapy section continues to work closely with the Principal Medical Officer dealing with rehousing and also with officers of the Housing Department in finding accommodation suitable for severely disabled people especially those whose disease affects locomotion.

Experience is proving that it is unwise to have disabled people in multi-storey flats above the first floor. The frequency with which lifts break down has made many wheelchair patients afraid to go out for fear that on their return they will be unable to reach their home.

This concludes the review of the work of the occupational therapy section. It will be seen from this report that the aim of this service is to restore disabled people to normal life wherever possible. The accent is always on ability and patients are encouraged to use residual movements to the full. Aids to independence are often necessary, but should never be issued indiscriminately or without medical advice. With correct treatment handicapped people should require less help from public service rather than more.

# RE-HOUSING ON MEDICAL GROUNDS

During 1968 a total of 6,551 applications were received for rehousing on medical grounds. Of these, 4,070 applicants were already living in Council accommodation which they found unsatisfactory and applying for a transfer to more suitable property and 2,481 were resident in non-Corporation property and applying for Council accommodation.

All applications for re-housing were closely examined and, where necessary, further investigations were made into the circumstances by either a Medical Officer, Health Visitor, Public Health Inspector or Tuberculosis Visitor. An assessment of the medical factors was then made and consideration was given to not only the individual applicant but to the whole of his or her family as a unit. Special recommendations were made to re-house handicapped people in the type of accommodation most suited to their disability.

Of the applicants in Council property, a total of 310 were recommended for a transfer to alternative accommodation, of these 69 transfers were effected by the end of the year. In the group living in property owned by private landlords 275 were recommended for special priority allocation out of whom 86 were re-housed by the end of the year. In addition, 235 applicants were awarded points. Details are given in the table below:—

1968	Special Priority Cases	Transfer Cases	Totals 6,551	
General Medical Cases  Number of Applications received	2,481	4,070		
Number recommended	275	310	585	
Number re-housed	86	69	155	
Number refused offers	14	4	18	
Number still not accommodated	175	237	412	

Owing to the severe shortage of housing accommodation in Liverpool only the most serious cases could be considered for medical recommendation. The majority of medical recommendations are given to persons suffering from cardiovascular or respiratory disorders and conditions affecting locomotion. Many of these recommendations were given for re-housing into accommodation accessible without the use of stairs, enabling applicants to lead fuller lives. A breakdown of the medical recommendations made, may be seen in the table below:—

Diagnosis		Number awarded Points	Number recommended for Special Priority	Number recommended for Transfer	Totals	
Cardiovascular			82	85	97	264
Conditions Affecting Lo	comot	ion	49	49	52	150
Respiratory Disease			65	96	107	268
Psychiatric Cases			9	9	12	30
Malignant Disease			11	13	16	40
Debilitating Diseases			11	20	25	56
Blindness or Deafness			3	1	_	4
Broken Families			5	2	1	8
Total	s		235	275	310	820

### TYPICAL CASES

Some typical cases which occurred during the year help to illustrate the approach to the problem.

- 1. An elderly man, suffering from chronic bronchitis and emphysema, and his arthritic wife lived in one room in a large damp semi-detached house. As they were unable to climb stairs, unsanitary toilet arrangements had to be used in their bed-sitting room. This couple were recommended for re-housing to accommodation without stairs, within a month this was achieved.
- 2. A young girl who was an old case of myelomeningocele had an ileostomy and gross deformities of her feet. Through overcrowding she was forced to share a bed with her grandmother and a bedroom with her eldest brother. A recommendation was made for re-housing in a house with a garden. The family were provided with a three-bedroomed parlour type house with a garden and the young girl was able to have the privacy of her own bedroom and a garden to rest in.
- 3. A husband and wife were living in a first-floor flat approached by seventeen stairs with no lift available. The wife was paraplegic confined to a wheelchair and house-bound, and her elderly husband found

it impossible to negotiate the stairs with the wheelchair. A recommendation was made for a ground-floor flat in the area in which they were living, as a married daughter lived close enough to this address to assist with the housework and shopping. A suitable offer was made and, within a month, this couple were re-housed in a ground-floor flat which had been adapted to assist handicapped people.

- 4. A man and his wife with a young child who was suffering from spina bifida and hydrocephalus, were living in a flat; the living room and bedroom were upstairs and the kitchen was on the ground floor accessible by a damp steep staircase. There was no hot water and only an outside toilet. The child was attending hospital for orthopaedic treatment and due to be fitted with calipers. The flat where she was living was too small and cramped to allow her anywhere to play. The family were re-housed to a house with a garden which provided better facilities for the development of this young child.
- 5. A couple and their five children occupied two rooms over a shop. The husband suffered from chronic heart disease and bronchitis, and he was in receipt of a 70 per cent War Pension. He found difficulty in climbing the steep stairs to the flat. The youngest daughter had leukaemia; added to this the overcrowded conditions with seven people in two rooms were most unhealthy. Following a special priority recommendation the family were rehoused in a parlour type house, which enabled the husband to sleep downstairs if he felt unfit to climb the stairs, and the young daughter could sit in the garden.

# MEDICAL EXAMINATIONS

A total of 4,536 medical examinations of employees was carried out, which 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 the latter type, the 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-seven candidates were examined on behalf of other local authorities. Of the examinations undertaken for the Corporation, 2,091 were for new appointments of officers, 1,478 for admission of manual workers to the superannuation scheme, 174 for extension of sick pay and 793 in consideration of the suitability of their present employment. Included in this figure were 57 Mersey Tunnel workers, who are given periodical examinations because of the nature of their work inside the tunnel and exposure to exhaust fumes, etc. There were no employees of the Water Engineer's Department needing special examinations during the year, because of working in compressed air in the shaft and tunnel under the Manchester Ship Canal.

The new arrangements for the Police and Fire Services involve the examination of recruits, both adult and cadet on new appointment, and the continued supervision of sickness cases and personnel involved in accidents both on and off duty and for pension purposes. Within the context of police medical examinations, there are also examinations of traffic wardens. In addition to the above, special examinations are carried out within the Fire Service of members undertaking breathing apparatus courses.

Many reports were obtained from doctors in hospitals and general practice. In consultation with the patient's general practitioner or hospital consultant, it was decided after medical examination that 386 were permanently unfit to carry out the duties of their post and should be retired, 96 manual workers were found unfit for entry into the superannuation scheme, and 32 officers were medically unfit to take up new appointments, a total of 514 persons, being approximately eleven per cent of those examined. A list of the medical conditions causing unfitness appears in the following table:—

Respiratory Diseases		Bronchitis and Asthma	 	1
Chronic Bronchitis	65	Emphysema	 	14
Bronchitis and Emphysema	17	Fibrotic Lung Disease	 	2

Cor pulmonale Bronchospasm	00					
			3	Alimentary Diseases Diverticulitis		5
			3	Cholecystectomy		1
Bilateral Tuberculosis			2	Peptic ulcer		6
Asthma			2	Gastritis		2
Obstructive respiratory dis			1	Hernia		1
Bronchiectasis			1	Duodenal Ulcer		1
CV 33 3 3			2	Colostomy		1
		-		Post gastrectomy syndrome		1
			113		-	10
the section of the ball the ball						18
Nervous Diseases				Post Madel Planner	36	
Brain damage			1	Psychiatric Diseases		11
			2	Anxiety State		14
Parkinsons Disease Meniere's Disease			1	Depression		11
3.6 3 4 3			1	Obsessional symptoms Mental breakdown		3
Muscular atrophy				Inadequate personality		2
		-7	6	Nervous debility		2
		_	-	Schizophrenia		2
Canalmania				isomorphism in in	-	
Carcinoma bronchus			4			35
Carcinoma bronchus		**	4 7		_	
0 1			2	Orthopaedic Conditions		
Carcinoma lung			4	Rheumatoid arthritis		11
0 : 1			9	Arthritis		18
0			1	Fibrositis		1
0 1 1			1	Disc Lesion		17
Carcinoma blood			î	Osteoarthritis		12
Carollolla blood 111 1				Fractures and injuries		14
			22	Amputation		2
		_		Rheumatic heart disease		1
Cardianasanlas Dissassa				Deformed feet		1
Cardiovascular Diseases			60	Bruised sacrum		1
Hypertension Myocardial degeneration .			60	Fibrosis		2
Paraplegia			î	Sciatica		2
			25	Cervical spondylitis		1
			12	Spinal spondylitis		1
			7	Chest deformity		1
0 0 1 1 1			17	Arm disability		1
Cardiac Ischaemia			16		-	-
Varicose Veins			4			86
TT ! l ! -			3		-	_
Intermittent claudication			4	Other conditions		
Tachycardia			2	Eve trouble		15
351. 1			1	Diabetes		4
(1 1 11 1			1	Otitis media		4
			1	Liver tumour		1
Myocardial insufficiency .			3	Vertigo		2
			1	Obesity		10
			1	Eczema		2
Arterial occlusion			2	Debility		5
		-	200	Scrotal Hernia	***	1
			163	Hyperthyroidism		1
			7	Poor sickness record		2
Genito-Urinary Diseases				Psoriasis		1
Charles and the second			2	Below physical standards		4
Nephrosis			2	Weakness of left arm	***	1
Hysterectomy			2	Thyrotoxicosis		1
Diseases kidney			1	Chest measurements		1
			1	Myxoedema	***	1
			1		iikii.	57
Removal of ovary			-			57
Removal of ovary			1			
Removal of ovary Undescended testicle . Prostatectomy			1		74	111
Removal of ovary Undescended testicle Prostatectomy Albuminuria			1 1			
Removal of ovary Undescended testicle			1 1 1			TT.

### ENVIRONMENTAL HEALTH

The duties under the Housing Acts in connection with the slum clearance programme have once again required a considerable proportion of time to be devoted to this important aspect of public health inspection. A total of 3,504 unfit houses were included in clearance areas, or dealt with by individual action and the details are included in the text of the report.

It is gratifying to be able to report that with the exception of a few special cases recently notified, all the office and shop premises registered with the local authority have received a general inspection. The few outstanding cases will be dealt with early in the ensuing year. A total of 29,521 general and additional inspections have been made since the Act came into operation in 1964, and a total of 25,694 infringements have been reported.

No further smoke control orders were confirmed during the year, but one order became operative in September. The rate of conversion can, of course, only proceed in accordance with the amount of money made available for grant aid.

The number of detailed inspections of vehicles being used for street trading in food was 445, resulting in 56 prosecutions being taken against traders in connection with infringements, under the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966.

#### Visits

Inspectors visit houses to make enquiries following notifications of certain infectious diseases. The number of visits amounted to 929 and the number of enquiries regarding contacts was 121.

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 6,627 from 2,916 persons, of which 2,019 from 646 persons proved positive.

There are twelve registered common lodginghouses in the City, eleven providing accommodation for 794 males and one providing accommodation for 95 females. The public health inspectors made 130 visits both day and night, resulting in notices being issued in respect of byelaw infringements and on seven occasions it was necessary to give the keeper a verbal warning. It is interesting to note that a general decrease in the demand for this type of accommodation has resulted in approximately 40 per cent of the total beds available, being vacant at any one time.

A total of 3,225 beds were examined and 419 beds were found to be verminous and subsequently cleansed by the local authority. During the year it was found necessary to cleanse 27 persons living in these houses.

Eight seamen's lodginghouses 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 790 beds, and public health inspectors carried out a total of 30 inspections. Infringements of the byelaws were reported on six occasions and the necessary action was taken to comply with the legislation. Demand for this type of accommodation shows a considerable reduction, as the three licensed seamen's houses capable of accommodating 304 persons of both Arabic and Chinese nationalities seldom accommodate more than eighteen seamen at any one time. It is anticipated that should this trend continue, it will result in the closure of these premises.

# Legal Proceedings

During the year 85 prosecutions were taken and the penalties and costs which were imposed amounted to £373 10s. 0d.

The weekly meeting of the Special Sub-Committee has again enabled emergency action to be taken for the remedying of urgent defects and where occupiers were suffering severe discomfort due to outstanding items of disrepair, arrangements were made for the work to be carried out in default of the owners, to remedy unsatisfactory conditions affecting 643 houses. The work included the clearing of 62 drains, the restoration of the water supply to 469 houses provided with joint supply pipes and the remainder was mainly in connection with repairs to roofs. The cost of the work will be recovered from the owners of the premises.

A total of 53,709 requests was received for inspectors to visit premises and altogether a total of 250,820 visits and inspections were carried out under the various enactments and 13,848 notices were issued under the Acts and Regulations.

Defective drains cause rodent infestation, flooding and subsidence. Drainage systems tested to remove these problems numbered 2,080 and notices were issued in respect of 527 drainage systems which were found to be defective. In addition, choked or defective public sewers were referred to the City Engineer's Department for action under the provisions of Section 24 of the Public Health Act, 1936.

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

Other departments have co-operated by forwarding references in respect of matters requiring the attention of inspectors and 6.918 references were forwarded to other departments.

### Canal Boats

During the year the Port Health Authority have carried out 22 inspections of canal boats within the Port Health Area. One contravention of the Public Health Act was found and this was remedied satisfactorily. As a result of changes in transport which have taken place in recent years canal boats are not now operating within the City area.

### Sewerage

The details in connection with the sewerage and sewage disposal systems of the City were kindly provided by the City Engineer. With the exception of two small areas, the City is served by main drainage which for all practical purposes functions efficiently. The proposal to convert the present combined system into an entirely separate system is gradually taking place, and no great difficulty is being encountered at present. Developers and architects both appear to be reasonably cooperative in this matter.

With regard to the North Sewage Disposal Works drainage area, the Stage II extensions to the works have been completed, so that, at present the treatment capacity is comparable to the flow reaching the works. However, due to present and future development within the drainage area, new extensions are urgently required to raise the treatment capacity from 9 m.g.d. to 14½ m.g.d., and it is hoped that the first stage of these extensions will be completed by the end of 1971.

At the South Sewage Disposal Works the present extensions have been completed, so that the final effluent will now be much improved and meet the requirements of the River Authority. A comprehensive scheme for sludge de-watering at the Works is at present being designed and it is hoped that this will be commissioned by mid-1970.

With this closing down of the old "Halewood Works" and the clearance of existing sludge lagoons, it is expected that the problem of odour nuisance which occurs from time to time will cease.

# HOUSING AND SLUM CLEARANCE

The detailed inspection of sub-standard housing accommodation has continued throughout the year resulting in 3,475 houses in 57 clearance areas being classified as suitable for demolition having regard to the standard of fitness laid down in the Housing Act, 1957. This total includes 1,424 houses which had previously been represented

during 1967 but were deferred until early this year. Since the programme recommenced in 1947, a total of 37,493 houses have been represented as unfit for habitation and included in clearance areas or dealt with individually.

Houses to the number of 4,605, in 36 clearance areas, were made the subject of eighteen compulsory purchase orders; 21 complusory purchase orders were submitted to the Minister of Housing and Local Government for confirmation and seven clearance orders in respect of 105 houses were also made and submitted for confirmation. Twelve Public Inquiries were held involving a total of 3,219 houses in sixteen Orders, and during the year eighteen compulsory purchase orders involving 4,823 houses and eleven clearance orders involving 96 houses, were confirmed. Families re-housed, from houses included in confirmed orders, numbered 4,049.

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 29 dwellinghouses being represented to the Sub-Committee as unfit for human habitation. These premises were occupied by 37 families.

The Sub-Committee considered the condition of 27 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 one house and closing orders in respect of 26 houses. In addition, seventeen representations in respect of rooms and parts of premises occupied as separate dwellings which were unfit for human habitation were considered and in sixteen cases it was decided that closing orders should be made, and in the remaining case a decision had not been made.

Following upon the re-housing of the occupants in premises subject to operative orders 200 houses were demolished and 37 were closed and sealed. In addition twenty dwellings, being parts of premises, were also closed.

Premises were re-inspected 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 six closing orders.

# Rent Acts, 1957-68

A total number of 33,218 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 9,201 applications for certificates of disrepair have been received. Some 3,272 tenants have applied for certificates as to the non-remedying of

defects specified in undertakings given by landlords, and 2,645 applications have been received from owners for certificates as to the remedying of defects in undertakings which they have given to tenants. Figures in 1968 were:—

Total number of applications for certificates of disrepair	90
Applications withdrawn	10
Number of notices served on landlords of the Local Authority's intention to issue certificates of disrepair (Form J)	80
Number of undertakings to carry out repairs received from landlords (Form K)	42
Number of certificates of disrepair issued to tenants (Form L)	37
Number of landlords who completed the repairs within the statutory period following the service of Form J	2
Number of applications (Form O) from tenants who have applied after owners have failed to comply with undertakings given (Form H or K)	10
Number of certificates (Form P) issued to tenants	8
Number of applications (Form O) from owners who have completed their undertakings	31
Number of certificates (Form P) issued to owners	31
Number of applications (Form O) not finalised during the year	_
Number of applications (Form M) received from owners for a cancellation certificate	23
Number of objections to cancellation received from tenants	7
Number of cancellation certificates issued	18

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 569 houses were inspected following enquiries regarding improvement grants and of 185 formal applications for standard grants, 184 were approved. Applications were also made in 79 cases for discretionary grants and 53 were approved.

# Compulsory Improvement of Houses

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

A total of five houses were represented to the Demolition and Closing Orders Sub-Committee and in two cases it was decided that no further action should be taken. In two cases the owners have given undertakings to carry out the necessary work of improvement within a specified period and the remaining case is still to be considered.

# Loans on Mortgage

During the course of the year, the City Council again considered applications for loans on mortgage from prospective owner/occupiers and 1,114 houses were inspected for this purpose.

# SHOPS ACTS, 1950 to 1965

This legislation remains unchanged and restricted by its various anomalous and, in some measure, unenforceable provisions. Nothing of any significance can be added to the comments of previous reports, except to record that duties are being carried out in connection with complaints of late night trading or of the sale of goods on Sundays in contravention of the Act. In addition to dealing with complaints, routine evening and Sunday duties are maintained, especially in the areas affected by late night traders.

All contraventions are dealt with appropriately, and court action has been taken against regular offenders. Information and guidance have also been given where necessary.

Particular areas of the City have been brought to the special attention of the department because of a sociological problem which appears to be worsened in localities where shops remain open late at night—some of them quite legally. These bright oases in otherwise darkened streets tend to attract people who seem to be at a loss for something to do, or who find them to be suitable meeting places. The complaints indicate that sometimes these groups become troublesome and on occasions give cause for concern to neighbouring people and parents. It was felt by those who approached the department that if shops could be made to be closed at an earlier hour the attraction to people to congregate outside them would be removed. Such action that could be taken was applied, including court proceedings, but the Shops Act, 1950, permits late night trading in a number of commodities, and some articles of food, including fried fish and chips are entirely exempt from evening closing provisions.

Whilst sociological problems of this nature were never envisaged as matters to be considered in applying retail trading restrictions, this reference to such an important issue serves to underline the complexity of the whole question of whether closing restrictions should be retained, increased or abandoned. In order to clear up the whole unsatisfactory situation which affects so many people, including enforcement authorities, an early solution must be found and applied.

During the year under review a total of 18,256 special visits were made to shops on Sundays, in the evenings and on early closing days, and this was a considerable increase over 1967. A further 18,366 inspections of shops of all classes, cafes, pet shops, hairdressers, public houses, launderettes, repairing depots, wholesale and retail warehouses have been made during the year. This work included detailed enquiries concerning the employment of assistants and their entitlements to meal breaks, weekly half-holidays, compensatory holidays for Sunday employment, also the hours and conditions of employment of young people under eighteen years of age, together with the examination of the appropriate notices and records.

### Hairdressers and Barbers

In this City the trade or business of a hairdresser or barber is regulated by the Liverpool Corporation Act, 1955, Section 42 and the Byelaws made under that enactment.

Registered hairdressers in the City number 801, and of these twenty new businesses were approved and 24 transfers of businesses to new owners were dealt with during the year. A number of the newly registered hairdressers were those who had been found carrying on unregistered businesses by inspectors making routine general inspections of their districts under the Offices, Shops and Railway Premises Act, 1963. Other inspections of these establishments were made from time to time in connection with applications for registration and to deal with enquiries arising out of complaints of hairdressing businesses in dwellinghouses.

The standard of hygiene is generally well maintained and complaints with regard to conditions in these establishments have not been received. A total of 49 infringements of the Hairdressers Byelaws were dealt with by warning letter, and in a few instances hairdressers were given advice on various matters connected with use of sterilising agents, or in regard to the arrangement of staff lunch intervals.

The evening closing provisions of the Shops Act, 1950, do not appear to present a problem to the hairdressing trade. Complaints have not been received and routine evening duties by inspectors have not revealed any infringements of these trading hours. Reports of hairdressing being carried on on Sunday have not been received, but enquiries

from hairdressers regarding the early closing day requirements indicated a limited desire for six-day opening for ladies' hairdressing salons in certain suburban districts of the City.

### Pet Animals Act, 1951

The number of pet animal dealers licensed during the year was 28, and 69 visits were made to their premises. Upon receipt of a notification from the City Treasurer that an application has been received and the licence fee, now increased to two pounds from ten shillings, duly paid by the applicant, a detailed inspection of the premises is made by a public health inspector in order to ensure requirements of the Pet Animals Act, 1951, and any other relevant legislation, are fully observed. The Liverpool Fire Service also inspect the premises and their recommendations for fire precautions are incorporated in the special conditions of the licence.

### Animal Boarding Establishments Act, 1963

As in 1967, five animal boarding establishments were licenced during the year under review, but four of these were premises of a Society which accommodates stray dogs and cats. The provisions laid down under this enactment are similar in many respects to those of the Pet Animals Act, 1951, but in the case of boarding establishments the proprietor has to keep a satisfactory record of all the dogs and cats kept on the premises. This is an extremely important requirement, and one which could well be incorporated in the Pet Animals Act.

Investigations were made into two allegations of unlicensed premises being used for boarding pets, but direct enquiries by inspectors and further indirect enquiries confirmed that the premises were not used for that purpose. However, in one case the allegation was associated with a complaint of a noise nuisance from barking dogs kept in a yard. Ultimately the trouble was removed when the person concerned ceased to put dogs in the yard.

#### FOOD HYGIENE

The Food Hygiene (General) Regulations, 1960, were modified in 1966 and from the 1st January, 1967, these regulations became solely concerned with food premises and certain classes of shops. All references to stalls and the transport of meat and other foods were revoked and these matters became the subject of more detailed provisions in the new Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966, which became operative on the 1st January, 1967.

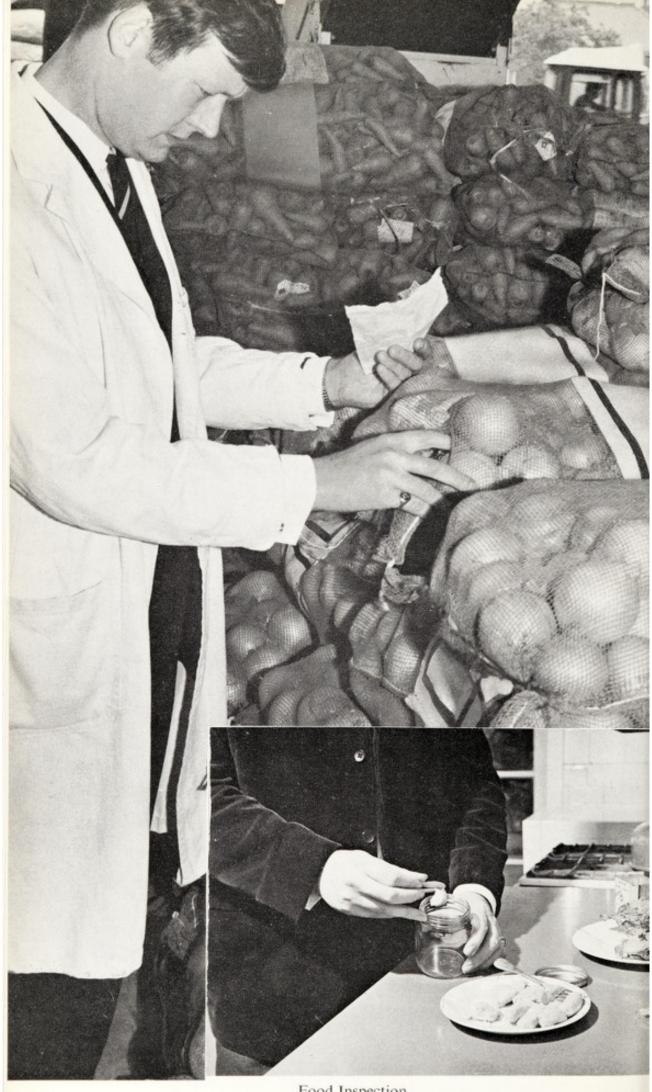
These new regulations set a greatly improved standard for all forms of stalls, mobile shops and delivery vehicles and are intended to enable enforcing authorities to require hygiene standards as near as possible to those required in food premises.



A Section of the Workshop for Mentally Subnormal Adults at New Hall

Atmospheric Pollution





Food Inspection

In accordance with the instructions of the Health Committee, special attention has been given to all food hygiene enforcement work both in respect to premises and street trading.

### Food Premises

Visits to food premises during the year numbered 15,218 and 4,505 infringements of the Food Hygiene Regulations were dealt with by either warning letters or court proceedings; this compares with 3,093 in 1967. Visits to retail food shops were increased by some 3,200 inspections compared with the previous year, and as has been referred to in the section of the report dealing with the Offices, Shops and Railway Premises Act, 1963, many of these inspections have been connected with work under both that enactment and the Food Hygiene Regulations.

These figures indicate the continuity of action that is being maintained in this field of environmental hygiene in spite of other important matters which necessitate the maximum possible attention, such as slum clearance, house improvements and maintenance, smoke control and the extensive duties under the Offices, Shops and Railway Premises Act, 1963.

The standard of hygiene generally maintained in food premises was very much the same as that found during the previous year, and the number of infringements reported by inspectors tall very much into the same ratio for each particular regulation. Unsatisfactory day-to-day cleaning is by far the most common offence and accounts for approximately half of the total recorded infringements. The failure to maintain a satisfactory supply of first-aid materials, also the absence of clean towels, detergent and nail brushes, make up another large number of the contraventions reported.

The assessment of the success, or otherwise, of enforcement work of this nature is usually based upon the graph of rising and falling numerical indicators, and an increase in the number of contraventions during a specific period may suggest a serious decline in standards. This, however, is not necessarily true in relation to the level of hygienic practices in food establishments. It is considered that, as the result of the work already carried out by this department, the overall standard is now considerably higher than it was a few years ago. For instance, any dirty conditions found in food premises today are much less serious in degree than were those dealt with in the earlier days of food hygiene enforcement work. Other requirementes of the Food Hygiene Regulations are also maintained at a more satisfactory level, although in some cases the quality of the effort may leave something to be desired.

This department's action, by routine and special inspections, advice, cautionary letters, prosecutions when necessary, together with

talks to staffs in their places of employment and lectures at the University of Liverpool School of Hygiene, organised in conjunction with the Royal Society of Health, has encouraged an increasingly effective and acceptable standard of clean food handling, packing and storing. Knowledge, experience and appreciation of food hygiene is building up year by year, and an increasing number of employees, including those only temporarily engaged in the food trade, are able to exercise an influence upon their less experienced colleagues, also owners of food businesses are now well aware of their special responsibilities.

# Outbreak of Food Poisoning

Regrettably a serious setback is always possible and because of a breakdown in one or more of the fundamental precautions an outbreak of food poisoning may occur. A trouble-free period may create an atmosphere in which carelessness or the lack of detailed attention may operate with disastrous termination.

Whatever may be the reasons for a breakdown in correct procedures, such an event can only be dangerous to the health and well being of the public, employees, and to the success of a food business. It cannot, therefore, be too strongly stressed that the proprietors of food businesses have a serious and continuous responsibility to plan and supervise every operation from the source of the food supply through every stage of its preparation and ultimate service to the customer.

A number of food poisoning enquiries were carried out in this City during the year, but one of them, not only by its severity but by the events revealed, proved to be the most serious. The source of the infection was found to be certain food supplies from outside the City. As is usually the case the infected food was received by the retailer in the normal way and put through the normal processes of refrigerated storage, thawing, handling, rotary spit roasting, and the final handling from the automatic roasting machine to the display cabinet.

The enquiries carried out by this department revealed several serious omissions in the necessary hygiene precautions which should have been observed as a routine exercise, and these may be summarised as follows:—

- (a) The period of thawing was insufficient to de-ice the interior of the food;
- (b) The period and temperature of the cooking was insufficient;
- (c) The cooked food was cut and handled by the same person who had handled the food when it was raw; and
- (d) The general arrangement of equipment was not satisfactory.

The recommendations necessary to deal with the many weaknesses in the whole set-up necessitated a great deal of careful enquiry,
investigation and consultation. Not one detail could be missed if the
solution was to be an effective one. The premises were immediately
voluntarily closed by the proprietors, and all personnel were subjected
to the necessary bacteriological tests and medical attention. Extensive
bacteriological testing of the premises and equipment was carried out
at intervals between disinfection and cleansing sessions until negative
results were consistently obtained. The food preparation, storage and
handling arrangements were completely re-organised, new equipment
installed where necessary, the ventilation system improved and additional handwashing facilities provided at important food handling
positions.

Probably the most difficult aspect of the whole problem was the training of the staff, many of whom were new to the firm when the shop was re-opened, and the clarifying of the detailed precautions to be enforced by the proprietor.

### Regulations 16 and 19

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

# Street Trading

The new Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966, have provided more effective measures for dealing with the form of street trading which has been a traditional but unsatisfactory practice of selling fruit and vegetables for a century or more. Consideration was therefore given to the many aspects of the problem and a careful study of all the various requirements of the new regulations and the measure of effective application of them to the old flat platform barrows used by many traders in various parts of the City centre and in the suburbs.

Surveys confirmed that there were some 70 or 80 full-time, parttime or seasonal traders of this class. The seasonal traders operated mainly during the soft fruit season, and made rapidly changing stands of very short duration over a period of a few hours a day for one or two weeks according to the availability of cheap soft fruits. These traders were extremely difficult to deal with and more often than not gave wrong information to inspectors making enquiries, so that follow-up action or court proceedings could not be taken.

The more regular traders were found to be straightforward folk but with limited resources and little understanding of the meaning or purpose of the hygiene regulations. Their barrows were of poor construction and because of the limited capacity and unsuitable design they could not be satisfactorily converted in a manner which would meet all the requirements of the regulations.

The traders were advised verbally and in writing of this, and the cautionary letter sent to each trader suggested they should come to the Health Department for detailed guidance as to the type of stall most likely to provide the necessary standard. Very few of the traders sought this information, and those who did were also warned of the increasing difficulties of finding suitable pitches for their stalls and the effect of developments in main shopping areas which may prevent them trading in a number of districts. It was felt that they should be made fully aware of their trading prospects before embarking upon the provision of what might prove to be a fairly costly mobile stall.

This informal action achieved very little and it therefore became necessary to institute court proceedings.

In addition to dealing with this specialized problem, special attention was given to the sale of wet fish from motor vans on the Dock Road and in a few outer districts of the City. All such traders have been appropriately dealt with and court actions arose out of the sales of fish which was falsely described as fish of a superior quality.

A total of 445 inspections of street traders of all classes was made during the year and 328 infringements were dealt with by warning letter or in connection with 56 informations heard in the magistrates' court resulting in fines totalling £93 10s. 0d.

#### Licensed Premises

During 1968 fourteen applications under the Licensing Act, 1964, were received by the Clerk to the Justices for new club registration certificates. The Town Clerk informs the various Corporation departments involved of these applications together with the applications for variations in existing certificates in respect of alterations or extensions to club buildings or upon transfer of a club to other premises. This department is responsible for enforcing the various Public Health Act and Food Hygiene provisions in all clubs and other licensed or non-licensed premises, and inspections are made in every case. Where works are required, and in many instances these may be very extensive, a full

specification of requirements is sent to the applicants. These requirements may relate to the building of new sanitary conveniences, additions or improvements to the existing toilet facilities, so as to ensure adequate and suitable accommodation for members and staff. Other items may include the installation of an efficient ventilation system for the club rooms and food preparation and dining areas, attention to lighting, extensive repairs to the fabric of the building and the satisfactory equipping of the kitchen and other food rooms, including ample hand-washing facilities. The cost of these works may involve the expenditure of several thousands of pounds, and require much attention by the inspector concerned until the specification requirements are finally approved.

The Stipendiary Magistrate granted club registration certificates under this enactment to fourteen clubs and approved the renewal of certificates in a further 25 cases.

The total number of registered clubs at the end of the year was 258 and a further 62 clubs are subject to on-licences under Section 55 of the Licensing Act, 1964.

There are now 179 off-licence premises for the sale of beer, wines and spirits, 27 restaurants are licenced for the sale of intoxicating liquor, and six premises are subject to residential restaurant licences.

#### Entertainment Clubs

The Liverpool Corporation (General) Powers Act, 1966, Section 18, which became operative on the 1st May, 1967, requires the registration with the local authority of any premises in the City used as an entertainment club by its members for entertainment, dancing or the playing of games. Premises which are already regulated by similar legislation are excluded from this requirement.

Registration or renewal of registration may be refused and registration may be revoked if the local authority consider the premises are not suitable with regard to lighting, sanitation, ventilation, safety, fire precautions, means of escape and fire appliances. The local authority may impose conditions on registration to ensure the maintenance of the various facilities and to regulate the hours of opening and closing of the club in order to avoid undue disturbance to the residents of the neighbourhood.

Upon receipt of an application the Corporation departments concerned make the necessary enquiries and inspections, and this department is solely responsible for lighting, sanitation and ventilation. As in the case of other clubs, a specification of works is sent where necessary and not until these requirements have been fully met are the premises approved so far as this department is concerned.

During 1968, nine applications for registration and fifteen for renewal of registration were appropriately dealt with.

# Offices, Shops and Railway Premises Act, 1963.

The number of office and shop premises registered with this department is now 10,683 and it is pleasing to report that they have all received an initial or general inspection with the exception of a few special cases recently notified to this authority. These outstanding cases will be dealt with early in the ensuing year.

At the end of December this year 29,521 general and additional inspections had been made since August, 1964, to premises affected by this enactment and a total of 25,694 infringements have been brought to the attention of employers, occupiers or owners of buildings by notice.

Successful court proceedings were taken during the year in respect of information relating to dirty walls, steps and ceilings of a main staircase and an absence of a supply of warm water to a wash-hand basin used in common by the occupiers of a small multi-let building comprising office and workshop accommodation.

The total number of infringements reported during the year was 6,496 affecting 1,595 of the 3,389 premises given a general inspection and these contraventions involved the maintenance of clean shops and offices; overcrowding of rooms in which people work; heating and ventilation; lighting; the provision and maintenance of sanitary conveniences and washing facilities; the provision of drinking water; accommodation for clothing not worn during working hours; eating facilities for shop assistants; the maintenance of floors, passages and stairs; the guarding of open staircases, hatches and openings in floors; the use, cleaning and guarding of dangerous machines; the provision and maintenance of first-aid materials; the investigation of accidents; and more recently, complaints concerning lifts.

The number of persons employed in all the registered premises was 106,975 including 58,610 females.

The central area of the City has been inspected and follow-up inspections are now being carried out. However, the greater part of the general inspections has occurred in the middle belt of the City and in the outer suburbs and housing estates. In addition to these detailed inspections the requirements of this enactment are dealt with by public health inspectors during the course of visits to premises in connection with inspections under other enactments, such as the Food Hygiene Regulations, the registration of hairdressers and barbers, employment agencies, ice-cream and milk retailing premises.

In May, 1969, new regulations will become operative to ensure safeguards for lifts and hoists in shops and offices, and these will necessitate careful inspections involving lengthy periods of time in many of the premises.

The experiences arising from this year's general inspections of premises to which this enactment applies have not brought any significant factors to our attention, and the overall standards and conditions found, compare well with those of previous years. As in other enforcement duties it is necessary to give special follow-up attention where employers or occupiers are slow to meet particular requirements of the Act. There is, however, an encouraging degree of compliance and cooperation on the part of employers and an increasing use of consultation and enquiry, especially by architects and contractors on behalf of their clients regarding the various provisions of this legislation.

The total number of infringements, 6,496, is an increase of 903 on those of the previous year, with an increase in the number of infringements with regard to the cleansing of premises from 861 in 1967 to 1,055 in the year under review. These were in addition to the 2,200 dealt with under the Food Hygiene Regulations in respect of food premises, an overall total of 3,255. This increase in the recorded number of cleansing contraventions is not an indication of worsening standards on the part of employers or their staffs.

Problems of poorly maintained premises are sometimes associated with multi-let buildings. One of the reasons for this is some apparent difficulty in employing suitable and sufficient staff for cleaning duties and in maintaining adequate supervision of these tasks especially in the smaller buildings in which a caretaker is not resident, or is not employed.

# Temperature and Ventilation

Inspections of offices and shops revealed that 85 premises were not provided with suitable or adequate means of heating the workplaces and that 740 occupiers had failed to provide a thermometer in their premises. This was an increase in the number of infringements recorded for 1967. With regard to ventilation only 43 contraventions were reported compared with 114 for the previous year.

The efficient heating and ventilation of premises is often a difficult and costly measure. Each requirement is closely connected and their efficient operation is dependent upon the accuracy of design, installation and function.

Newly constructed high-rise office buildings present problems which at the design stage might well have been foreseen. It may be difficult to plan for all possible circumstances especially in development schemes incorporating units for unspecified use, but there are

basic factors which are often overlooked or disregarded, possibly due to financial limitations.

Many of the difficulties experienced in dealing with this relatively new enactment may be attributed to the absence of consultations between architects, specialists in the technical field and representatives of the appropriate local authority departments.

# Sanitary Conveniences

The total contraventions reported under this section of the Act were 951 in respect of the maintenance and cleaning of sanitary conveniences, and 48 premises were found to have insufficient facilities; an increase of 92 infringements on those of the previous year.

# Washing Facilities

The number of infringements recorded in respect of washing facilities was 760 compared with 442 in the previous year. Most of the action under this section has been in respect of the maintenance of the existing facilities and the provision of hot water, soap and clean towels.

# Floors, Passages and Stairs

The enforcement of this section has resulted in the reporting of 912 contraventions compared with 804 in 1967. Special attention was given to the structural condition of floors, stairs, service hatches in floors and to other potential dangers associated with defects or the omission of hand or guard rails, and these matters are usually dealt with expeditiously by the responsible person.

# Dangerous Machinery

Notified accidents during the year arising out of the use or the cleaning of machines was 21 compared with eighteen for 1967. Seven of these accidents occurred to young persons under eighteen years of age and four accidents happened while machines were being cleaned; none of them to young persons.

It is gratifying that such a small number of accidents are recorded in respect to dangerous machines. Nevertheless one must feel concern that these notifications are not necessarily the true indication of actual incidents or the seriousness of them.

The machines in general use in shops and offices are usually of standard designs incorporating the necessary safety guards and interlocking devices. It is sometimes the failure by a machine operator to maintain a guard in its safety position which creates the accident risk. Manufacturers have in recent years made many modifications to machines in order to ensure a high level of safety for those who operate

them. Unfortunately, certain human factors demand additional safeguards so that by the further development and use of automatic locking devices a machine even of the gravity feed slicing type will not function when a guard has been removed from its "safe" position.

### First Aid

During the year there was a slight increase in the number of infringements of this section—a total of 628 compared with 613 for 1967. Many of these contraventions have related to the insufficient maintenance of first-aid materials where normally a suitable first-aid kit is provided. The need for the use of first-aid materials in small shops and offices is usually infrequent and one appreciates that the replenishment of the various items may be overlooked. However, quite a number of establishments, especially upon inspection under this Act for the first time, were found to be unequipped with this essential facility.

There is some misunderstanding by certain food shop proprietors who think they meet the first-aid requirements of this enactment by providing only materials to satisfy the Food Hygiene Regulations. Inspectors have found it necessary to ensure that the standard provisions of both these enactments are fully observed in respect of food shops where persons are employed.

During the year one large firm was granted exemption from the provisions relating to first-aid boxes or cupboards, on the grounds that a fully equipped first-aid room was maintained at the premises.

### Accidents

The notification of accidents in shops and offices under the jurisdiction of this department was 498 compared with 539 for 1967. A number of these were found to be due to some personal fault of the victim, usually because of a lapse of attention at an essential moment in their work.

Minor and serious accidents have been caused, in some cases to aged part-time employees, through falls on ice allowed to remain on external steps and surfaces. Persons brushing or cleaning floors put down the tools for the job and then fall after tripping over them. An assistant was injured through striking against a trolley after standing on a strap of the sandal she was wearing. A bank worker pulled a heavily laden cash truck over his foot whilst helping to move it, and a person in a canteen scalded her hand and wrist when adding cold water to a kettle already containing some hot water. A man suffered a leg injury through walking into a desk drawer left open by another person, and, in a shop, a person was injured when a nine-runged ladder slipped because, the injured person admitted, they had wrongly positioned the ladder.

Hoists and Lifts

Regulations have now been published under Section 20 of this enactment and they become operative on the 28th May, 1969. The regulations impose requirements as to the construction, maintenance and examination of lifts in premises within the scope of the Act.

Among other things it will be necessary for every lift to be thoroughly examined by a competent person every six months, or twelve months in certain cases. The term "competent person" is not defined but some guidance is given which suggests that a competent person is one who is experienced in the operation, working and maintenance of lifts, usually an insurance company surveyor who specialises in this work.

The various requirements of these regulations will create additional duties for the inspectorate of this department, involving considerable extra time in the carrying out of general and other inspections of the many buildings affected by the regulations. This will prove to be an important extension of the existing duties, and no doubt, many older buildings will require some special attention, especially during the initial period.

## THE ADULTERATION OF FOOD AND DRUGS

During the year, 3,159 samples of food and drugs were procured and analysed and of this number 171 or 5.4 per cent were found not to be genuine or otherwise irregular. Milk, being such a widespread and staple source of food supply, is prominent in any sampling programme and 2,194 samples of milk were procured for analysis. Statutory action was taken in respect of fish cakes, and misrepresentation of fish. Fines totalling £110 0s. 0d. and £13 0s. 0d. costs were imposed.

Samples of ice-cream, ice lollies and frozen confections submitted for chemical analysis or bacteriological examination numbered 165. A total of 150 ice-cream samples were examined bacteriologically and 73 were found to be in Grade I, 30 in Grade II, 18 in Grade III and 29 in Grade IV. Samples in Grades III and IV are considered unsatisfactory and it is the usual practice to take further samples to see if the samples are consistently poor. Appropriate action was taken in respect of unsatisfactory samples and advice given to manufacturers concerning the proper cleansing and sterilisation of the processing plant.

In addition to the bacteriological examination of milk and icecream, 98 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 1,389 comprising 1,352 heat-treated milks and 37 raw milks.

Of the 1,041 pasteurised milks, one failed the phosphatase test for efficiency of pasteurisation, in this case the fault was immediately rectified. In addition, twenty samples failed the methylene blue test for bacterial quality. Of the twenty samples taken, fifteen were from one premises and were taken from bulk supplies. Steps were immediately taken to ensure the correct method of cleansing of the milk churns. Of the 222 sterilised milk samples none failed the turbidity test and, of 89 samples of Ultra High Temperature milk, four samples failed the Colony Count test. In the latter instance the processing plant is located outside the City and the appropriate local authority was informed. Two methylene blue failures were reported from the 37 untreated milk samples taken and the results of guinea pig inoculation of the milk tested for the presence of tubercle bacilli proved all samples were negative.

The milk supply to schools, hospitals and Corporation establishments is sampled regularly and 232 samples were tested chemically and bacteriologically. All samples proved satisfactory.

A small percentage of the milk supply of the City consists of untreated milk. Of the 37 samples of untreated milk all were specially tested for the presence of brucella abortus. All samples were found to be negative.

New registration certificates in respect of milk distributors and their premises numbered 42 and licences for the sale of designated milk were issued. A total of 854 visits were made. These visits revealed that 42 new registrations were required to be effected for dairies and milk distributors, twelve licences were to be transferred and 96 renewals were to be made. At the time these visits were made the public health inspectors ensured that the requirements of the Milk and Dairies (General) Regulations, 1959, were strictly complied with.

Durin the year 520 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 records and the functioning of the recording and indicating instruments.

There are five pasteurising plants in the City consisting of three multiple and one single high temperature short time pasteurising plants, and one 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. There are also three milk sterilising plants in the City. 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 cattle, subject to the premises being of the required standard. There are thirteen cowsheds and thirteen piggeries in the City.

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.

During the year 41 samples of animal feeding stuffs and fertilisers were obtained from City mills for analysis. There were no major infringements of the principal Act. Twenty samples of animal feeding stuffs and other material were examined bacteriologically for the presence of Bacillus Anthracis. All samples proved negative.

## Supervision of Food Supply

Close supervision of the food supply of the City has been maintained throughout the 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. Certain difficulties have been experienced by traders in the Cazneau Street market this year by the part closing of the market for the construction of the approach road in connection with the second tunnel crossing, causing considerable difficulty in maintaining hygiene standards.

Routine inspection is carried out on poultry and game at the wholesale market prior to sale to the retail trade; 6,258 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 Stanley Fish Market resulted in the rejection of 22,456 lbs of fish and 3,460 lbs of shellfish.

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 147,022 lbs of fresh fruit and 260,414 lbs of vegetables as being unfit for human consumption.

Daily visits have been made to a variety of food premises for the purpose of the inspection of canned 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 Engineers (Cleansing) Department and subsequently tipped under supervision.

The examination of canned goods and grocery sundries resulted in the rejection of 94,075 lbs as being unfit for human consumption. In addition some 31,727 packages of frozen foods were rejected due to breakdown of refrigerator cabinets. Details of the various categories of canned goods, etc., rejected are as follows:—

	lbs. wt.
Canned Meats	 45,583
Canned Fruit and Vegetables	 30,053
Canned Fish, Milk and Soups	 8,452
Dry Groceries, etc	 9,987

The Merchandise Marks Acts and Orders in Council made thereunder lay down marking for certain imported foods and to ensure compliance with these Orders visits were made to provision merchants, butchers and greengrocers. Any infringements observed were rectified at once.

Investigations into food complaints originating from members of the public were carried out on 400 complaints of foreign bodies or the question of nature, substance or quality of various foodstuffs. All complaints were thoroughly investigated and the complainants generally satisfied.

# MEAT INSPECTION

The year 1968 will long be remembered as the time when things connected with the wholesale meat trade in the City went wrong. Foot and mouth disease which had devastated beef herds in Cheshire and Shropshire for three months at the close of the previous year, did not abate until February by which time some 2,363 outbreaks had occurred. Stock for slaughter was most difficult to obtain and consequently the price of meat reached an all time level.

Early in the year, the motor haulage meat transport workers went on strike causing disruption of meat supplies from docks and cold stores; a refrigerator breakdown at Stanley Market resulted in a considerable quantity of meat being rejected, and on September 25th, the cleaning staff employed by the Markets Department of the Corporation at the abattoir and wholesale meat market, without warning, came out on strike. It was decided that all stock standing—822 animals—should be slaughtered the next day.

On completion of this work, the slaughterhalls presented a grim picture. Something had to be done quickly to remove the blood and

other debris; and in order to prevent a hazard to health, the Medical Officer's meat inspectors, together with the staff of the Markets Department voluntarily turned to and set about cleaning the slaughter-halls. All operations at the abattoir were suspended for the ensuing four weeks. The meat market was stocked with meat brought in from outside areas. The Markets Committee through the City Council subsequently expressed appreciation and thanks, to the staff who had dealt so expeditiously with a major problem which might easily have developed into a very real danger to public health. Looming over all these events was a general fear that slaughtering operations, and the ancillary trades, would cease at the end of December when the Corporation would close the abattoir owing to recurring financial deficits and the imperative need for a costly modernisation programme in order to comply with the hygiene requirements of the law.

Against this sombre background, the fresh meat wholesalers faced with the stark facts of survival, took an important decision. This was, to take over the operation of the abattoir: to lease parts of the slaughterhalls lairages, and other facilities from the Corporation and to undertake all work necessary to bring slaughtering operations up to the hygiene standards required by legislation.

This modernisation will present many problems. Apart from financial considerations, the difficulties of structural alterations, overhead rail installation, electrical work, relaying of floors, whilst of necessity continuing slaughtering operations and the statutory inspection of carcases, will call for the utmost forbearance and co-operation of all concerned.

# Animals Slaughtered

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

Calves	Pigs	Sheep	Bullocks	Heifers	Cows	Bulls	Total
1,401	88,135	169,984	28,754	1,203	12,096	254	300,827

#### Diseased Conditions

Of the 300,827 animals slaughtered and inspected, 1,624 whole carcases were totally rejected as diseased and unfit for human consumption, together with part carcases from 7,248 animals. In addition, organs from 61,135 other animals were found to be diseased and rejected as unfit. These figures indicate that 20 per cent of the animals slaughtered were found on post mortem inspection to be diseased. This compares with 23 per cent in 1967. A summary of the reasons for condemnation is set out in the statistical appendix.

# Meat Inspection Charges

The City Council decided in 1963 that charges for the inspection and stamping of carcases 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 and stamping of 300,827 animals slaughtered in the City during the year was £12,870.

# Diseased Meat and Offal-Disposal and Treatment

The amount of diseased meat and offal rejected was 310 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 for 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.

### Tuberculosis

The overall incidence of tuberculosis found during routine inspection of bovine carcases was, as last year, less than one per cent. In pig carcases which last year showed 0.7 per cent there was a slight drop to 0.5 per cent. Only one cow was sent in by the veterinary officers of the Ministry of Agriculture, Fisheries and Food, under the tuberculosis eradication scheme. The carcase did not show any tubercular lesions.

#### Brucellosis

With the almost complete eradication of tuberculosis in dairy herds, the Ministry of Agriculture, Fisheries and Food, and the Department of Agriculture and Fisheries for Scotland, have now commenced an intensive search amongst cattle in dairy herds which are affected with brucella abortus. Under the Brucellosis (Accredited Herds) Scheme, reactors are slaughtered; and during the year, 24 cows and one heifer were sent in for slaughter. After post-mortem inspection all the carcases were found to be sound, and were passed for human consumption. In all cases the Ministry voluntarily surrendered the udder, uterus and genitalia, which were destroyed.

### General Diseased Conditions-Calves

The number of calves slaughtered was 1,401. This is the lowest number for a very long time but was not unexpected, as the foot and mouth outbreaks of the previous year had eliminated whole herds of dairy cows, and these cows in the normal way would have each borne at least one calf. Of these calves most of the bull calves would have been slaughtered off at 10-21 days old.

Out of the 1,401 calves slaughtered, 299 were rejected outright for acute enteritis or umbilical pyaemia.

Cattle

Of the 42,307 cattle slaughtered consisting of 28,754 bullocks, 12,096 cows, 254 bulls and 1,203 heifers, the beef quality varied very much. Some of the cow beef was of the poorest quality seen on the market for years, most of the bullock beef was lean and unfinished, but nevertheless commanded a ready sale at good prices because the modern young housewife dislikes fat. As usual, the prime beef was reserved for shipping companies, and the more exclusive hotels.

The number of carcases found to be diseased at the time of slaughter was 8,148. Of this total, 63 carcases were totally rejected, together with part carcases or offals from another 8,085 animals.

## Sheep and Lambs

Again this year, good quality mutton or lamb has been scarce and expensive. Hill sheep were of poor quality generally, and, at the back end of the year, the rams sent in for slaughter from the ram sales were arthritic, oedematous and over-bred.

The number of carcases wholly condemned for diseased conditions was 1,042, together with part carcases from another 3,532; and organs mainly livers from a further 50,000 animals.

Pigs

The total number of pig carcases and offal inspected in Stanley Abattoir and at a private abattoir in the City was 88,135. The number of carcases found to be diseased at the time of slaughter, was 7,342; the number totally condemned was 220 together with part carcases from a further 7,122 pigs. The incidence of tubercle in pigs was down to 0.5 per cent. Pyaemic infections remained about the same as last year, but it was noted that at the end of the year, there was a marked rise in the number of pig carcases rejected for acute swine erysipelas, when compared with previous years. Farmers and pig breeders were advised through the wholesalers, and being alerted, could obtain veterinary advice and take steps to isolate pig herds and keep away from livestock auctions. This action by the department was much appreciated.

### THE MEAT MARKET

The large quantities of frozen or chilled beef, frozen mutton, lamb and offal (tails, kidney, livers and hearts) sold daily on the market are subject to inspection. Most of this meat was in good condition, but on occasions, it was necessary to trim both Uruguayan and Yugoslav meat for mould, or decomposition. During the year, a quantity of beef hindquarters arrived from Cuba, but were disappointing from the quality angle.

### Container Traffic

Consistently good was the beef and lamb sent from Ireland. Container traffic from both Northern Ireland and the Free State has increased very greatly. Not all the containers are shipped through Liverpool; a steady flow of containers has been built up this year, of Irish meat, through the ports of Preston, Newport and Holyhead to Stanley Market. Meat so consigned, travels well, is not subject to pilferage, and being packed in insulated containers with cardice, need not be opened immediately on arrival, but "regulated" to meet the best market price available.

Carcase meat dressed in rural areas and sent into Stanley for sale, continues to receive attention and re-inspection. Much of this meat is condemned for pathological conditions which should have been detected at the time of slaughter and primary inspection.

Carcases and meat dealt with in the market excluding the meat and offal of the the 300,827 animals slaughtered in the City were as follows:—

Origin	Beef Hinds/Fores	Carcases Mutton/Lamb	Carcases of Pork	Carcases of Veal
Imported chilled or frozen	13,675	788,920	1,297	ollen <u>22</u>
Slaughtered outside Stanley Abattoir	42,618	202,661	122,622	6,966

In addition to the above, 136,356 packages of meat, poultry and rabbits were handled.

# Slaughtering Licences

During the year, 75 licences were granted by the City Council to slaughtermen ritual cutters of the Shecita Board and two Muslim ritual slaughterers. In addition thirteen licences were issued to Mohammedan seamen who slaughtered sheep in the abattoir, the carcase meat being destined for consumption by ship crews.

### Pharmaceutical Raw Material

Various organs and glands for example, pituitaries, thyroids, adrenals, ovaries, taken from healthy carcases after inspection were collected and sent for processing for medicinal use.

In addition, some 56 tons of distomatotic livers were sent for pharmaceutical manufacture.

# Training Courses

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

# Specimens for Teaching Purposes

Requests for the supply of embryos, blood, hearts, eyes, cysts and other pathogenic specimens for hospital laboratories, various departments of the University, schools, and training colleges have been met.

In addition specimens were provided and examinations set up for the Royal Society of Health and the Public Health Inspectors Education Board.

# FACTORIES INSPECTION

Systematic inspections have continued to be made to every type of trade and business premises throughout the City under the provisions of the Factories Act and the Offices, Shops and Railway Premises Act, 1963.

The various local authority departments also concerned with the administration of the above enactments, and H.M. Inspector of Factories offered their usual close co-operation. A suggested reason for the marked reduction in the number of "non-mechanical factories", (see Statistical Appendix, page 150) is possibly due to the the change in the term to "non-power factories", coupled with the increased use of small hand-operated power tools in this type of factory. The total number of "power factories" is accordingly increased.

Apart from queries relating to sanitary accommodation in various premises, a number of complaints concerning conditions affecting the welfare and comfort of clerical workers in factory premises were remedied.

### Food Factories

Routine visits were continued to food factories, canteens, ware-houses and other food premises, and as well as any necessary action under the Factories Act, the opportunity was taken to ensure that the various provisions of the Food Hygiene Regulations were being implemented. The inspectors are qualified to deal with all the various enactments appertaining to such premises, and this procedure avoids the necessity for more than one inspector visiting the premises.

#### Outworkers

In accordance with the provisions of Sections 133 and 134 of the Factories Act, 1961, outworkers' returns are received twice yearly. The premises referred to in these returns are visited to ensure that a satisfactory standard of cleanliness is maintained by the outworkers in their homes. The returns of outworkers during the current year were as follows:—

(1) Number of outworkers during the year... ... 129
(2) Number of returns received from other authorities ...
(3) Number referred to the Medical Officer of Health of districts outside the City ...

Rag Flock and Other Filling Materials Act, 1951

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

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

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

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

The gradual reduction in the number of registered premises is due mainly to the demolition of premises as re-development advances in various parts of the City, and to the increased demand for synthetic fibres and foam rubber, which do not come within the scope of the Act.

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

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

Visits made throughout the year to pig farms, smallholdings, market and nursery gardens, amounted to a total of 197.

No infringements were reported under the above anactment.

### INDUSTRIAL NUISANCES

#### Offensive Trades

The decrease in the number of offensive trades in the central area recorded last year, continued throughout the current year with more firms closing down. The remaining establishments throughout the City are inspected regularly and frequent observations ensure that any temporary emission of offensive vapours caused by mechanical breakdown, mistakes, or an error of judgment on the part of the operators, can be detected and brought under control as quickly as possible.

One firm of bone boilers in the central area, has already installed a new type of condenser plant. The results obtained in the reduction of offensive vapours are encouraging, and a considerable reduction in the use of water has also been achieved.

### Offensive Smells and Industrial Effluvia

Many complaints of offensive odours have been received during the year, varying in their causes from dead rats under floorboards and in partition walls, cooking smells from fried fish and chip shops and basement luncheon clubs and restaurants, to overheating of electric light shades or diffusers made from low grade plastics. In one instance, the operators of copying machines in a large office building complained of offensive odour and a feeling of nausea. Investigations traced the cause to the developing solutions employed in the machines. The management readily carried out the department's recommendations to provide an extraction system from the machines and additional mechanical ventilation to the room.

Effluvia complaints from industrial processes throughout the year included fumes from a large "tin and drum" manufacturer, smells from a fertilizer plant, cellulose spraying and coffee roasting.

### Dust and Dirt Nuisances

The sources of these complaints are not confined to industrial areas, but vary from residential areas, where launderettes and dry cleaning plants have set up business and discharge the "fluff" from the hot air driers into the atmosphere, to the annoyance of the local residents. Office dwellers in the City centre complain of nuisances from dust when the exterior of adjacent buildings are given a "spring clean". The nuisance from this operation can be minimised by choosing a "wet process" and the skilful erection of protective "drapes".

The construction of the Second River Mersey Tunnel Crossing and its approach roads have been the cause of a number of complaints. The residents of the dwellings adjacent to the "workings" complained of mud and dirt in the streets, deposited by lorries transporting the "spoil" or sub-soil from the excavations to the disposal point. The contractors agreed to co-operate with the City Engineer (Cleansing Section) in an effort to improve the conditions of the streets concerned.

### Noise

Noise is a curious phenomenon. The kind and intensity of noise that irritates one person does not disturb another, a fact proved repeatedly by the department upon investigation of a wide variety of complaints.

The trend of our twentieth-century City life is to accept the gradual increase in the level of background noise both in and outside our homes, exemplified by noises from telephones, transistor radios,

televisions, refrigerators, vacuum cleaners, central heating and ventilating installations, to the increased volume of road traffic, and air traffic in some localities.

The study of noise, its cause, its diversity and its effect is already an established science. Unfortunately, some of the practical recommendations are aimed at a reduction in the transmission of noise, rather than eradication at the source. Noise is generally accepted as a necessary evil by day. It is not, however, tolerated at night, when the daily background noise has diminished, making isolated noises from industrial and commercial processes more apparent to local residents, resulting in appeals to the department to take steps to ameliorate the situation. Factories operating night shifts are a constant source of complaints, often involving protracted investigations by inspectors late at night and into the early hours of the morning. Managements are usually very co-operative and willing to carry out recommendations in order to reduce the level of noise. Unfortunately, solutions to noise problems are not always readily apparent, and certain firms have sought the advice of experts in this field in an endeavour to obviate the noise or to reduce it to an accepted level.

Excessive noise, however, is often caused by worn and badly sited machinery, the careless action of operators and little or no acoustic aids or design.

Other complaints of noise received during the year arose from the following causes:—

- 1. Barking of dogs.
- The exodus of members from social clubs in residential areas late at night, often accompanied by the slamming of car doors.
- 3. The sound of air compressors in garages.
- The noise of pneumatic drills, air compressors and soil excavation machinery on building sites.

There was a marked increase this year of noise complaints from the last category, especially in the City centre, where numerous building projects, both private and public, are under construction. The warm summer months made office workers more vulnerable, when windows were opened. One firm, whose business interests involved making numerous long distance telephone calls, temporarily installed acoustic canopies over the telephone receivers while the building opposite was being demolished.

## ATMOSPHERIC POLLUTION

Smoke Control Orders

There are now twenty operative Smoke Control Orders covering some 13,600 acres of the City involving some 66,600 dwellings and 8,600 other buildings. In addition, a further five Smoke Control Orders have been confirmed but they are not yet operative. These Orders cover a further 5,400 acres and include some 29,750 dwellings and 10,400 other buildings. It will not be possible to complete the five confirmed Orders by the present operative date in 1969, due to the present financial situation and the operative date of Orders numbered 23, 24, 25 and 26 covering the wards of Gillmoss, Clubmoor, Pirrie and Fazakerley have been put back to the 1st April, 1970. The number 27 Smoke Control Order covering Warbreck Ward is with the Ministry of Housing and Local Government and a date for the operation of this Order has not yet been finalised.

The result of smoke control can readily be seen as there is an almost complete absence of smoke in many areas of the City. Residents in Smoke Control Areas are ready to draw attention to any smoke being emitted either from chimneys or from the burning of refuse, and prompt investigation is made in such cases, as the department are concerned that every effort is made to reduce pollution to an absolute minimum.

Certain provisions of the Clean Air Act, 1968, become operative on the 1st April, 1969, and from this date it will be an offence to acquire, or sell, any solid fuel other than authorised fuel for use in a smoke control area. This means that fuel dealers can no longer sell coal for burning in domestic premises in smoke control areas. There is no doubt that this new control will prevent, to a great extent, the burning of unauthorised fuels in smoke control areas, especially during the hours of darkness when emissions cannot be readily observed.

#### Industrial Problems

The emission of smoke from chimneys serving furnaces in industrial premises has not presented a major problem, as most installations are now capable of being operated without causing an offence. When emissions have been reported, investigation has shown that the emission has been due to a mechanical breakdown. Managements, in general, are aware that the emission of smoke is due to the inefficient burning of fuel and this adds to the cost of running the establishment. It is, therefore, in the interest of the management to ensure that the emission of smoke is kept to a minimum.

# Measurement of Atmospheric Pollution

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

### New Installations

Plans deposited with the City Building Surveyor which indicated that new chimneys were to be constructed, were examined and approval was given in 72 cases, and in fourteen cases it was found necessary to increase the height of the chimney before the necessary approval could be given. Notification to install new boilers or furnaces was received in respect of 58 installations, of which 38 detailed specifications were submitted and the necessary certificate of approval issued.

### RODENT CONTROL

# Duties of Local Authorities and Occupiers

Every local authority is required under the Prevention of Damage by Pests Act, 1949, to take steps to secure, so far as practicable, that their district is kept free from rats and mice, and to enforce the duties of owners and occupiers under its provisions.

One requirement of the Act is that the local authority must be notified by occupiers when rats or mice are living on or resorting to buildings and lands in substantial numbers. Occupiers of premises readily avail themselves of the services provided, not only for assistance in the destruction of the pests, but also for advice to prevent infestation.

# Systematic Survey

A total of 15,187 sites were examined by the rodent control staff during the year in connection with the routine survey and investigation of complaints. A further 60,675 visits were made entailing operational work and re-examination of buildings and lands, during or following treatment. Public health inspectors also made, in conjunction with other matters, 122,377 inspections under the Act.

#### Rodent Infestation

During the year 4,945 premises were found to be infested, 2,057 by rats, 60 by rats and mice and 2,828 by mice only. Details are shown in the statistical appendix.

The rat infestations found in the dockside and central areas of the City were mainly of the black rat (rattus rattus) type. These rats are more difficult to deal with than the brown rat (rattus norvegicus) and in an effort to reduce the rodent population it was decided to carry out some block control examinations. This work only commenced at the end of the year and it is anticipated that much improvement will be shown in the figures for 1969.

Complaints regarding rats and/or mice totalled 15,709, an increase of 3,332 over the previous year. Of the 1,136 dwellinghouses found to have rat activity, 1,000 infestations were solely confined to the external parts of the premises.

### Rodent Disinfestations

During the year 4,641 buildings and lands were disinfested from rats and/or mice. Of the 4,766 infestations and re-infestations remedied during the year, 4,599 were treated by the department's staff and of these, 4,564 were cleared by poisoning, twelve were remedied by trapping only and 23 by the use of poison and trapping.

It is estimated that at least 12,197 rats in buildings and on lands were destroyed during the year as a result of poisoning treatments; 840 dead rats were actually collected during operational work and 146 were caught in traps. Of the rats collected 43 were sent to the Public Health Laboratory for examination and the remainder were burnt.

There is no reliable formula for calculating the kill in relation to the poisoning of mice but there can be no doubt that the number destroyed by this method is considerable having regard to the fact that 14,683 ounces of bait were consumed by mice.

#### Rat Destruction in Sewers

There are some 26,500 manholes providing access to the whole of the sewerage system in the City and the entire sewerage system has been treated by the direct poisoning method. A total of 50,975 poison baits were laid in manholes and there is no doubt that as the result of the continuous and systematic treatment of sewers, the breeding and migration of rats through sewers and drains has been greatly reduced. The majority of infestations on the surface are due to brown rats having escaped from defective sewers or drains and it is, therefore, essential to ensure that treatments are continuously applied. A follow-up test after the poison treatment was applied to a proportion of the manholes previously treated, and activity was only recorded in 772 out of a total of 9,837 manholes re-tested, which is an indication of the effectiveness of the treatment. A further poison treatment was applied in the areas where these manholes were situated.

During the year it was considered necessary to refer to the City Engineer 1,012 items of work which required attention in order that maximum benefit could be had from the work entailed in this branch of the work of the department. The items included the removal of rubbish from baiting points and clearing of choked or partially choked sewers.

### Preventive Measures

During the year 459 drain tests were carried out in connection with rat infestations, which resulted in 169 premises being found to have defective drainage systems and the appropriate action was taken. Ten notices were issued under the provisions of the Prevention of Damage by Pests Act, 1949, relating to premises for non-structural work. No legal proceedings were instituted during the year and this is an indication of the co-operation which exists between owners, occupiers and staff of the section.

The number of complaints received increased, but the increase has not been in proportion to the number of infestations confirmed. This is an indication of the way the public co-operate by reporting stray rodents. The majority of the infestations were of a minor character and this is indicative of the effectiveness of the treatments which had been previously applied.

## Pigeon Control

The Protection of Birds Act, 1954, makes provision for the destruction of certain wild birds, including feral pigeons, in the interests of public health.

During the year a total of 75,846 wild pigeons were caught and painlessly destroyed. This figure includes 14,877 birds which were dealt with by private firms interested in the control of feral pigeons.

The number of complaints received during the year was 209 and 24,150 visits were made by the staff. Since the sub-section was formed in January, 1966, a total of 173,789 feral pigeons and 19,186 eggs have been destroyed.

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

# DISINFECTION AND DISINFESTATION

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

### INSPECTION OF PREMISES FOR VERMINOUS CONDITIONS

The number of inspections performed during the year in connection with re-housing of families was 4,738. As a result of these inspections 1,761 dwellinghouses and the furniture or effects of 115 families were treated for verminous conditions.

### Disinfestation of Other Verminous Premises

The full use of the services provided by the department for treatment of verminous premises has resulted in 6,766 inspections and 2,904 treatments being carried out, together with treatment of 162 business premises.

### DISINFESTATION AND DISINFECTION STATION

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

16,363 Verminous articles disinfested.

8,957 Infectious articles disinfested.

20,800 Articles for precautionary treatment.

860 Tons of miscellaneous goods for precautionary disinfection.

74 Male persons cleansed.

### DISINFECTION OF INFECTIOUS PREMISES

Following the incidence of infectious disease at home 247 premises were dealt with in the manner prescribed for terminal disinfection. In addition the department was again called in to carry out disinfection at two hospitals where outbreaks of infectious disease had occurred.

#### MISCELLANEOUS SERVICES

# Incontinent Laundry Service

This service, which is continuing to expand, dealt with 32,929 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, 11,550 visits were made for the purpose of issuing or collecting items of equipment.

# City Mortuary

This service works in close liaison with the office of the City Coroner. During the year two attendants assisted at 473 post mortems and 512 bodies were received.

### OTHER ACTIVITIES

Other activities of the section include: -

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

### STAFF

The staff employed consisted of: -

1 Chief Inspector	1	Shift Leader
1 Senior Inspector		Drivers
5 Inspectors	21	Disinfectors, etc.
2 Depot Assistants	1	Joiner
1 Foreman—Disinfecting Station		Boiler Attendant
1 Foreman—Depot	2	Mortuary Attendants
1 Storekeeper		almo in some in order

### VEHICLES

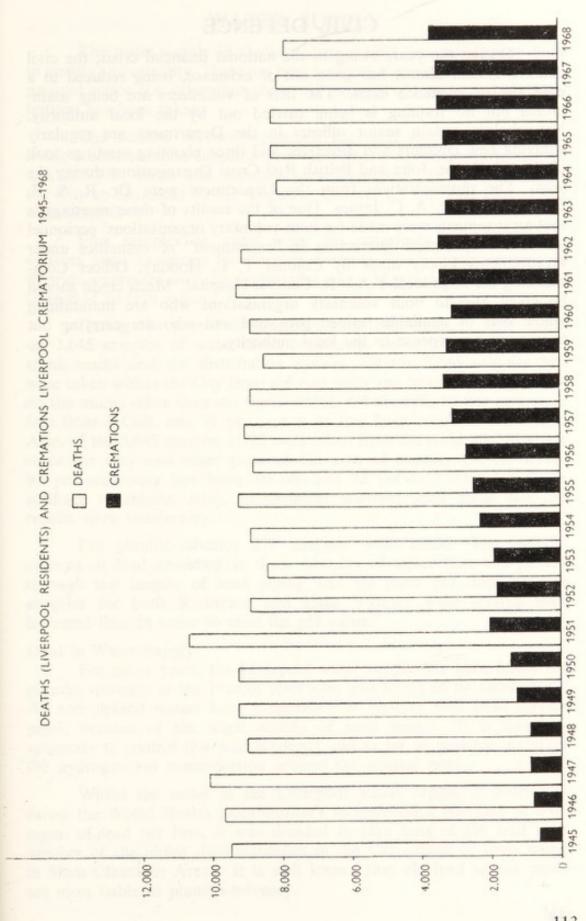
The vehicles used by the section covered 183,648 miles during the year and consumed 9,756 gallons of petrol.

### CREMATION

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

The number of cremations carried out during the year at the Liverpool Crematorium was 3,748. This is an increase over the number undertaken during 1967 (3,575) and it would appear that the recent tendency for the increased use of cremation is likely to persist, particularly as the cost of earth burial has been increased this year. 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, had led to a slight decline in the figures up to the last four 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.



## CIVIL DEFENCE

During the year, owing to the national financial crisis, the civil defence system almost has gone out of existence, being reduced to a care and maintenance basis. The lists of volunteers are being maintained but no training is being carried out by the local authority. Nevertheless certain senior officers in the Department are regularly studying new circulars and directives and three planning meetings took place with the St. John and British Red Cross Organisations during the vear. The representatives from the Department were Dr. R. S. E. Cutcliffe and Mr. A. C. James. One of the results of these meetings is that arrangements were made for both voluntary organisations' personnel to receive up-to-date instruction in "assessment" of casualties under arrangements kindly made by Colonel T. L. Hobday, Officer Commanding the large local T.A.V.R. General Hospital. Much credit should be given also to both voluntary organisations who are maintaining viable lists of available trained personnel and who are carrying out training at no expense to the local authority.

## WATER SUPPLY

The water supply in the area during 1968 was satisfactory both in quality and quantity. There has been no form of contamination in which unusual action (i.e. other than the usual methods of treatment and distribution) has been taken.

The number of dwellinghouses, flats and shops with domestic living accommodation supplied from the public water mains in Liverpool was 205,398. None was supplied by a standpipe. The population of the City as estimated by the Registrar General for the 30th June, 1968, was 688,010.

Five samples of water from the aqueducts and distribution systems were examined for fluoride content. The average amount of fluoride, expressed as F, in the samples was 0.12 p.p.m., the range being from 0.11 to 0.16 p.p.m.

During the year 1968 bacteriological examinations were made on 3,645 samples of water from aqueducts, wells, storage reservoirs, trunk mains and the distribution system. Of the 3,645 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, 91 per cent were free from B.Coli. and 71 per cent were free from coliform organisms. Also, of the 3,645 samples 1,772 were taken from the trunk mains which serve the City and other parts of the area of supply. Of the 1,772, 97 per cent were free from B.Coli. and 93 per cent were free from coliform organisms. Also, 72 chemical analyses were made and the results were satisfactory.

For plumbo-solvency 278 analyses were made. The average amount of lead absorbed in those samples of water that had passed through test lengths of lead piping was '07 parts per million. The supplies for both Rivington and Lake Vyrnwy were treated with hydrated lime in order to raise the pH value.

Lead in Water Supply

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

Whilst the water in the Liverpool mains supply is constantly below the World Health Organisation's recommended standard of 0.05 mgm. of lead per litre, it was decided to take tests of the lead in a number of the oldest dwellinghouses in the City—most of them being in Slum Clearance Areas. It is well known that old lead service pipes are most liable to plumbo-solvency.

During the year a total of 384 samples were submitted from these old houses with lead service pipes and gave the following results:—

Samples of water held overnight ... 192 Average lead content 0·14 mgm/1.

Samples of water after discharge of contents of service pipe by running the tap for one minute

the tap for one minute 192 Average lead content 0.07 mgm/1.

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

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

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

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

# STATISTICAL SECTION VITAL STATISTICS

BIRTH STATISTICS—1945-1968

1968			LIVE BIR	THS			STILLBIRTHS	3
	300	Male	s Female	es Tot	al	Males	Females	Total
Legitims Illegitim		5,493 658				97 18	88 16	185 34
	Total	6,151	5,696	11,84	7	115	115 104	
	1 1-0		a obei	T			Illegitimate L	ive Births
Year	Live Births	Birth Rate	Registered Stillbirths	Total Births	per Li	llbirths r 1,000 ve and llbirths	No.	% of Live Births
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	101	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	[10.20	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	111	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	1 1113	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	amo	19-8	1,020	6.2
1963	15,775	21.3	351	16,126	1100 j	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	tines:	18-1	1,197	8.2
1966	13,557	19-0	277	13,834		20.0	1,250	9.2
1967	12,583	17.8	223	12,806		17-4	1,296	10.3
1968	11,847	17.2	219	12,066		18-2	1,310	11.1

# PERCENTAGE OF ILLEGITIMATE LIVE BIRTHS TO TOTAL LIVE BIRTHS

### COMPARISON OF LIVERPOOL RATES WITH RATES FOR ENGLAND AND WALES

		England	1		England
	Liverpool	and Wales		Liverpool	and Wales
1930	4.6	4.6	1950	6.0	5.1
1931	4.6	4.4	1951	5.5	4.8
1932	4.5	4.4	1952	5.5	4.8
1933	4.3	4.4	1953	5.4	4.7
1934	4.4	4.3	1954	5.4	4.7
1935	4.3	4.2	1955	5.1	4.7
1936	4.4	4.1	1956	5.0	4.8
1937	4.4	4.2	1957	5.3	4.8
1938	4.8	4.2	1958	5.1	4.9
1939	4.4	4.2	1959	5.2	5.1
1940	4.6	4.3	1960	5.4	5.4
1941	6.2	5.4	1961	5.7	6.0
1942	6.3	5.6	1962	6.2	6.6
1943	7.1	6.4	1963	6.9	6.9
1944	8.3	7.3	1964	7.7	7.2
1945	10.7	9.3	1965	8.2	7.7
1946	7.3	6.6	1966	9.2	7.9
1947	5.8	5.3	1967	10.3	8.4
1948	5.7	5.4	1968	11.1	8.5
1949	5.7	5.1	12 357		

### DEATHS FROM PRINCIPAL CAUSES-1968

Class	Cause Group No. (List A)*	Cause		Male	Female	Total	Rate per 1,000 Popula- tion	Percent- age of Total Deaths
II	45–49, 52–61	Cancer (except resp ratory system)	oi- 	514	683	1,197	1.74	15.04
11	50, 51	Cancer (respiratory system)		487	88	575	0.84	7.23
VII	81, 83, 84	Heart Diseases		1,250	1,166	2,416	3.51	30.36
VII	85	Cerebrovascular Disease		381	517	898	1.31	11.28
VII	80, 82, 86–88	Other Circulatory Diseases		161	220	381	0.55	4.79
$_{ m VIII}$	91, 92	Pneumonia		263	394	657	0.95	8.26
$_{ m VIII}$	89, 93	Bronchitis		368	144	512	0.74	6.43
IX	97-104	Digestive Diseases		98	98	196	0.28	2.46
XIV &	126-135	Congenital Anomali and Certain Caus		10,	333	1.2	1 979,03	
	590	of Perinatal Mortality		100	79	179	0.26	2.25
E XVII	138-150	Accidents, Poisonin and Violence	gs 	212	184	396	0.58	4.98
Various	Remainder	All other causes		255	296	551	0.80	6.92
Totals	100	All causes		4,089	3,869	7,958	11-6	100

<sup>\*</sup> The code numbers in this and other mortality tables are from the 8th Revision, W.H.O. Manual, published 1967, and used for the first time this year.

### DEATHS FROM CANCER 1968 (CLASS II)

Cause Group No. (List A).	Organs affected	Male	Female	Totals
45	Buccal cavity and pharynx	13	11	24
46-49	Oesophagus, stomach, intestines and rectum	264	260	524
50, 51	Larynx, trachea, bronchus and lungs	487	88	575
54	Breast	•2	127	129
55, 56	Cervix and uterus		67	67
52,53,57,58	Other and unspecified sites	182	171	353
59	Leukaemia	25	19	44
60	Lymphatic and haematopoietic tissue	18	22	40
61	Benign or unspecified neoplasms	10	6	16
92-0	Totals	1,001	771	1,772

<sup>\*</sup>Sex has been checked for these cases, and is correct.

# TRENDS OF MORTALITY 1946-68

	Deaths from Cancer of the Respiratory System	Deaths from Tuberculosis of the Respiratory System
1946	234	579
1947	235	999
1948	252	630
1949	320	532
1950	331	481
1951	334	406
1952	346	269
1953	432	258
1954	383	232
1955	408	185
1956	448	137
1957	448	123
1958	399	109
1959	444	102
1960	457	81
1961	525	80
1962	484	74
1963	483	54
1964	527	38
1965	493	42
1966	528	46
1967	503	44
1968	575	39

MATERNAL MORTALITY-1930-1968

,	Year.		BIR	THS REGISTE	RED	MATERNAL	MORTALITY	
	L UGI.	Live Births		Stillbirths	Total Births	Deaths	Rate per 1,000 Total Births	
930			18,881	774	19,655	75	3-81	
1931			18,626	722	19,348	55	2.84	
932			18,149	827	18,976	51	2.69	
933			16,929	680	17,609	60	3.41	
934			17,593	685	18,278	51	2.79	
935			17,347	749	18,096	59	3.26	
936			17,403	708	18,111	64	3.52	
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	
942		***	13,729	552	14,281	34	2.38	
		***				34	2.27	
943			14,432	485	14,917			
944		***	15,412	492	15,904	31	1.95	
945		***	14,784	431	15,215	23	1.51	
946			18,528	539	19,067	19	0.99	
1947			19,904	514	20,418	17	0.83	
1948			17,695	479	18,174	14	0.77	
1949		***	16,551	358	16,909	9	0.53	
1950			16,110	375	16,485	7	0.42	
1951	***		15,593	396	15,989	10	0.62	
1952			15,839	400	16,289	7	0.43	
1953			16,022	394	16,416	5	0.30	
1954			15,742	400	16,142	8	0.49	
1955			15,268	408	15,676	9	0.57	
1956			15,944	394	16,338	7	0.43	
1957			16,044	409	16,453	7	0.42	
1958			15,662	413	16,075	4	0.25	
1959			15,615	375	15,990	5	0.31	
1960			15,961	377	16,338	5	0.31	
1961			16,492	380	16,872	2	0.12	
1962			16,479	333	16,812	5	0.30	
1963			15,775	351	16,126	4	0.25	
1964			15,625	283	15,908	3	0.19	
1965			14,553	269	14,822	1	0.067	
1966			13,557	277	13,834	_		
1967			12,583	223	12,806	1	0.078	
1968			11,847	219	12,066	î	0.083	

Deaths from stated causes at various ages under one year.

Cause of Death	Cause Group No. List A	Under 1 week	7-27 days	1-6 months	7-11 months	Total Deaths under 1 year	
Meningococcal Infection	19	_		1	_	1	
Measles		25	_	-		-	_
Pneumonia		91, 92	6	2	25	3	36
Bronchitis		89, 93	_	2	13	1	16
Enteritis		5		3	6	1	10
Congenital Anomalies		126-130	23	8	8	3	42
Injury at Birth		131, 132	23		_	_	23
Other Diseases of Early						-	
Infancy		133-135	92	2	_		94
Other causes		-	8	4	23	5	40
Tota	ls		152	21	76	13	262

Live Births in the year ... Legitimate 10,537 Deaths ... Legitimate Infants 210 Illegitimate 1,310 Illegitimate Infants 52

Causes of Death—1968
(This table relates to underlying primary causes of death, as in previous annual reports).

Class	Male	Female	Total	Rate per 1,000 Population	Percentage of total deaths
I—Infective and Parasitic					
Diseases	50	29	79	0.11	0.99
II—Neoplasms III—Endocrine, Nutritional	1,001	771	1,772	2.58	22.27
and Metabolic Diseases IV—Diseases of Blood and	17	55	72	0.10	0.90
Blood-forming Organs	17	25	42	0.06	0.53
V—Mental Disorders	36	13	49	0.07	0.62
VI—Diseases of the Nervous System and Sense					
Organs VII—Diseases of the Circula-	36	32	68	0.10	0.85
tory System VIII—Diseases of the Respira-	1,792	1,903	3,695	5.37	46.43
tory System IX—Diseases of the Digestive	656	564	1,220	1.77	15.33
System X—Diseases of the Genito-	98	98	196	0.28	2.46
Urinary System XI—Complications of Preg- nancy, Childbirth and	53	42	95	0.14	1.19
the Puerperium	_	1	1	0.00	0.01
XII—Diseases of the Skin and		ne detail?			
Subcutaneous Tissue XIII—Diseases of the Musculo- skeletal System and	- 1	2	2	0.00	0.03
Connective Tissue	12	24	36	0.05	0.45
XIV—Congenital Anomalies XV—Certain Causes of Peri-	30	32	62	0.09	0.78
natal Mortality XVI—Symptoms and Ill-defined	70	47	117	0.17	1.47
Conditions E XVII—Accidents, Poisonings and Violence (External	9	47	56	0.08	0.70
Cause)	212	184	396	0.58	4.98
Totals	4,089	3,869	7,958	11.6	100

Analysis of Causes of Infant Mortality in Successive Quinquennia 1896-1965, and the years 196-1967 and 1968.

(A)—Recorded Deaths

Years	Total Live Births	Total Deaths Under 1 Year of Age	Infectious Diseases (excluding Tubercu- losis)	Tubercular Diseases	Nervous Diseases	6 Respira- tory Diseases	7 Digestive Diseases	Malforma- tions Premature Birth, Maras- mus &c.	9 Extern Cause
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	- 1	5	61	17	210	11
1967	12,583	277	1	_	6	55	16	189	10
1968	11,847	262	14*	_	7	55	10	167	9

<sup>\*</sup> Includes 10 cases of Enteritis and other Diarrhoeal Diseases, previously in Class IX, Diseases of Digestiv-System, and shown in column 7, now included in Class I, Infective and Parasitic Diseases.

	1	2	3	DEATH RA	5	6	7	8	9
Years	Birth Rate per 1,000 population	All Deaths Under 1 Year of Age	Infectious Diseases (excluding Tubercu- losis)	Tubercular Diseases		Respira- tory Diseases	Digestive Diseases (including Diarrhoea)	Malformations Premature Birth, Marasmus &c.	Externa Causes
1896/1900	33.4	189	12.7	6.2	22.1	32.0	57-1	51.0	7.3
1901/1905	33.4	172	13.0	5.5	21.2	29.3	43.7	48.1	4.7
1906/1910	32.2	149	13.6	3.9	17.4	26-6	33.0	46.7	4.6
1911/1915	29.3	137	11-6	3.1	12.8	26.1	32.6	43.1	3.8
1916/1920	24.9	116	11-1	2.0	10.9	28-4	18.8	42.0	1.8
1921/1925	25.1	100	10.2	1.9	5.5	26-6	17-1	36.1	1.2
1926/1930	22.1	94	10.2	1.1	4.2	26.7	17.4	31.1	0.8
1931/1935	20.5	89	10.1	0.9	4.2	23.1	13.4	35.3	0.8
1936/1940	19-4	77	7.0	0.9	6.4	17.9	8.8	32.9	1.0
1941/1945	21.3	78	4.8	1.0	5.6	24-1	7.7	30.7	1.8
1946/1950	22.9	56	3.4	0.5	2.3	12.3	10.5	25.1	1.2
1951/1955	20.1	33	1.0	0.1	0.3	6.1	1.7	22.8	0.8
1956/1960	20.7	27	0.4	300	0.3	4.9	1.1	19-9	0.4
1961/1965	21.4	25	0.2	0.03	0.3	5.2	1.1	17.8	0.7
1966	19.0	23	0.1	_	0.4	4.5	1.3	15-5	0.8
1967	17.8	22	0.1	201_0	0.5	4.4	1.3	15.0	0.8
1968	17.2	22	1.2	100	0.6	4.6	0.8	14-1	0.8

Population, Birth Rates, Death Rates, Infant and Maternal Mortality

Name of Authority	Birmingham	Bradford	Bristol	287,460 0.99 1.11 16.4 16.2 11.7 13.6 27.1 0.21 0.29 0.05 0.024 0.017 2.3 0.6 - 0.08 0.003 -
Registrar-General's estimated population for 196	3 1,074,940	294,440	427,780	
Comparability factor—  (a) Births  (b) Deaths	0.99	1-04 0-96	1·03 0·95	
Crude birth rate per 1,000 population	18-84	18-91	15-7	16-4
Birth rate as adjusted by factor	18-61	19-67	16-2	16-2
Crude death rate per 1,000 population	11.56	13-67	12.5	11-7
Death rate as adjusted by factor	13-06	13-12	11-9	13-0
Infant mortality rate per 1,000 live births	22-51	28-73	17-1	21.3
Neonatal mortality rate per 1,000 live births .	15.01	18-49	11-1	15.7
Stillbirth rate per 1,000 total births	14-11	14.51	15-1	13-6
Perinatal mortality rate per 1,000 total births .	26-23	29-90	23.7	27-1
Maternal mortality rate per 1,000 total births .	0.29	1.06	0-6	0.21
Non-respiratory	0·46 0·13 0·04 0·00	0·62 0·22 0·02 0·01	0·18 0·03 0·02 0·02	0.05
Death Rates per 1,000 population from—	1-0	E-10 10 11	100	
Cancer (all forms including leukaemia and aleukamia)	2.43	2.42	2-45	2.3
Cancer of Lungs and Bronchus	0-67	0.65	0-63	0.6
Meningococcal infections	0.00	0.00	0-0	_
Whooping Cough	0.00	0.00	_	_
Influenza	. 0.06	0.09	0.11	0.08
Measles	. 0-00	0.00	_	
Acute Poliomyelitis and Encephalitis		0.00	_	_
Diarrhoea (under 2 years)	. 0-02	0.02	0-01	0.007
Diarrhoea (under 2 years) (per 1,000 live births)	20000	1.08	0.89	0-4

RATES, ETC., OF A NUMBER OF THE LARGER AUTHORITIES FOR 1968

Kingston upon Hull	Leeds	Leicester	Liverpool	Manchester	Newcastle upon Tyne	Nottingham	Sheffield
294,720	506,080	280,340	688,010	602,790	244,880	305,050	531,800
1·02 1·14	1·00 1·11	1·04 0·97	0·98 1·16	1.05 1.08	1·00 1·10	0-99 1-05	1·01 1·11
17-8	16-8	18-35	17-2	17.81	14.90	19-2	16.68
18-1	16-8	19.08	16-9	18-70	14.90	19-01	16.84
11-16	12.2	12.48	11-6	12-68	13-13	12-6	12.54
12.7	13.5	12-11	13.5	13-69	14-45	13.23	13-91
19-3	20	19-83	22.1	26.36	20-83	21-00	18.03
10-1	12-5	12.25	14.6	16-11	10-14	13.8	11.71
13-6	18	17.76	18-2	15-86	13-25	15.8	14.00
20.9	28	27-88	30.7	29.88	21.36	28.5	24.22
0.38	0.35	0.19	0.083	e -	-	0.17	0.11
0·3 0·04	0·42 0·05	0·34 0·16	0·318 0·048	0-43 0-06	0·351 0·037	0·4 0·07	0·29 0·06
0·02 0·003	0·03 0·004	0·02 0·01	0·057 0·007	0.06 0.01	0·057 0·012	0·04 0·02	0.03
2.4	2.52	2.43	2.576	2.67	2.85	2.52	2.52
0.75	0.66	0.60	0.836	0.81	0.78	0.72	0.75
0.003	108	0.004	0.001	0.003	0.008	0.01	0.005
_	000	_ 6	0.003	21 <b>—</b>	_	-	
0.1	0.05	0.05	0.006	0.12	0.048	0.08	0.039
_	0.006	_	0.001	0.003	_		0.001
	_	^		0.005		_	0.001
0.002	0.02	0.01	0.016	0.018	0.016	0-03	0.009
1.3	1.06	0.78	0.929	1.02	1.096	1.7	0.563

Total	Female	Male	ge Group	A	
262	110	152	 year	Under 1	
12	3	9	 	1	
8	3	5	 	2	
10	2	8	 	3	
2	2	-	 	4	
20	7	13	 	5 —	
10	3	7	 	10—	
30	9	21	 	15—	
22	11	11	 	20	
33	9	24	 	25—	
52	17	35	 	30—	
64	28	36	 	35—	
112	46	66	 	40	
223	83	140	 	45—	
356	142	214	 	50-	
605	211	394	 	55	
887	298	589	 	60	
1,040	413	627	 	65—	
1,060	461	599	 	70—	
1,211	671	540	 	75—	
964	614	350	 	80—	
669	487	182	 	85—	
252	200	52	 	90	
54	39		 	95—	
7,958	3,869	4,089	 	Totals	

Age Groups	Male	Female	Total	
Under 1 day	54	33	87	
1 day	16	11	27	
2 days	8	5	13	
3 days	5	6	11	
4 days	4	1	5	
5 days	2	5	7	
6 days	2	180,8	2	
Total under 1 week	91	61	152	(A)
1 week (7-13 days)	7	4	11	
2 weeks (14-20 days)	3	3	6	
3 weeks (21-27 days)	1	3	4	
Total (7-27 days)	11	10	21	(B)
Total under 28 days	102	71	173	(A+B)
1 month	6	5	11	EXPLANATORY NOTE
2 months	17	10	27	
3 months	7	11	18	
4 months	6	1	7	
5 months	5	3	8	
6 months	3	2	5	traf "guigi lata
Total 1-6 months	44	32	76	(C)
7 months	2	3	5	
8 months	2	3	5	
9 months	2	disperie	2	
10 months	mir-rad	1	1	
11 months	opinelas	damin of		ommination of the
Total 7-11 months	6	7 -	13	(D)
Total under 12 months	152	110	262	(A+B+C+D)

Total Primary and Secondary Causes of Death Reported on Death Certificates—1968. (N.B. Numbers relate to causes, not to individual deaths).

		Cause	Male	Female	Total	Totals expressed as percentage of all causes.
Underlying Prin	nary	1	4,089	3,869	7,958	56.7%
Other Primary		2	1,731	1,772	3,503	25.0%
,, ,,		3	229	289	518	3.7%
,, ,,		4	12	11	23	0.2%
Total Primary			6,061	5,941	12,002	85.5%
Secondary		2	571	548	1,119	8.0%
,,		3	377	370	747	5.3%
,,		4	79	83	162	1.2%
Total Secondary			1,027	1,001	2,028	14.5%
Total all causes			7,088	6,942	14,030	100%

#### EXPLANATORY NOTE

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

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

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

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

1968—Summary of Deaths from Cardiovascular and Respiratory Causes for Certain Occupations

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

All are male.

Occupation	Bricklayers	Builders' Labourers	Masons and Stone Workers
Age Group	P 255		
35–39		1	-
40-44	2 2 8 8 8	4	-
45-49		- 1-11	-
50-54	1	1	-
55-59	3878 881	4	_
60-64	3	6	-
65-69	2	6	1
70-74	_	2	2
75–79	3	1	_
80-84	1	2	1
85-89	4-2-5	1	1
90-94	-RFB=	****	-
95-	E- 111	2	-
Totals	10	30	5
eaths from all causes in these occupations	20	41	8

DETAILS OF THE BROAD GROUPS OF CAUSES USED IN THE SUMMARY BY AGE GROUP OF DEFINED CAUSES OF DEATH 1968. Code numbers relate to the Intermediate List of 150 causes (List A) in the W.H.O. Manual (1967 edition).

Infectious and Infective Diseases.
A 1— 44, A 72, A 80, A 81, A 89-93, A 99,
A 100, A 105, A 106.

Neoplastic Diseases. A 45 — 61. Degenerative Diseases. A 82 — 85, A 98, A 102, A 109, A 136, A 137.

Congenital Anomalies, etc.
A 126 — 132, A 134, A 135.
Trauma.
A 138 — 150 inclusive.

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

SUMMARY BY AGE GROUPS OF DEFINED CAUSES OF DEATH-1968 (N.B.-Numbers relate to causes not individual deaths).

	Total	5 10.2% 38 7.6% 4 3.2%	17 20.9%	2 12.6% 8 3.4% 3 1.1%	3 17.1%	9 25·1% 6 11·8% 6 4·7%	41.6%
Tota	2	1,425 1,068 444	2,937	1,772 478 153	2,403	3,519 1,656 656	5 831
ratio	H	47% 46% 34%	%24	44% 56% 48%	46%	51% 53% 53%	7069
Sex ratio	М	53% 54% 66%	25%	56% 44% 52%	24%	49% 47% 47%	780/
	H	670 490 152	1,312	771 267 73	1,111	1,784 877 348	3 000
Totals	M	755 578 292	1,625	1,001 211 80	1,292	1,735 779 308	668 6
& over	Eq.	500 391 118	1,009	453 135 60	648	1,515 702 309	9 596
65 yrs &	M	480 401 184	1,065	559 119 63	741	1,065 482 210	1 757
YES	Œ	42 18	134	173 72 10	255	189 109 24	399
55-64 yrs	M	170 104 74	348	270 65 14	349	465 208 74	747
45.54 yrs	Eq.	37 26 11	7.	101 42 2	145	54 12	113
45.54	M	13 88 83	100	126 23 3	152	152 61 19	939
yrs	F	13 2 2	29	1 1 25	36	212	25
35.44 yrs	M	9 10 3	22	66 8	32	39	53
yrs	H	0.61	11	00 ro	13	- 00 -	10
25-34	M	t- 00 ==	16	∞-	6	4 00 01	14
4 yrs	H	64	63	9 67	00	1 13	4
15-2	M	21 21	4	64	63	1 3	4
5-14 yrs 15-24 yrs 25-34 yrs	F	4	4	411	4	111	1
	M		60	es	60	61	67
0.4 yrs	压	30	49	-11	6.1	1-1-	14
-	M	74 4 9	67	411	4	1-9	133
AGE GROUPS	CAUSE	Infections/Infective Underlying Primary Other Primary Secondary	Totals	Neoplastic Underlying Primary Other Primary Secondary	Totals	Degenerative Underlying Primary Other Primary Secondary	Totals

1.2% 0.4% 0.2%	1.8%	2.8% 0.1% 0.1%	3.0%	4.8% 5.5% 5.2%	15.6%		100	20-9%	17.1%	41.6%	1.8%	3.0%	15.6%	100%
169 55 32	256	396 14 8	418	677 773 735	2,185			2,937	2,403	5,831	256	418	2,185	14,030
43% 35% 47%	45%	46% 29% 37%	46%	57% 54% 56%	%22			45%	%94	52%	45%	46%	25%	49.5%
57% 65% 53%	28%	54% 71% 63%	24%	43% 46% 44%	45%		8	25%	24%	48%	%89	54%	45%	20.2%
13	107	184	191	387 415 410	1,212			1,312	1,111	3,009	107	191	1,212	6,942
36	149	212 10 5	227	290 358 325	973			1,625	1,292	2,822	149	227	973	7,088
63	63	22 23 23	127	293 327 337	957	16565 168051		1,009	648	2,526	61	127	957	5,269
111	1	07   8	73	191 226 234	651	i anei		1,065	741	1,757	1	73	651	4,287
00 01	10	02	50	50 51 43	144	Phobes		134	255	322	5	20	144	880
eo	65	1 26	32	49 85 66	200			348	349	747	65	32	200	1,679
111	1	113	13	113	44			74	145	113	1	13	4	389
-11	-	15 63	27	12 28 12	51			100	152	232	-	27	51	563
-11	-	6	6	13	27			53	36	25	-	6	27	127
111	1	16	16	664	22			22	32	53	1	16	22	145
111	1	41	20	440	11			11	13	50	1	10	11	45
111	1	12	27	E1 4 6	20			16	6	14	1	27	20	98
111	1	∞	00	131	5			67	00	4	1	00	50	27
-11	1	42	24	-	1			4	63	4	-	24	7	36
11-	1	64	61	1-1	1			4	4	-1	1	61	П	12
11-	-	2 62	12	9   61	œ		97	က	80	61	-	12	00	29
67 17 14	86	9 1 1	7	9-1-	23	28233		49	63	14	86	7	23	193
91 36 16	143	411	16	11 0 4	20	35458		67	4	. 13	143	. 16	20	263
ing Primary rimary	Totals	auma Underlying Primary Other Primary Secondary	Totals	Other Causes Underlying Primary Other Primary Secondary	Totals	1950	Summary of above totals	Infectious/Infective	Neoplastic	Degenerative	:	Trauma	Other Causes	Totals
Congentate Underly Other P Seconda	To	Trauma Under Other Secon	T	Other (Other Other Seco	T	E E E E	Summ	Inf	Ne	De	Cor	Tre	Otl	13

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

AMALYSIS OF CAUSES OF MORTALITY

Deaths from certain Groups of Diseases in each decade from 1871 to 1960, and during the separate years 1961-1968

Years	(a) Infective diseases (less Influenza and Tuberculosis)	(b) Tubercular diseases	(c) Respiratory diseases (including Influenza)	(d) Digestive diseases	Total Deaths from (a), (b), (c) & (d)	(e) Cancer	Total Deaths from all causes
971.1980	97 905 (10.9)	1	1	14.747 (10-0)	-		147,005
981 1890			-		_		146,195
801-1900	13,515 (9.3)		-	-	-		145,522
901-1910			_	-	-		150,962
		14.946 (10-9)	36,480 (27.3)	12,282 (8.9)	74,125 (55.0)	7,603 (5.5)	137,323
	7.831 (6-6)		_		-		117,756
			_		_	-	115,632
	9.645 (9.6)		_		_	-	98,347
1951.1960			_		-	-	90,642
1961			-			-	9,262
169	99 (0-3)	81 (0.9)	-			-	9,162
1063			1,641 (18-4)			_	8,908
16.4	99 (0.3)		_		113	-	8,191
165		43 (0.5)			-	_	8,300
988	12 (0-1)	51 (0-6)	_		-	1,657 (20-0)	8,295
967	28 (0.3)		_		1,622 (199)	-	8,148
0.68		44 (0.6)			-	1,772 (22-3)	7,958

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

Since 1962 the columns have included the following classes:-

Column (a) Class I less Tuberculosis

(c) Class VIII.

(d) Class IX.

(e) Class II.

#### MATERNITY AND CHILD WELFARE

#### MIDWIFERY SERVICE

#### ENQUIRIES INTO HOME CONDITIONS—1968

#### BABIES

Hospital	Suitable for	No	Not Suitable for
Requests	Early Discharge	Contact	Early Discharge
2,854	1,925	497	432

#### HOSPITAL DISCHARGES-1968

#### MIDWIFERY SERVICE — HOSPITAL DISCHARGES

				1	Number	of Days	8		1		D	
Hospital	2	3	4	5	6	7	8	9	10	Total	Pre- mature Births	Total
Sefton General	132	178	109	43	88	265	244	86	49	1,194	121	1,315
Mill Road	302	224	85	82	111	327	215	28	23	1,397	258	1,655
Liverpool Maternity	59	159	355	551	438	255	137	34	10	1,998	111	2,109
Broadgreen	99	111	78	44	43	50	69	31	11	536	58	594
Walton	86	122	42	176	312	162	54	22	22	998	53	1,051
Others	1	3	3	12	26	24	12	5	1	87	3	90
Total	679	797	672	908	1,018	1,083	731	206	116	6,210	604	6,814

	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. 4 lb. 7 ozs. to 4 lb. 15 ozs. 5 lb. to 5 lb. 8 ozs.	3 11 16	1 1 1 1 1	3 24 371
5 lb. 9 ozs. and over	2	_	206
Totals	32	4	604
Sets of twins One of twins Sets of triplets Two of triplets	1		41 8 2

 $\frac{1}{23}$ 

#### Patients Transferred to Hospital-1968

Mothers					Babies	
Malpresentations				32	Congenital Abnormalities	
Postmaturity	***			31	Vomiting	
Ante-partum haeme		e		22	Calcium deficiency	
Pre-eclamptic toxae	emia			21	Asphyxia and cyanosis	
Premature rupture		nbrane	s	18	Twitchings and convulsions	8
Prolonged labour				17	Vomiting and diarrhoea	
Multiple pregnancy				14	Bleeding from umbilicus	
Prematurity				9	Melaena	
Domestic reasons				9	Hirschprung's disease	
Anaemia				9	Grunting respirations	
Rh. incompatibility				8	Jaundice	
Miscarriages				7	, , , , , , , , , , , , , , , , , , ,	
Disproportions				6		
Foetal distress				6		
Premature labour				6		
Multiparity	***		***	5		
Post-partum haemo	nnho oc	***				
	rrnage			5		
Retained placenta		***		3		
Bad obstetric histor	У	***		2		
Intra-uterine death	***			2		
Others	***	***	***	10		

#### Reasons for Midwives Calling in Medical Aid—1968

Mothers					Babies			
Ruptured perineum .				23	Asphyxia			12
Prolonged labour .				21	Septic spots and rashes			10
Puerperal pyrexia .				17	Sticky eyes			9
Malpresentations .		***		12	Twitchings			7
Premature rupture of	men	nbran	es	10	Vomiting			5
Haemorrhoids and va				8	Oral thrush			5
Post-partum haemori	rhage			8	Chest infection			4
Pre-eclamptic toxaen				7	Diarrhoea			3
A				6	Congenital malformation			3
Breast infection .				6	Prematurity			2
Ante-partum haemor	rhage			5	Jaundice			2
The start of the s				5	Snuffles			2
Retained placenta .				5	Blood-stained stools			2
***			***	5	Others			5
Post maturity				4				_
Y				3				71
Multiplicity				3				
Othora				6				
				-				
				154				
Total .				225				
				ischarg	ed from hospital before the	tenth	day,	and
71 were patients deli	vered	at h						100

Of these, 154 were for patients discharged from hospital before the tenth day, and 71 were patients delivered at home.

Patients on Doctors' Maternity Medical List ... ... ... ... ... ... ... ... 135

Patients not on Doctors' Maternity Medical List ... ... ... ... ... ... ... 90

EPIDEMIOLOGY

Enterovirus Survey, 1961-1968

SUMMARY OF RESULTS

Number of children from whom specimens were taken 89 182 140 137 141 131 136 92 1,048  " reported on so far 16 33 29 29 37 41 30 133 80 1,014  " of enteroviruses isolated 16 33 29 29 37 41 30 182 23  Adenovirus type 1									1961	1962	1963	1964	1965	1966	1961	1968	Total
Coxsackie virus type A	r of chiloreporte	dren ed or rovi	from so fa	whom s tr	specim	ens wel	re take	:::	89 85 16	182 180 33	140 134 29	137 133 29	141 139 37	131 130 41	136 133 30	92 80 18	1,048 1,014 233
Coxsackie virus type A		Det	ails	f positiv	e cases												
Coxsackie virus type A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	irus tvp	e 1					:	:	1	1	1	1	1	1	1	1	-
Coxsackie virus type A		67	: :	: :	:	:	:	:	1	-	1	1	1	1	1	1	9
Coxsackie virus type A						::	:	:	1	1	1	1	1	1	1	1	3
2			nd Ca	oxsackie	virus				1	1	1	1	1	1	1	1	1
2	ie virus	type	e A	:	:	:	:	::	1	1	5	-	6	5	67	1	55
" " A4 " " " " " " " " " " " " " " " " "	:	:	A2	:	:	:	:	:	67	1	1	1	1	1	1	1	61
	:	:		:	:	:	:	:	-	1	1	1	-	1	1	I	61
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	:		A5	:	:	:	:	:	1	1	1	1	1	1	1	1	1
A8	:		A6	::	:	:	::		4	1	-	1	1	1	1	1	4
" " A9 "" " " " " " " " " " " " " " " "		**	A8	::	:	:	:	:	1	1	1	1	1	1	1	1	1
	*	:	49	::	:	:	:	:	1	1	1	1	1	1	67	1	67
A16   .	"	**	A10	***	:	:		****	1	61	1	I	1	1	1	1	01
" " B1 "" "" "" "" "" "" "" "" "" "" "" "" ""	**	:	A16		:	:	:		I	1	-	1	1	1	1	1	1
" " B2 " " " " " " " " " " " " " " " " "		:	B1	:	;		:	:	1	1	1	1	61	1	1	1	63
" " B3 "" "" "" "" "" "       3       2       1         " " B4 "" "" "" "" "" "       3       2       1         " " B5 "" "" "" "       " " " " " " "       " " " " " " "         " " " " A with ECHO virus type 1       " " " " " " " " " " " " " " " " " " "			B2	:		::	::		1	1	67	1	1	1	1	1	2
" " " B4	:	**	B3	::	:	:	:	:	1	67	67	1	1	1	¢1	1	-
" " B5	:	**	B4	:	:	:	:	:	1	33	1	1	1	60	1	1	-1
" " B6 In the style of the			B5	::	:		:	:	1	1	1	1	1	1	1	1	60
" " A with ECHO virus type 1 — — — — — — — — — — — — — — — — —	**		B6			:	:	:	1	1	-	1	1	1	1	1	-
, , , , , , , , , , , , , , , , , , ,		:	AW	ith ECE	to vir	us type	1 ,	:	1	1	1	1	1	1	1	1	-
, , , , , , , , , , , , , , , , , , ,	:	**	**		**	**	14	:	1	1	1	1	1	1	I	1	1
	"	**	**			:	25	:	1	1	1	1	1	1	1	1	1
	:		**			**	30	:	1	1	1	1	1	1	1	1	1
	-16	of ente	of enterovi	of enteroviruses    Details of irus type 1 5 5   5   5   10   10   10   10   10   10   10	of enteroviruses isolated    Details of positivative stype 1   5   5   5	of enteroviruses isolated  Details of positive case in the cas	of enteroviruses isolated  Details of positive cases:  " 5  " 5  " 5  " 5  " 5  " 5  " 5  " 7  " 7  " 84  " 84  " 85  " 88 .	Solated	Solated	Solated	Solated 16  solotopesitive cases:  Coxsackie virus type A 2  Coxsackie virus type A 2  10  10  10  10  10  10  10  10  10  1	solated 16 33  of positive cases:  Coxsackie virus type A 16  Coxsackie virus type A	so isolated 16 33 29  so f positive cases:  Coxsackie virus type A 1	se isolated 16 33 29 29 29 29 29 29 29 29 29 29 29 29 29	so isolated	so isolated	solated 16 33 29 29 37 41 30  of positive cases:  Coxsackie virus type A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Coxsackie virus type A with unidentified virus	1964 1965 1966	1967 1908	Total
	1.	1.	
2 4	1	1	- 10
	-	'	00
2 together	1	23	21
2 together	1	-	4
			65
2 together	-	1	1
2 together 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1 23	1	*
2 together 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	- 6	1	22
	0		10
	-		0 0
2 together	1	1	00
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	-	20
2 together	1	1	5
2 together		1	9
2 together	10		6
			-
	1		10
	- 1	1	00
	1	1	7
	1	-	1
	-	1	1
	-	3	11
2 together	10	. 60	16
", ", ", ", ", ", ", ", ", ", ", ", ", "	***	H M	3.5
", types l and 2 together – 2 – 2 – 2 – 2 – 2 – 2 – 2 – 2 – 2	-	-	9
" " " 1.2 and 3 " " - 1 - 1	-		9
	27 0	1 0	9
	21	7	0 1
33	1		0
2 at a 0	1	1	1
Pollovirus, type not identified 1 1 1 1 1 1 1 1 1 1 1 1 1	1		0.
Totals 16 33 29 29 37	37 41	30 18	233

# TUBERCULOSIS RATES

INCIDENCE, PREVALENCE AND MORTALITY RATES FOR PERIODS 1958-1968 INCLUSIVE.

YEAR	Incidence Ra	Incidence Rate per 1,000 of	population	Prevalence Ra	Prevalence Rate per 1,000 of population.	population.	Mortality Ra	Mortality Rate per 1,000 of population	f populatio
	Pulmonary	Non Pulmonary	Over-all Total	Pulmonary	Non Pulmonary	Over-all Total	Pulmonary	Non Pulmonary	Over-all Total
1958	1.04	0.10	1.15	11-31	1.00	12.30	0.143	600.0	0.152
1959	2.15	90-0	2.55	10-53	0.87	11-40	0.135	0.004	0.139
0961	0.58	90-0	0.64	11.22	0-75	11-97	0.107	0.004	0-111
1961	0.54	0-07	0.62	10-14	0.65	10-79	0.107	800.0	0.115
1962	0.59	0.07	0.65	9.05	0.61	99-6	0.099	600.0	0.109
1963	0.53	90-0	0.59	8.02	0.54	8.57	0.073	0.005	0.078
1964	0.37	10.0	0.41	7.14	0.51	7.64	0.052	0.004	0.056
1965	0.34	0-02	0.39	5.84	0.39	6-23	0.058	0.001	090-0
1966	0.33	0.04	0.37	5-17	0.39	5.56	0.065	0.007	0.072
1961	0.33	0.04	0.37	4.59	0.39	4.98	0.061	0.007	890-0
1968	0.32	0.02	0.37	4.05	0.39	4-44	0.057	0.007	0.064

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

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

Population as at Mid-year.

#### TUBERCULOSIS

#### NOTIFICATIONS-AGE GROUPS 1968

Age	Male	Female	Tota
-1	_	_	_
1-	1	1	2 4
2-	2	2	4
3-	1	-	1
4-	_	-	_
5-	6	1	7
10-	4	1	5
15-		10	12
20-	2 8 7	12	20
25-	7	6	13
30-	10	10	20
35-	8	8	16
40-	13	11	24
45-	12	4	16
50-	15	4	19
55-	12	6	18
60-	18	6 4 6	22
65-	16	6	22
70-	16	1	17
75-	6	3	9
80+	4		4
Age unkno		_	1
Totals	162	90	252

Number of persons examined for time	the fi	rst	4,342	Numb	er for	ind to be fi	ree of c	lisease		2,590
Number found to be definitely tu as detailed in 'A' below	berculo	ous	296		er for lition	and to be a	sufferin 	g fron		1,456
	R	ESPIR	ATORY	Non	-RES	SPIRATORY		Тот	AL	GRANI
DIAGNOSIS	Adı	ılts	Children		ults	Children	Adı	ılts	Children	TOTAL
	M.	F.	Children	M.	F.	Children	M.	F.	Cinnaren	
A.—New Cases examined during the year	168	81	16	13	14	4	181	95	20	296
B.—Contacts examined during the year:  (a) Definitely tuberculous  (b) Diagnosis not completed (c) Non-tuberculous	3 553	5 2 616	6 7 1,296	=	=		3 553	5 2 616	6 7 1,296	14 9 2,465
C.—Cases written off the Register as Recovered	250	223	39	9	21	3	259	244	42	545
D.—Number of Cases on Register on 31st December 1968: (a) Definitely tuberculous (b) Diagnosis not completed	872 5	120 1	90	137	32	1,409 10	1,009 5	152 1	2,570 16	
	(b) Diagnosis not completed 10   Number of attendances of patients at the Chest Clinics during the year 1968					patients thome on 3				481
Number of visits paid by the Tu Medical Officer to the homes of during 1968			40	of	num patie ring	ber of visit nts by T 1968	ubercu	to the	Visitors	14,906
Total number of cases vaccina B.C.G. during 1968. Children Others	ted w	ith 	1,217 222	in i	Sefto	newly bor n General d Liverpoo	Hospit	al, Wa	alton Gene	Ward

	Chile (0-4 y			children years)		ts & Adults years)
Year	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
	26	59	51	67	1234	148
1940	33	68	44	79	1225	158
1941	32	63	54	84	1284	201
1942		60	64	107	1368	168
1943	47 29	45	68	58	1344	147
1944		45	60	70	1360	133
1945	35		63	72	1380	125
1946	35	40 37	88	69	1341	128
1947	50		79	49	1490	130
1948	51	49	77	63	1479	107
1949	63	41		41	1353	91
1950	106	32	113	47	1328	87
1951	106	26	101	35	1318	67
1952	90	37	161		1175	78
1953	77	18	130	27		97
1954	46	22	114	28	975	71
1955	46	24	82	23	951 938	81
1956	34	9	88	13		80
1957	46	9	79	12	892	48
1958	47	17	61	11	686	30
1959	29	12	54	6	1550	
1960	17	3	24	5	398	36
1961	19	6	26	6	360	42
1962	24	3	23	2 2 2	391	45
1963	35	3	37	2	319	38
1964	16	3	17	2	240	23
1965	9	3	15	3	225	28
1966	12	_	15	4	208	26
1967	6	1	9	3	219	25
1968	7		9	3	203	30

B.C.G. VACCINATION SCI	HOOL (	HILDRI	EN-19	68				
Number of School Childre					on		 	10,739
Number of acceptors							 	9,667
Number Heaf-tested						***	 	7,394
Number of positive Heaf	tests						 	1,130
Number of children vacci		with B	.C.G.				 	5,392

B.C.G. VACCINATION OF SCHOOL CHILDREN, HEAF TESTS-1957-1968

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

#### MENTAL HEALTH SERVICE

## References to Mental Health Service and Action Taken 1968.

#### REFERENCES

So	ources	f Refe	erence					No. of references
	- 00			ILS.				373
General Practitioners	often	dmice	ion					68
Hospitals for Section 25 action	after	dmiss	ion					61
Hospitals for Section 26 action	alter	idmiss	sion	***				
Hospitals—	1							190
Casualty and reception was	rds							107
After out-patient or day tr	eatmen	it			***			1,763
In-patients on discharge	***	***	***	***			***	70
Requesting reports	***		***	***				10
Education Department—							-	54
Children unsuitable for edu	acation	in sch	lool	***	***	***		110
Special school leavers				***		444	***	110
Other references				***		***	***	70
Police and Courts							***	79
Relatives natients, public box	lies, etc						***	333
Various sources, patients rec	eiving	comm	unity .	care and	d refe	rred fo	r re-	
admission to hospital						***		444
			T	otal				3,656

#### ACTION TAKEN IN ABOVE CASES

To the second			Acti	ion		ini				No. of cases
Admitted to ho	spital u	nder Me	ntal	Health	Act—					010
Section 29								***		316
Section 25										234
Section 26								***		11
Section 60										29
Section 67				***						2
Informal								***		641
Mental Health	Act act	ion afte	r hos	pital ad	mission	Section	25			68
Melical Health						Section	26			61
Admitted non-I	svehia	tric host	oitals					***		2
Home reports s	ent to	hospital								70
Escorts to hosp	ital							***	***	74
Placed on comr	nunity									2,084
No further acti	on nece	essarv								64
No ful ther acti	on nece	J.							-	0.000
					To	otal				3,656

<sup>\*</sup>This number represents only a proportion of total informal admissions, in many cases the Mental Health Service was not involved in admission

	(A)	(B)	(C)
Month	Accident/ Emergency Calls	False calls with good intent	Malicious False calls
January	 2,035	109	33
February	 1,943	119	18
March	 2,216	168	22
April	 2,240	158	33
May	 2,186	175	34
June	 2,083	142	35
July	 2,204	178	28
August	 2,100	161	33
September	 1,999	138	26
October	 2,085	165	28
November	 2,047	144	25
December	 2,201	176	36
Total	 25,339	1,833	351

<sup>(1)</sup> The totals shown in columns (B) and (C) are to be taken as being included in column (A), but are shown thus for statistical purposes.

#### INFECTIOUS PATIENTS-1968

				Hospital to		Т	YPE
	1	Month	Admissions	Hospital Transfers	Total	Sitting Cases	Ambulance Cases
January			 133	22	155	116	39
February	7		 70	24	94	58	36
March			 96	16	112	72	40
April			 79	16	95	68	27
May			 82	20	102	67	35
June			 103	27	130	92	38
July			 153	31	184	118	66
August			 105	21	126	88	38
Septemb	er		 116	13	129	79	50
October			 159	26	185	114	71
Novembe	er		 145	24	169	118	51
Decembe	r		 118	15	133	101	32
		Total	 1,359	255	1,614	1.091	523

#### Age of Vehicles in Years—1968

	1968	1967	1966	1965	1964	1963	1962	1961	1960
Ambulances	 Under 1	1-	2-	3-	4-	5-	6-	7-	8-
50.2	16	8	14	16	1	12	8	2	_
Handicapped persons transport vehicles	 2	7	7	7	_	13	_		

				1967	1968
Diesel Ambulance	s		 	26·4 m.p.g.	24·05 m.p.g.
Petrol Ambulance	s		 	16·1 m.p.g.	15·2 m.p.g.
Dual-Purpose Am	bulanc	es	 	15·5 m.p.g.	15·1 m.p.g.
Sitting-case Ambi			 	20·8 m.p.g.	18.6 m.p.g.
Vehicle Mileage			 	1,039,806	982,373
Fuel—Diesel			 	5,142 gallons	3,128 gallons
-Petrol			 	56,692 gallons	59,519½ gallons 811 gallons
Oil			 	1,041½ gallons	orr gamons

## Average mileage for the fleet was as follows:-

Type of	Vehicle	Average Mile		Percentage increase/ decrease on 1967
Ambulances I	Petrol	1967 18,476	1968 15,360	— 16.8%
1	Diesel	15,078	10,032	— 33.5%
Sitting-case A	mbulances	14,217	13,285	— 6·5%
Sitting-case Ca	ars	5,984	4,477	- 25.2%

#### Fuel Consumption

Stretcher case ambulances	 Petrol	15.2 miles per gallon
	Diesel	24.05 ,, ,, ,,
Sitting-case ambulances	 Petrol	15.1 ,, ,, ,,
Sitting-case cars	 Petrol	18.6 ,, ,, ,,

The total petrol consumption during 1968 increased by 2,827 gallons or 4.9 per cent to  $59,519\frac{1}{2}$  gallons and the diesel fuel consumption decreased by 2,014 gallons or 39.2 per cent to 3,128 gallons.

PATIENT REMOVALS-1968

Number of Persons Carried	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Non-infectious— Out-patients	17,729	15,637	18,098	18,240	20,916	14,555	16,509	15,311	14,199	16,932	15,847	13,569	197,542
Discharges	3,263	3,092	3,254	3,043	3,123	2,660	2,694	2,627	2,610	2,818	2,931	3,112	35,227
Inter-Hospital Transfers	969	909	664	750	699	635	700	640	635	969	632	517	7,840
Infectious—													
Hospital Admissions/ Discharges	133	70	96	79	85	103	153	105	116	159	145	118	1,359
Inter-Hospital Transfers	22	24	16	16	20	27	31	21	13	26	24	15	255
Accident/Emergency	1,960	1,882	2,117	2,127	2,061	1,977	2,061	1,995	1,890	1,966	1,968	2,040	24,044
Other Persons	-	42	1	318	41	98	21	222	18	16	15	56	635
Totals 1968	23,803	21,353	24,245	24,573	26,912	20,043	22,169	20,721	19,481	22,613	21,562	19,427	266,902
Totals 1967	25,627	23,362	24,534	23,429	25,119	24,277	22,984	22,859	22,112	23,581	23,863	21,708	283,455

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AMBULANCE		Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oet.	Nov.	Dec.	Total
Diesel	Mileage Fuel-gallons Oil-quarts	8,159 330 431	5,896 256 34	7,033 298 22	7,666 329 30	5,983 245 16½	6,776 252 16	3,985 168 23	6,608 278 12 <u>1</u>	4,677 202 22	6,190 244 31½	6,808 299 17	5,463 227 5 <u>1</u>	75,244 3,128 273½
Petrol	Mileage Fuel-gallons Oil-quarts	2,635	42,116 2,707 31 99	40,757 2,645 137	40,717 2,686 164	44,554 2,880 176½	37,621 2,310 120½	42,873 2,793 133	41,201 2,702 100	41,996 4 2,755½ (17) 157	45,907 3,060 (29) 162	45,754 3,179 (19) 153	47,061 3,287 107	512,014 33,639½ (65) 1,657½
Dual-purpose	Mileage Fuel-gallons Oil-quarts	34,550 2,337 116	30,342 2,099 70	36,965 2,483 (5) 102	35,808 2,411 183½	37,421 2,449 114	28,113 1,803 110	34,694 2,221 109	27,901 1,776	26,359 1,682 82	30,590 2,002 83	26,225 1,756 86	23,013 1,616 81	371,981 24,635 (5) 1,265
Sitting Case	Mileage Fuel-gallons Oil-quarts	2,592 124 5	2,342 134	2,083 116 11 <u>4</u>	2,539 133 10½	1,565 108 4	1,855 91 1	1,864	1,705 97 12½	1,665 80 11	1,858 92 6	1,522 99 2½	1,544 84 1	23,134 1,245 48½

TOOR BELLEVIOUS	1968	Fuel M.P.G. Oil M.P.P. 24-05 137-5 15-2 154-5 15-1 19-1 18-6 238-5	
(Oil figures in quarts.) Figures in brackets snow tuel obtained from comes food attended of the comes		Fue	982,373 miles 3,128 gallons 59,519½ gallons 811 gallons
ANALYSIS		Oil M.P.P. 145-7 123-9 117-5 181-3	
	1967	Fuel M.P.G. Oil M.P.P. 26.4 145.7 16.1 123.9 15.5 117.5 20.8 181.3	Vehicle mileage Fuel—diesel Fuel—petrol
		Diesel ambulances Petrol ambulances Dual-purpose ambulances Sitting-case ambulances	

#### MEDICAL EXAMINATIONS-1968

Department	Admi te Sur annu Sche	o er- ation	0	nsion of pay	Fitne nev appoi offi	vly	cont	bility o tinue oloy- ent	Tota
	Fit	Unfit	Fit	Unfit	Fit	Unfit	Fit	Unfit	
Airport	 15	1	1		7	_	_	_	24
Art Gallery	 2	1	_	-	1		_	_	4
Baths	 90	2		_	5	-	6	3	55
Building Surveyor's	 _	_		_	3		_	_	3
Central Purchasing	 			-	25		1	1	27
Children's	 1	_	-	_	104	5		1	111
City Analyst	 _			_	2			_	2
City Architect's	 1		1	_	13		2	_	17
City Engineer's	 187	7	20	12	239	_	22	25	512
City Estates	 12	5	5	1	34	_	19	17	93
City Lighting	 21	2	2		3		2	5	35
City Planning	 	-		-	14	_	1	1	16
City Treasury	 1			1	175	1	3	î	182
Education	 79	12	8	4	495	3	44	106	751
Fire Service	 4		16	_	72	9	63	5	169
Health	 23	1	3		385	6	20	22	470
Housing	 50	7	_	_	51	_	19	9	127
Libraries	 6		-	1	79	2	13	4	105
Magistrates	 _		-		12	_		-	12
Markets	 8	2		1	ĩ		4	3	19
Mersey Tunnel	 3		3		35	1	8	9	59
Museums	 4	2	_	_	8	-	2	1	17
Parks & Recreation	 95	5	7	1	29	2	8	7	154
Passenger Transport	 369	9			36		5	29	475
Police	 12	2	13	3	46	1	48	8	133
Probation	 _	_	_	_	18	_	40	1	19
Town Clerk's	 1				57			2	60
Water	 73	6	14	5	12		6	7	123
Weights & Measures	 	_	14	_	6	1	2		8
Works	 289	31	40	11	44	2	146	62	634
Welfare	 41	1	1	-	48	1	12	17	120
TOTAL	 1,382	96	134	40	2,059	32	447	346	4,536

Total Fit ... 4,022 Cancelled ... 420
Total Unfit ... 514 Other Authorities ... 67

#### ENVIRONMENTAL HEALTH CONTROL

0 ö Costs 0 60 13 13 0 0 0 0 0 0 Penalties £ 8. d. 10 10 360 12 105 125 93 No. of Informations or Complaints 01 18 56 85 Food not of quality demanded Evening Closing 10(1) 4(1) Section : ÷ i : : : FOOD HYGIENE (Markets, Stalls and Delivery Vehicles)
REGULATIONS, 1966 SUMMARY OF PROSECUTIONS (CASES HEARD)-1968 : : : : Food Hygiene (General) Regulations, 1960 Shops Act and Food and Drugs Act, Regulations : : Act : Offices, Shops and Railway Premises Act, 1963 2 Food and Drugs Act, 1955 Shops Act, 1950/1965

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# FACTORIES ACT, 1961

#### PART 1 OF THE ACT

1. Inspections for purposes of provisions as to Health (including inspections made by the Public Health Inspectors).

Premises (1)	Number on Register (2)	Inspections (3)	Number of written notices (4)	Occupiers prosecuted (5)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by local authorities	56	110	2	-
(ii) Factories not included in (i) in which Section 7 is enforced by local authority	2,976	2,039	55	_
(iii) Other premises in which Sec- tion 7 is enforced by the local authority (excluding out- workers premises)	97	145	2	
Total	3,129	2,294	59	_

#### 2. Cases in which Defects were found.

Particulars	Found	Remedied		f Cases in fects were Referred	Number of Cases in which
(1)	(2)	(3)	To H.M. Inspector (4)	By H.M. Inspector (5)	Prosecutions were instituted (6)
Want of Cleanliness (S.1.)	3	3	1	1	-
Overcrowding (S.2.)	-	_	_	-	3-
Unreasonable temperature (S.3.)	_	_	_	12	P P
Inadequate ventilation (S.4.)	_	-	1	_	1
Ineffective drainage of floors (S.6.)	_	-		_	_
Sanitary Conveniences (S.7.) (a) Insufficient	5	5	-	2	8
(b) Unsuitable or defective	82	82	1	19	_
(c) Not separate for sexes	1	1	8 - 8	1	-
Other offences against the Act (not including offences relating to Outwork)	2	2	Lious YAU RO	_	000
Total	93	93	3	23	- E

#### FACTORIES ACTS

#### PART VIII OF THE ACT

#### OUTWORK

#### SECTIONS 133 AND 134

140 400		Section 133	DOM:		Section 134	
Nature of Work (1)	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	No. of prosecutions for failure to supply lists	No. of instances of work in unwhole- some premises (5)	Notices served	Prosecutions (7)
Wearing apparel- making, etc	39	_	1001	enseE	_	_
Christmas stockings	89	DOLL SE	- THE	and a	_	-
Total	128		_	_	_	_

# CLEARANCE AREAS NOT YET CONFIRMED BY THE MINISTER at 31st December, 1968

Area					Houses	Familie
Pickering Street Clearance Area, 1966					604	728
Richmond Terrace Clearance Area, 1966					4	12
Woodville Terrace No. 1 Clearance Area,	1966				58	64
Woodville Terrace No. 2 Clearance Area,					25	28
Cupid Street Clearance Area, 1966					340	349
Stanfield Road Clearance Area, 1966					1,076	1,158
Hamilton Road No. 1 Clearance Area, 196					5	5
Hamilton Road No. 2 Clearance Area, 196					7	8
Netherfield Road North No. 5 Clearance					12	13
Toxteth Street Clearance Area, 1967	ar cw,	, 1000			226	263
Ballington Street Clearance Area, 1967					115	120
Kingsley Road No. 2 Clearance Area, 196	7			***	44	70
Kingsley Road No. 3 Clearance Area, 196				***		
					15	15
Maitland Street Clearance Area, 1967	•••				42	43
Mill Street No. 12 Clearance Area, 1967					2	3
Mill Street No. 13 Clearance Area, 1967					5	12
Aiken Street Clearance Area, 1967	***		****		176	190
Lockhart Street Clearance Area, 1967		***			53	56
Grafton Street No. 3 Clearance Area, 1967	7				8	11
Menzies Street Clearance Area, 1967					764	803
Bousfield Street Clearance Area, 1967					135	145
Beloe Street Clearance Area, 1967					9	11
Tapley Place No. 1 Clearance Area, 1967					25	31
Tapley Place No. 2 Clearance Area, 1967					3	2
Derby Place Clearance Area, 1967					11	9
Douro Place Clearance Area, 1967					6	4
Barry Street Clearance Area, 1967					650	684
2007 111			***		000	084

# CLEARANCE AREAS NOT YET CONFIRMED BY THE MINISTER at 31st December, 1968—continued

Area		Houses	Families
Salop Street No. 1 Clearance Area, 1967	 	 137	143
Salop Street No. 2 Clearance Area, 1967	 	 54	55
Salop Street No. 3 Clearance Area, 1967	 	 4	4
Florence Street No. 1 Clearance Area, 1967	 	 10	12
Florence Street No. 2 Clearance Area, 1967	 	 3	3
Tetlow Street No. 3 Clearance Area, 1967	 	 2	2
Walton Lane Clearance Area, 1967	 	 14	16
Freeland Street Clearance Area, 1967	 	 331	375
Fordham Street Clearance Area, 1967	 	 68	77
Langham Street No. 1 Clearance Area, 1967	 	 73	106
Langham Street No. 2 Clearance Area, 1967	 	 14	22
Langham Street No. 3 Clearance Area, 1967	 	 3	3
Netley Street Clearance Area, 1967	 	 56	60
Luton Grove Clearance Area, 1967	 	 9	10
Tetlow Street No. 4 Clearance Area, 1967	 	 4	4
Salop Street No. 4 Clearance Area, 1967	 	 4	4
Grinfield Street No. 2 Clearance Area, 1967	 	 29	30
Nile Street No. 1 Clearance Area, 1967	 	 32	57
Nile Street No. 3 Clearance Area, 1967	 	 4	4
Alfred Street Clearance Area, 1967	 	 34	53
St. James Road Clearance Area, 1967	 	 19	50
Rathbone Street Clearance Area, 1967	 	 5	8
Washington Street Clearance Area, 1967	 	 3	5
Great George Street Clearance Area, 1967	 	 2	13
Kemble Street Clearance Area, 1967	 	 227	234
Mulgrave Street No. 1 Clearance Area, 1967	 	 37	140
Mulgrave Street No. 2 Clearance Area, 1967	 	 . 7	2:

# CLEARANCE AREAS NOT YET CONFIRMED BY THE MINISTER at 31st December, 1968—continued

Area		Houses	Familie
Mulgrave Street No. 3 Clearance Area, 1967	 	3	12
Crosfield Road No. 1 Clearance Area, 1967	 	321	337
Cotter Street Clearance Area, 1967	 	35	47
Ash Street Clearance Area, 1967	 	104	106
Raglan Street Clearance Area, 1968	 	163	178
Cherry Lane Nos. 1–5 Clearance Areas, 1968	 	39	39
Lilly Grove Clearance Area, 1968	 	15	14
Lestock Street Clearance Area, 1968	 	5	5
Upper Stanhope Street No. 2 Clearance Area, 1968	 	7	13
Celia Street Clearance Area, 1968	 	323	349
East Prescot Road Nos. 6 & 7 Clearance Areas, 1968	 	9	8
Crosfield Road No. 2 Clearance Area, 1968	 	173	182
Brasenose Road Nos. 1 and 2 Clearance Areas, 1968	 	335	370
The Elms Nos. 1–3 Clearance Areas, 1968	 	14	41
Welfield Place Clearance Area, 1968	 	54	83
Beaufort Street No. 10 Clearance Area, 1968	 	5	6
Jenkinson Street Clearance Area, 1968	 	23	26
Claypole Street Clearance Area, 1968	 	587	614
Cardigan Street Clearance Area, 1968	 	233	239
Bridport Street Nos. 1 and 2 Clearance Areas, 1968	 	18	21
Combermere Street Clearance Area, 1968	 	7	7
Northumberland Street No. 5 Clearance Area, 1968	 	5	5
Upper Parliament Street No. 8 Clearance Area, 1968	 	9	21
Anson Street Clearance Area, 1968	 	5	7
Valker Street Nos. 1 & 2 Clearance Areas, 1968	 	17	19
		8,114	9,099

## COMPULSORY PURCHASE ORDERS CONFIRMED DURING 1968

Order	r	e mereno		No. of Houses	No. of Families
Westbourne Street C.A. C.P.O.			 	 6	8
Melville Place Area C.P.O			 	 61	111
South Street Area C.P.O			 	 991	1,112
Marlborough Street Area C.P.O.			 	 15	18
Kinder Street Area C.P.O			 	 59	69
Beacon Lane Area C.P.O			 	 944	998
Everton Valley Area C.P.O			 	 80	116
Erskine Street C.A. C.P.O			 	 346	408
Solway Street Area C.P.O			 	 65	70
Clyde Street C.A. C.P.O			 	 14	15
Esk Street C.A. C.P.O			 	 7	7
Forge Street C.A. C.P.O			 	 8	9
Balkan Street Area C.P.O			 	 61	61
Kimberley Street Area C.P.O.			 	 302	783
Whalley Street C.A. C.P.O			 	 330	348
Norwood Grove Area No. 3 C.P.(	)		 	 242	277
Norwood Grove Area No. 1 C.P.C			 	 369	450
Priory Grove Area C.P.O			 	 923	972
				4,823	5,832

## CLEARANCE ORDERS CONFIRMED DURING 1968

1-4 1 1-3		Oro	ler		One		No. of Houses	No. of Families
Sefton Park Road				 			1	-
Arley Street				 			13	14
Brunswick Place				 			8	10
Boundary Street				 			5	5
Mill Lane (Old Swan	(			 			10	9
Haddock Street				 			5	5
Buttermere Street				 			10	10
Haddock Street No.	2			 			22	29
Wilbraham Street				 			11	11
Woodville Terrace				 			7	7
William Moult Stree	t			 			4	5
						- 10	96	105

## CLEAN AIR ACT, 1956

# Inspections, Observations, Etc. Particulars of Inspections, 1968

Particulars of	Inspecti	ons, 15	00			
Number of Inspections to Secure Smoke (	Control				***	14,826
Incidental Visits						1,894
Special Visits						721
Re-Visits						7,511
Advisory Visits						2,048
Total Number of Appliances Examined						3046
OBSE	RVATIO	NS				
	RIAL CHIM					
						1,438
Routine Observations				77.5		901
Special Observations			***	****		20
Total Minutes of Excess Smoke Recorde	d					
	TTDDING	,				
8.	HIPPING	×				59
Routine Observations		•••				00
CLEAN AIR ACT, 1956, SECTION 3						
Approval of		irnaces	1968			
Notices of Intention to install received.						58
						38
						38
CLEAN AIR ACT, 1956, SECTION 10						
Heights of		imneys	1968			
Plans examined to Check Chimney Hei	ght					86
Plans approved						72
Plans approved after Chimney Height	Increased					14

ATMOSPHERIC POLLUTION MEASUREMENT—1968

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							SMC	SMOKE								SC	SULPHUR	UR							
	Ja	Jan F	Feb N	Mar	Mar Apr May Jun	day 3		Jul	Aug S	Sep (	Oct	Nov	Dec	Jan	Feb	Mar	Apr		May Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Value	:					30	15	40	30	51	74	CRO)	ROXTETH 138 165	HALL				202	152	259	247	259	235	270	229
Highest Value	:					127	36	83	37	82 2	212	170	222					444	362	400	349	387	344	301	250
Lowest Value	:					4	ī	11	œ	œ	17	27	30					106	36	35	7.9	79	40	00	70
Average Value	:						32	59	80	79 1	142 2	GR 208	GREEN 1 8 215	LANE					101	7.9	68	135	176	247	265
Highest Value	:						1 66	133	88 1	177 3	369	554	641						181	221	155	297	427	586	477
Lowest Value	:						ಣ	-	16	24	59	7	1						39	11	9	09	09	13	4
Average Value	oò :	84 2	279	61	78	25	25	62	26	74 1	H 122 2	HATT 200	HATTON G/ 200 126	ARDEN 350	488	220	255	161	125	150	142	229	324	341	339
Highest Value	424 467	4		187 2	211 1	141	54 1	155 1	112	194 3	354	569	431	530	788	580	392	336	275	284	334	418	546	883	636
Lowest Value	:	63	00	18	19	10	60	22	19	20	15	39	31	115	266	96	99	99	61	32	61	135	1	78	125
Average Value	:	1	73	22	18	14	14	56	11	13	13	L.A 88	LARK L. 8 221	ANE	344	193	218	221	170	250	219	258	267	339	499
Highest Value	- :	-	114	99	54	553	30	22	18	24	32	257	308	1	918	442	503	415	308	332	297	362	402	401	602
Lowest Value	1	1	18	10	4	10	4	00	01	-	1	-	43	1	172	91	115	86	75	104	79	82	106	110	148
Average Value	112 163	2 16		20	71.	62	100	33	20	66 1	100	N 135	WOOLTON 165 2	ON 202	324	142	158	167	116	93	133	201	210	295	344
Highest Value	282	50	574 139 193	39 1		150	900	06	61	99 2	263 2	553	294	432	844	352	294	328	233	258	194	302	417	744	423
Lowest Value	43		45	23	27	55	10	10	16	66	06	43	5.4	0.2	150	RR	36	7.9	88	1	69	2,	33	0.7	103

The station at Croxteth Hall could not be operated during January to April.

The station at Green Lane is a new station—and came into operation in June.

		Infest	Infestations			Reinfestations during the Year	tations he Year		Category	gory	Total infesta-	Total
Description of Premises	Premises	Rats	Rats and Mice	Mice	Premises	Rats	Rats and Mice	Mice	Major	Minor	77 1	remedied
Shops	946	250	16	089	38	18	1	22	I	986	986	731
Factories	258	136	15	107	17	12	1	7	1	277	277	192
Warehouses	169	120	4	45	10	44	1	1	1	174	174	148
Dwelling-houses	2,462	1,136	1	1,325	10	4	1	60	1	2,469	2,469	2,850
Other buildings and lands	1,110	415	24	671	49	13	-	40	1	1,164	1,164	845
Food premises (included in above)	(730)	(233)	I	(497)	(4)	(3)	Î	(1)	Î	(734)	(734)	(586)
T. Jones F.	4.945	2,057	09	2,828	114	51	1	73	1	5,070	5,070	4,766

	Cattle Excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed 300,827	30,211	12,096	1,401	168,984	88,135
Number inspected 300,827	30,211	12,096	1,401	168,984	88,135
All diseases except tuberculosis and cysticerci Whole carcases condemned Carcases of which some part or organ was condemned	4 2,295	59 5,727	299 112	1,042 53,532	220 6, <b>6</b> 82
Percentage of the number inspected affected with diseases other than tuber- culosis and cysticerci	7.6%	47.8%	29.3%	32.2%	7.8%
Tuberculosis only Whole carcases condemned	_	_	_		_
Carcases of which some part or organ was condemned	23	5	_	1-	440
Percentage of the number inspected affected with tuberculosis	0.07%	0.04%	_	1-	0.5%
Cysticerci Carcases of which some part or organ was condemned	28	7	_	4	
Carcases submitted to re- frigeration	28	7	_	4	_
Generalised and wholly con- demned	_	_	_	_	_

QUANTITY OF FOOD CONDEMNED FOR DISEASE OR FOUND UNFIT FOR HUMAN CONSUMPTION—1968

					Tons	Cwts.	Qrs.	Lbs.
Beef, mutt	on,	veal and	pork	 	316	2	1	5
Offal		***		 	204	4	3	19
Fish				 	10		2	_
Poultry				 	2	15	3	14
Fruit			***	 	65	12	2	22
Vegetables				 	116	5		14
Canned go	ods	***		 	41	19	3	23
Sundries				 	4	9	_	19
					761	10	2	4

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