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Report

on the Health of the

City of Liverpool

for

1971

by the

MEDICAL OFFICER OF HEALTH

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Report

on the Health of the

City of Liverpool

for the year

1971

by

ANDREW B. SEMPLE, C.B.E., V.R.D., M.D., D.P.H., Medical Officer of Health

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Councillor J L Walsh (Chairman)

Aldermen

A N Bates

A B Collins MBE

(Died January 1972)

R Rattray

F Woolfenden

Councillors

WF Burke

J W Butler

E M Clein

H Francis

I Levin

J McLean

Mrs E Nield

Mrs M Josephine Powell

J F Stevens

R Stoddart

Dr C Taylor

N Wood

Representing Local Executive Council

Mr J H Sunter

Mr W J Tristram

Representing Local Medical Committee

Dr M Solomon

Dr W P Wilson

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Deputy Chairman

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Aldermen

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(Died 18th October 1971)

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Personal Services Society Mrs S Kay

Welfare Organisations, Committee, Mr J M Moores, Jnr (Chairman) Liverpool Council of Social Services

Miss Barbara Wood

Liverpool Catholic Children's Protection Society Father J Dunne (Administrator)

Senior Staff

HEALTH DEPARTMENT

Medical Officer of Health

Professor Andrew B Semple,

CBE, VRD, MD, DPH

Principal Medical Officer

(Epidemiology)

(A/Deputy in absence of MOH)

R S E Cutcliffe MRCS, LRCP, DPH

Principal Medical Officer

(Mental Health)

T L Begg, MB, ChB, DPH

Principal Medical Officer (Medical Examinations)

J K Howard, MB, ChB, BD

Principal Assistant (Administration)

A C James, Dipl PA

PERSONAL HEALTH SERVICES DEPARTMENT

Director

Miss Esther M E Ramsay,

MB, CHB, DPH

Chief Ambulance Officer

A Guinney

Principal Nursing Officers

Miss A Watson B H Dickinson Miss I Ferguson

SOCIAL SERVICES DEPARTMENT

Director

Brian Meredith Davies, MD DPH

ENVIRONMENTAL HEALTH AND PROTECTION DEPARTMENT

Director

Miss Audrey Lees,

BArch, ARIBA, DiplTP, MTPI

Chief Public Health Inspector

W H Wattleworth

Chief Disinfecting Inspector

R C Symes (Retired November 1971)

Preface

I have the honour to present my 20th Annual Report as Medical Officer of Health of the City of Liverpool and the 124th report in the series.

As I am no longer directly responsible for the management of most of the services which have to be mentioned in the statutory report, the report is divided into four parts.

- Part A The Health Department for which I am fully responsible.
- Part B The Personal Health Services Department under the direction of the Director of Personal Health Services (Dr E. M. Ramsay).
- Part C The Social Services Department under the management direction of the Director of Social Services (Dr Brian Meredith Davies).
- Part D The Environmental Health and Protection Department under the management control of the Director (Miss Audrey Lees).

As a functional officer I am still responsible for all the health standards of the city, and for advising the Council on all public health and medical matters.

The Registrar-General's estimate of the city's population as at June 1971, fell by 63,790 compared with the figure for June 1970. It is likely that the estimate for 1970 was somewhat inflated, so that the various rates for that year based on population are on the low side. This possibility would help to account for many of the increases in death rate which can be seen in the 1971 figures.

The advance census figures show that whilst the proportion of persons aged 65 and over is still less in Liverpool than the national average, it is also now much nearer to the national average, and substantially higher than it was at the last full census in 1961. This fact also will help to account for the higher death rates.

The number of live births fell by over a thousand, the birth rate being below the national average (which was 16.0 in 1971) for the first time for many years. The number of illegitimate births fell by a hundred, but the percentage of illegitimate to total live births rose slightly.

There was an increase in dysentry especially in the last quarter of the year. Tuberculosis (non-pulmonary) increased from 28 to 34.

Measles dropped from 7,110 in 1970 to 569 in 1971. Whooping cough also dropped, from 734 to 146. Decreases were also recorded in food poisoning, infective jaundice, ophthalmia neonatorum and scarlet fever.

No cases occurred of anthrax, cholera, diphtheria, paratyphoid, poliomyelitis, plague or smallpox.

The new management arrangements are now fully operational in Liverpool and although they leave much to be desired, especially in the various aspects of collaboration, they are satisfactory because the responsible officers are almost all former members of the Health Department, who worked together as an integrated team in the past. And now, we are in the midst of yet another reorganisation to implement the requirements of the White Paper on the National Health Service Reorganisation: England (Cmnd 5055) and the provisions of the National Health Service Reorganisation Bill.

I welcome this new move for two reasons. First, an integrated health and medical care service is timely and will promote efficiency in health care for the public. Second, as the areas where collaboration must take place between the new health authorities and the local authorities have been studied, defined and detailed rules for collaboration laid down, this will provide a better basis for collaboration for the future. But as always, success will depend on good will and a willingness to work together by all concerned.

I wish to record my thanks to the staff of the Health Department for their continued efforts and loyal support, and the three directors of the new departments for providing information for inclusion in this report in respect of the services for which I am no longer personally responsible. I am also grateful to the Chairmen and members of the Committees which now deal with the former Health Department services.

I am,

Your obedient servant,

Medical Officer of Health.

andrew B. Semple

Vital Statistics

	1969	1970	1971
Area (land and inland water)-acres	27,819	27,819	27,819
Population (Estimated by Registrar-General)	677,450	667,000	603,210
Deaths (all causes)	8,317	8,050	7,974
Death rate per 1,000 (unstandardised)	12.3	12.1	13.2
Live Births	11,268	10,673	9,551
Live Birth rate per 1,000 population	16.6	16.0	15.8
Percentage of illegitimate live births	11.4	11.5	11.8
Stillbirths	168	174	150
Stillbirth rate per 1,000 total (live and still) births	14.7	16.0	15.5
Total Births (live births and still births)	11,436	10,847	9,701
Infant Deaths (under one year)	227	225	210
Infant Mortality rate per 1,000 live births	20.1	21.1	22.0
" " " 1,000 legitimate births	20.2	21.2	20.9
" " " 1,000 illegitimate births	19.4	20.3	30.9
Neo-Natal Mortality rate (under 28 days) per 1,000			
related live births	12.3	13.4	14.4
Early Neo-Natal Mortality rate (under one week)			
per 1,000 related live births	10.6	11.3	12.3
Perinatal Mortality rate (stillbirths and deaths under			
one week) per 1,000 total live and stillbirths	25.0	27.2	27.5
Maternal Deaths	4	3	1
Maternal Mortality rate per 1,000 total births	0.350	0.277	0.103
Deaths from:			
Pulmonary Tuberculosis	25	24	21
Death rate per 1,000 population (unstandardised)	0.037	0.036	0.035
Non-pulmonary Tuberculosis	3	7	5
Death rate per 1,000 population (unstandardised)	0.004	0.010	0.008
Respiratory Diseases	1,451	1,352	1,268
Death rate per 1,000 population (unstandardised)		2.0	2.1
Cancer (all forms)	1,825	1,752	1,736
Death rate per 1,000 population (unstandardised)		2.6	2.9

Population

The Registrar-General's estimate of the city's population as at June 1971 was made in the light of the census of April 1971, and shows a reduction of 63,790 on the figure for June 1970. It is likely that the Registrar-General's estimates towards the end of the intercensal period were too high, and in consequence the rates based on population for those years are rather lower than they should be, and the differences between the 1970 and 1971 rates are less than they appear to be.

The advance census figures show that whilst the proportion of persons aged 65 and over is still less in Liverpool than the national average, it is also now much nearer to that average, and substantially higher than it was at the last full census in 1961. This fact also will help to account for the higher death rate for 1971.

Births

During the year 9,551 live births were registered within the city, the birth rate being 15.8 per thousand of the estimated mid-year population. These figures compare with 10,673 and 16.0 respectively in 1970. The birth rate has now fallen below the national average, after having been above it for many years. The number of illegitimate live births was 1,131 (11.8% of all live births), as compared with 1,231 (11.5%) in 1970.

Stillbirths

The 150 stillbirths registered in the city during the year represent a stillbirth rate per thousand total live and stillbirths of 15.5. The stillbirth rate among illegitimate babies was 18.2 and among legitimate babies 15.1 per thousand.

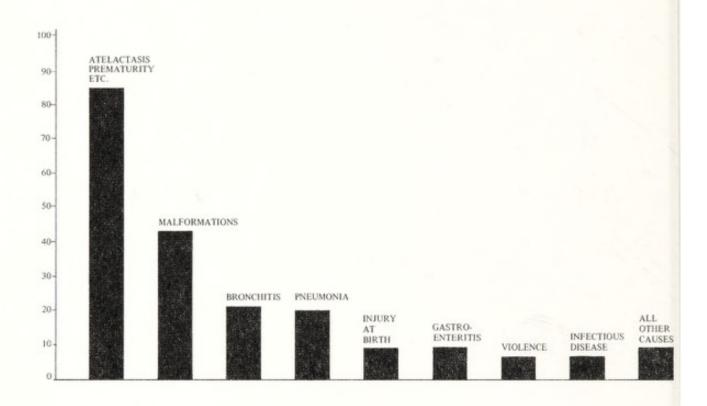
Mortality

There were 7,974 deaths registered within the city during the year, 3,988 males and 3,986 females. The general death rate was 13.2 per thousand population, as compared with 12.1 for the preceding year (see remarks under 'Population').

The number of deaths from cancer of the respiratory system was 567. Deaths from tuberculosis during the year were 26 as compared with 31 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 22.0 per thousand live births as compared with 21.1 for the previous year. A total number of 210 infant deaths occurred, of which 35 were deaths of illegitimate children. These figures give an infant mortality rate of 20.9 per thousand legitimate live births, compared with 21.2 in 1970, and an infant mortality rate of 30.9 per thousand illegitimate live births, compared with 20.3 in 1970. The neonatal mortality rate (under 28 days) was 14.4 as compared with 13.4 for the previous year, whilst the early neonatal mortality rate (under one week) was 12.3 as compared with 11.3 per thousand related live births. The principal causes of infant mortality are represented in the following diagram:—

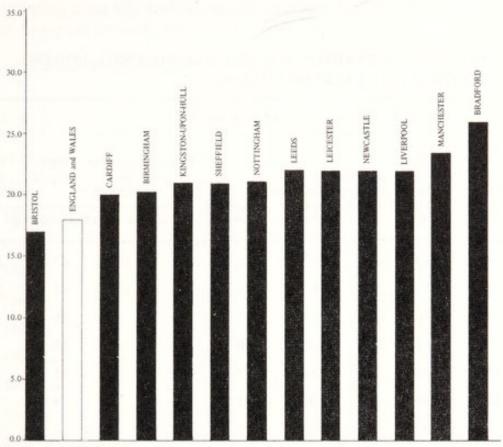


Code Numbers included in each category (List A)

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

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

CHART SHOWING INFANT MORTALITY FOR A NUMBER OF THE LARGER AUTHORITIES FOR 1971, COMPARED WITH ENGLAND AND WALES



Perinatal Mortality

This rate, which is the number of stillbirths and the number of deaths in infants under one week per thousand births, represents very fairly the hazards of childbirth. During 1971 the rate was 27.5 compared with 27.2 in 1970.

Child Mortality

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

YEARLY MEAN NUMBER OF DEATHS IN SUCCESSIVE QUINQUENNIA, 1920-1969, AND TOTAL DEATHS IN THE YEARS 1970 AND 1971

		Deaths, I year and under 5 years of age								
Deaths under	Deaths	Total 1 year and under		Respira-	Digestive	Measles	Whoop- ing Cough	Diph- theria	Scarlet Fever	
Year 1 year		5 years (including tory of age T.B.) Diseases		Diseases	Included	in Infection	ous Diseas	ses		
1920-24	2,278	1,349	557	513	121	202	109	62	28	
1925-29	1,879	1,252	564	461	121	227	118	61	23	
1930-34	1,601	890	456	278	63	200	72	79	9	
1935-39	1,283	487	243	147	30	79	46	58	3	
1940-44	1,140	366	160	94	17	27	23	45	1	
1945-49	1,100	168	67	36	13	8	15	9		
1950-54	553	100	26	22	5	2	4	-	-	
1955-59	432	57	7	12	5	1	_	_	-	
1960-64	426	52	3	11	3	1	1	-	-	
1965-69	280	40	2	7	1	1	-	-	-	
1970	225	26	1	5	-	_	-	-	-	
1971	210	44	2	11	1	-	_	-	-	

Deaths from Cancer

The total number of deaths from cancer during the year was 1,736 as compared with 1,752 in 1970. The number of deaths from cancer of the respiratory tract increased from 565 to 567.

Motor Vehicle Accidents

The number of deaths from motor vehicle accidents was 95, an increase of 9 over 1970. The following figures relate to deaths of Liverpool residents only, including those killed whilst outside Liverpool. Non-Liverpool residents killed in Liverpool are excluded:

Year	Deaths from motor vehicle accidents	Deaths registered outside Liverpool (included in previous column)		
1957	93	21		
1958	78	13		
1959	98	25		
1960	119	22		
1961	112	24		
1962	81	12		
1963	86	17		
1964	105	21		
1965	115	20		
1966	115	25		
1967	101	17		
1968	85	16		
1969	86	20		
1970	86	18		
1971	95	20		

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

Epidemiology

The number of cases of notifiable disease notified in 1971 compared with the preceding four years is shown in the table below:

	Notified Cases 1967	Notified Cases 1968	Notified Cases 1969	Notified Cases 1970	Notified Cases 1971
Scarlet Fever	536	185	329	436	204
Whooping Cough	494	609	209	734	146
Measles (excluding rubella)	5,771	4,444	1,112	7,110	569
Poliomyelitis	-	3	-	-	-
Tuberculosis, respiratory	234	219	186	169	169
Tuberculosis, non-respiratory	29	33	28	28	34
Diphtheria	_	_	_	_	- 1.5
Smallpox	-	-	-	-	-
Meningococcal Infection	3	3(A)			
Meningitis Acute	-	2(B)	4	5	12
Acute Encephalitis, post-infectious	1	-	-	-	-
Dysentery	425	341	386	84	377
Ophthalmia Neonatorum	70	70	64	80	52
Puerperal Pyrexia	287	269(A)			
Acute Pneumonia (primary or influenzal)	182	70(A)			
Paratyphoid Fever	1	1	1	1	-
Typhoid Fever	1	1	1	_	1
Food Poisoning	78	139	93	155	107
Erysipelas	20	13(A)			
Malaria (contracted abroad)	5	5	4	2	5
Anthrax	2	_	1	-	-
Infective Jaundice	_	439(C)	381	189	172
Tetanus		- (B)	_	-	1

⁽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-Incidues 242 voluntarily notified, (January-June), 197 statutorily notified (June-December).

There was a big drop in the number of cases of infectious disease notified. Measles was reduced to 569 cases, compared with 7,110 in 1970. The figures for scarlet fever and whooping cough were also much lower than in 1970. Tuberculosis (non-respiratory) increased to 34 cases compared with 28 in 1970.

Exclusion of children from school

The total number of children excluded from school on account of infectious disease was 29. The average period of exclusion was 38 days.

Dysentery

During 1971 377 cases were notified. The following table gives the number of dysentery cases notified between 1961 and 1971.

1961	335
1962	296
1963	383
1964	313
1965	259
1966	372
1967	425
1968	341
1969	386
1970	84
1971	377

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

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

The total number of cases coming to the attention of the Department was 107. Of these, 23 occurred in a series of 10 family outbreaks, and 77 occurred in isolation. There was also one general outbreak with 7 cases.

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

1
11
2
1
2
7
1
1
5
16
4
3
1
1
1
4
10
2
1
1
1
29
1
1
107

The general outbreak occurred at a wedding reception which took place in a district near Liverpool. Of the 12 Liverpool people who attended the reception, 7 became ill after an interval averaging 34 hours. They suffered mild gastro-intestinal symptoms lasting for a few days in most cases, but one of them was admitted to hospital, and died nine days after the reception. It should be mentioned that this person, a man aged 63, already suffered from a severe respiratory condition, and the salmonellosis was presumably only a contributory factor. Three of the other Liverpool people were positive without symptoms, and two were negative.

The 27 other persons who attended the reception came from other areas, whose Medical Officers of Health were notified. Reports were subsequently received of 4 positive cases amongst these persons.

It was not possible to obtain samples of any of the food eaten at the reception, but from details obtained about the preparation of the meal it was considered highly likely that the infection came from two turkeys. These weighed about 14 lbs. each. After delivery to the house of the lady who prepared the food they remained in their cardboard cartons until the following day (time not known), and were then removed and defrosted until 7.30 a.m. on the next day. They were then cooked consecutively for four hours each, allowed to cool, were sliced and wrapped in tin foil, but were not refrigerated, and remained at room temperature overnight. They were delivered to the reception centre the following day and then laid out for consumption at 3.30 p.m.

Samples of the same batch of turkeys were investigated at the Public Health Laboratory, and found to be infected with s. bredeney, this being also the organism found in the stools of the persons affected. The suppliers of the birds being a firm outside Liverpool, the Medical Officer of Health concerned was informed, with a view to the sale of further infected birds being stopped.

Inadequate cooking of the turkeys and subsequent lack of refrigeration were both contributory factors in this outbreak.

Infective Jaundice

During the year 172 cases were notifed. There were also 2 deaths from this cause.

Poliomyelitis

No cases occurred in Liverpool during the year.

Typhoid

A case of typhoid occurred in a boy aged 8 years who had spent a fortnight's holiday in Minorca with his parents, tenants of a small non-residential licensed hotel in Liverpool. The boy's symptoms began 16 days after his return home, and continued intermittently until, after 8 days, his doctor was informed. He arranged for the boy's admission to hospital, where he remained for two months, when he was discharged free from infection.

As the parents were food handlers they were taken off work until investigations were complete. Disinfection of the hotel premises where the family lived was arranged. Full advice and instruction was given to the staff of the hotel regarding the importance of personal hygiene, the cleanliness of utensils and crockery, and the sterilisation of drinking glasses, bar surfaces, and contact surfaces in the toilets.

The parents themselves were completely free of symptoms. Widal tests were diagnostic of recent salmonella typhi infection, but repeated examinations of faeces and urine were negative, as were blood cultures and two specimens of duodenum contents. There was no evidence of the parents' having become typhoid carriers.

All Liverpool contacts were investigated but proved negative. The Medical Officers of Health of contacts outside Liverpool were informed, but no other cases were reported.

Typhoid Contacts

Several contacts of typhoid cases from outside Liverpool were notified to the department during the year but no positives were found.

Paratyphoid

No cases of this disease occurred during the year.

Paratyphoid Contacts

A contact of paratyphoid B was notified but proved negative.

Winter Epidemic Spotting

As in previous years, the co-operation of various large employers was obtained to return figures of sickness absenteeism from all causes and from influenza. These figures were much lower than in 1970.

During the year there were 5 deaths from influenza compared with 70 in 1970.

Figures of claims for sickness benefit for the first two weeks of the year were much lower than in 1970. No figures were available from the 3rd week in January until March on account of the postal strike. During the rest of the year the figures remained generally lower than in 1970.

Statistical Section

VITAL STATISTICS

BIRTH STATISTICS - 1948-1971

		Live Birt	hs		Stillbirth	ns		
1971		Males	Females	Total	Males	Females	Total	
Legitim	ate	4,414	4,006	8,420	56	73	129	
Illegitin	nate	588	543	1,131	11	10	21	
Total		5,002	4,549	9,551	67	83	150	
					Stillbirths	Illegitimate	Live Birth	
Year	Live Births	Birth Rate	Registered Stillbirths	Total Births	s Stillbirths No.		% of Live Births	
1948	17,695	22.3	479	18,174	26.3	1,009	5.7	
1949	16,551	20.7	358	16,909	21.2	943	5.7	
1950	16,110	20.1	375	16,485	22.7	968	6.0	
1951	15,593	3 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	2 20.3	394	16,416	24.0	873	5.4	
1954	15,742	2 20.5	400	16,142	24.8	847	5.4	
1955	15,268	3 19.6	408	15,676	26.0	785	5.1	
1956	15,944	20.6	394	16,338	24.1	801	5.0	
1957	16,044	20.9	409	16,453	24.9	854	5.3	
1958	15,662	2 20.5	413	16,075	25.7	799	5.1	
1959	15,615	20.6	375	15,990	23.4	815	5.2	
1960	15,961	21.1	377	16,338	23.1	868	5.4	
1961	16,492	2 22.1	380	16,872	22.5	946	5.7	
1962	16,479	22.1	333	16,812	19.8	1,020	6.2	
1963	15,775	21.3	351	16,126	21.8	1,095	6.9	
1964	15,625	21.4	283	15,908	17.8	1,199	7.7	
1965	14,553	3 20.2	269	14,822	18.1	1,197	8.2	
1966	13,557	7 19.0	277	13,834	20.0	1,250	9.2	
1967	12,583	3 17.8	223	12,806	17.4	1,296	10.3	
1968	11,847	7 17.2	219	12,066	18.2	1,310	11.1	
1969	11,268	3 16.6	168	11,436	14.7	1,290	11.4	
1970	10,673	3 16.0	174	10,847	16.0	1,231	11.5	
1971	9,55	1 15.8	150	9,701	15.5	1,131	11.8	

PERCENTAGE OF ILLEGITIMATE LIVE BIRTHS TO TOTAL LIVE BIRTHS

Comparison of Liverpool rates with rates for England and Wales

	Liverpool	England and Wales		Liverpool	England and Wales
1940	4.6	4.3	1956,	5.0	4.8
1941	6.2	5.4	1957	5.3	4.8
1942	6.3	5.6	1958	5.1	4.9
1943	7.1	6.4	1959	5.2	5.1
1944	8.3	7.3	1960	5.4	5.4
1945	10.7	9.3	1961	5.7	6.0
1946	7.3	6.6	1962	6.2	6.6
1947	5.8	5.3	1963	6.9	6.9
1948	5.7	5.4	1964	7.7	7.2
1949	5.7	5.1	1965	8.2	7.7
1950	6.0	5.1	1966	9.2	7.9
1951	5.5	4.8	1967	10.3	8.4
1952	5.5	4.8	1968	11.1	8.5
1953	5.4	4.7	1969	11.4	8.4
1954	5.4	4.7	1970	11.5	8.3
1955	5.1	4.7	1971	11.8	8.4

DEATHS FROM PRINCIPAL CAUSES - 1971

Class	Cause Group No. (List A)*	Cause	Male	Female	e Total	Rate per 1,000 Popula- tion	Percentage of Total Deaths
II	45-49, 52-61	Cancer (except respiratory system)	482	687	1,169	1.94	14.7
II	50, 51	Cancer (respiratory system)	450	117	567	0.94	7.1
VII	81,83,84	Heart Diseases	1,242	1,169	2,411	4.00	30.2
VII	85	Cerebrovascular Disease	378	559	937	1.55	11.8
VII	80, 82, 86-88	Other Circulatory Diseases	188	244	432	0.72	5.4
VIII	91, 92	Pneumonia	301	389	690	1.14	8.7
VIII	89, 93	Bronchitis	350	167	517	0.86	6.5
IX	97-104	Digestive Diseases	80	80	160	0.27	2.0
XIV & XV	126-135	Congenital Anomalies and Certain Causes of Perinatal Mortality	80	71	151	0.25	1.9
E XVII	138-150	Accidents, Poisonings and Violence	194	215	409	0.68	5.1
Various	Remainder	All other causes	243	288	531	0.88	6.7
Totals	11 0	All causes	3,988	3,986	7,974	13.2	100

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

DEATHS FROM CANCER - 1971

Cause Group No. (List A)	Organs affected	Male	Female	Totals
45	Buccal cavity and pharynx	16	5	21
46-49	Oesophagus, stomach, intestines and rectum	211	240	451
50, 51	Larynx, trachea, bronchus and lungs	450	117	567
54	Breast	-	130	130
55, 56	Cervix and uterus	_	54	54
52, 53, 57, 58	Other and unspecified sites	206	228	434
59	Leukaemia	23	8	31
60	Lymphatic and haematopoietic tissue	17	17	34
61	Benign and unspecified neoplasms	9	5	14
	Totals	932	804	1,736

TRENDS OF MORTALITY - 1948-71

	Deaths from Cancer of the Respiratory System	Deaths from Tuberculosis of the Respiratory System
1948	252	630
1949	320	532
1950	331	481
1951	334	406
1952	346	269
1953	432	258
1954	383	232
1955	408	185
1956	448	137
1957	448	123
1958	399	109
1959	444	102
1960	457	81
1961	525	80
1962	484	74
1963	483	54
1964	527	38
1965	493	42
1966	528	46
1967	503	44
1968	575	39
1969	546	24
1970	565	24
1971	567	21

DEATHS FROM LEUKAEMIA - 1960-71 (I.C.D. Nos. 204-7)

Year	Male	Female	Total
1960	27	21	48
1961	22	16	38
1962	14	22	36
1963	25	16	41
1964	21	15	36
1965	26	15	41
1966	20	14	34
1967	14	16	30
1968	25	19	44
1969	23	15	38
1970	24	22	46
1971	23	8	31

	Births Regis	tered		Maternal Mortality		
Year	Live Births	Stillbirths	Total Births	Deaths	Rateper 1,000 Total Births	
1930	18,881	774	19,655	75	3.81	
1931	18,626	722	19,348	55	2.84	
1932	18,149	827	18,976	51	2.69	
1933	16,929	680	17,609	60	3.41	
1934	17,593	685	18,278	51	2.79	
1935	17,347	749	18,096	59.	3.26	
1936	17,403	708	18,111	64	3.52	
1937	16,728	618	17,346	40	2.31	
1938	16,175	639	16,814	33	1.96	
1939	15,614	631	16,245	29	1.86	
1940	15,016	519	15,535	31	2.01	
1941	13,291	508	13,799	32	2.42	
1942	13,729	552	14,281	34	2.38	
1943	14,432	485	14,917	34	2.27	
1944	15,412	492	15,904	31	1.95	
1945	14,784	431	15,215	23	1.51	
1946	18,528	539	19,067	19	0.99	
1947	19,904	514	20,418	17	0.83	
1948	17,695	479	18,174	14	0.77	
1949	16,551	358	16,909	9	0.53	
1950		375	16,485	7	0.42	
1951	16,110	396	15,989	10	0.62	
	15,593	400		7	0.43	
1952	15,839		16,289	5	0.30	
1953	16,022	394	16,416	8	0.49	
1954	15,742	400	16,142	9		
1955	15,268	408	15,676	7	0.57	
1956	15,944	394	16,338	7	0.43	
1957	16,044	409	16,453	4		
1958	15,662	413	16,075		0.25	
1959	15,615	375	15,990	5	0.31	
1960	15,961	377	16,338		0.12	
1961	16,492	380	16,872	2 5	0.12	
1962	16,479	333	16,812	4	0.25	
1963	15,775	351	16,126	3	0.19	
1964	15,625	283	15,908	1	0.067	
1965	14,553	269	14,822	1	0.067	
1966	13,557	277	13,834	1	0.078	
1967	12,583	223	12,806	1	0.078	
1968	11,847	219	12,066	4	0.35	
1969	11,268	168	11,436		0.33	
1970	10,673	174	10,847	3	0.10	
1971	9,551	150	9,701	1	0.10	

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 month	7-11 s months	Total Deaths under 1 year
Meningococcal Infection	19	_	_	1		1
Measles	25	_	-	-	-	-
Pneumonia	91, 92	2	6	12	-	20
Bronchitis	89, 93	1	6	17	-	21
Enteritis	5	-	_	8	1	9
Congenital Anomalies	126-130	24	5	13	1	43
Injury at Birth	131,132	8		1	_	9
Other Diseases of						
Early Infancy	133-135	77	4	3	_	84
Other causes	-	5	3	13	2	23
Totals		117	21	68	4	210
Live Births in the year	Legitima: Illegitima			Deaths	Legitimate Illegitimate	

CAUSES OF DEATH - 1971

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

Class		Male	Female	e Total	Rate per 1,000 Popula- tion	Percentage of total deaths
I	Infective and Parasitic Diseases	33	19	52	0.09	0.65
II	Neoplasms	932	804	1,736	2.88	21.77
III	Endocrine, Nutritional and Metabolic Diseases	32	50	82	0.14	1.03
IV	Diseases of Blood and	10	10	20	0.03	0.25
17	Blood-forming Organs		16	36	0.03	0.45
V	Mental Disorders Diseases of the Nervous System	20	10	30	0.00	0.43
V 1	and Sense Organs	40	46	86	0.14	1.08
VII	Diseases of the Circulatory System		1,972		6.27	47.40
VIII	Diseases of the Respiratory System	687		1,268	2.10	15.90
IX	Diseases of the Digestive System	80	80	160	0.27	2.01
X	Diseases of the Genito-Urinary System		58	97	0.16	1.22
XII	Childbirth and the Puerperium Diseases of the Skin and	-	1	1	0.00	0.01
XIII	Subcutaneous Tissue Diseases of the Musculo-skeletal	-	5	5	0.01	0.06
	System and Connective Tissue	8	21	29	0.05	0.36
XIV	Congenital Anomalies	27	29	56	0.09	0.70
XV	Certain Causes of Perinatal Mortality	53	42	95	0.16	1.19
XVI E XVII	Symptoms and Ill-defined Conditions Accidents, Poisonings and Violence	25	37	62	0.10	0.78
ZATI	(External Cause)	194	215	409	0.68	5.13
Totass		3,988	3,986	7,974	13.2	100

POPULATION, BIRTH RATES, DEATH RATES, INFANT AND MATERNAL MORTALITY ETC., OF A NUMBER OF THE LARGER AUTHORITIES 1791 NI

		Birming- ham	Bradford Bristol	Bristol	Cardiff	Kingston- upon-Hull Leeds	Treeds	Leicester	Man- Leicester Liverpool chester	Man- chester	Newcastle upon-Tyne	Notting-	Sheffield
	Registrar-General's estimated population for 1971		1,013,420 294,740 426,170	426,170	276,790	284,680	501,080	282,000	603,210	542,430	221,390	296,750	515,950
	(a) Births (b) Deaths	0.99	1.04	1.03	0.99				0.98	1.05	1.10	0.99	1.02
	Crude birth rates per 1,000 population Birth rate as adjusted by factor	16.73	19.0	14.8	15.4	17.7	15.6	16.9	15.8		14.3	17.19	15.3
	Illegitimate live births as a percentage of all live births	11.7	110	=					8 11		13	18 73	10.6
	Crude death rate per 1,000 population Death rate as adjusted by factor	11.49	13.1	12.3	11.9	11.2	12.3	12.3	13.2	13.15	13.7	12.23	12.7
	Infant mortality rate per 1,000 live births20.35	\$20.35	26	17	20.1	21.0	22.	22	22.0	23.52	22	21.17	21.0
	Stillbirth rate per 1,000 total births	12.86 14.02	15 10	13	13	11.1	13	14 13	14.4	15.01 15.22	111	11.76	14.0
	total births	24.90	22	21	27	21.1	23	26	27.5	28.89	26	22.47	27.0
	Maternal mortality rate per 1,000 total births Tuberculosis rates per 1,000 population	0.17	0.71	1	1	9.4	0.13	96.0	0.103	1	1	0.39	0.25
	(a) Primary notifications: Respiratory Non-Respiratory	0.37	0.57	0.17	0.27	0.19	0.33	0.42	0.280	0.37	0.244	0.28	0.211
	Respiratory Non-Respiratory	0.02	0.014	0.02	$0.029 \\ 0.011$	0.03	0.03	0.02	0.035	0.01	0.054	0.04	0.027
	Cancer (all forms) Cancer of Lungs and Bronchus Meningococcal Infections	2.50 0.61 0.00	2.35 0.62 0.010	2.60	2.53	2.5 0.8 0.035	1.27 0.86 0.006	2.45 0.64 0.004	0.940	2.84 0.93 0.00	3.16	0.72	2.66 0.84 0.002
	Whooping Cough Influenza Measles	0.00	0.003	0.02	0.014	0.004	0.006	0.004	0.008	0.00	1 1	0.003	0.01
2	Acute Poliomyelitis and Encephalitis Diarrhoea (under 2 years)	0.01	0.003	0.002	0.007	0.007	0.012	0.004	0.002	0.00	0.004	0.03	0.012
7	per 1,000 live births	9.0	1.61	0.47	0.47	9.4	0.77	0.84	1.05	0.34	0.317	1.76	0.762

ANALYSIS OF CAUSES OF INFANT MORTALITY IN SUCCESSIVE QUINQUENNIA 1896-1970, AND THE YEAR 1971

(A) - Recorded Deaths

	1	2	3 4		5	6	7 8	3 9	
Years	Total Live Births	Total Deaths Under 1 Year of Age	Infectious Diseases (exclud- ing Tubercu- losis)*	Tuber-	Nervous Diseases	Respira- tory Diseases	Digestive Diseases	Malforma tions Premature Birth, Maras- mus &c.	
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
1966/1970	59,928	1,299	45*	-	25	267	53	864	45
1971	9,551	210	14	-	4	42	2	141	7

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

(B) - Death Rates

		Death Rates per 1,000 Live Births								
	1	2	3	4	5	6	7	8	9	
Years	Birth Rate per 1,000 popula- tion	All Deaths Under 1 Year of Age	Infectiou Diseases (exclud- ing Tubercu- losis)*	Tuber-	Nervous Diseases	Respira- tory Diseases	Digestive Diseases	Malforma tions Prematur Birth, Maras- mus, &c.	e Externa	
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	_	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	
1966/1970	17.4	22	0.8	-	0.4	4.5	0.9	14.4	0.8	
1971	15.8	22	1.5	-	0.4	4.4	0.2	14.8	0.7	

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

ANALYSIS OF ALL DEATHS BY AGE AND SEX - 1971

Age Group	Male	Female	Total
Under 1 year	109	101	210
1	7	6	13
2	6	,6	12
3	9	5	14
4	1	4	5
5-	16	6	22
10-	19	10	29
15-	16	8	24
20-	25	9	34
25-	16	10	26
30-	21	12	33
35-	39	20	59
40-	63	38	101
45-	133	83	216
50-	196	154	350
55-	361	221	582
60-	532	300	832
65-	670	387	1,057
70-	606	529	1,135
75-	503	655	1,158
80-	379	666	1,045
85-	198	479	677
90-	51	233	284
95-	12	44	56
Totals	3,988	3,986	7,974

ANALYSIS OF INFANT DEATHS BY AGE AND SEX - 1971

Age Groups	Male	Female	Total	
Under 1 day	37	36	73	
1 day	8	9	17	
2 days	6	2	8	
3 days	5	2	7	
4 days	3	3	6	
5 days	3	2	5	
6 days	1	-	1	
Total under 1 week	63	54	117	(A)
1 week (7-13 days)	6	5	11	
2 weeks (14-20 days)	3	2	5	
3 weeks (21-27 days)	4	1	5	
Total (7–27 days)	13	8	21	(B)
Total under 28 days	76	62	138	(A+B)
1 month	4	6	10	
2 months	7	9	16	
3 months	6	9	15	
4 months	8	8	16	
5 months	3	3	6	
6 months	4	1	5	
Total (1-6 months)	32	36	68	(C)
7 months	-	1	1	
8 months	-	1	1	
9 months	_	-	/-	
10 months	-	1	1	
11 months	1		1	
Total (7–11 months)	1	3	4	(D)
Total under 12 months	109	101	210	(A+B+C+D)

TOTAL PRIMARY AND SECONDARY CAUSES OF DEATH REPORTED ON DEATH CERTIFICATES - 1971

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

	Cause	Male	Female	Total	Totals expressed as percentage of all causes
Underlying Primary	1	3,988	3,986	7,974	54.7%
Other Primary	2	2,017	2,018	4,035	27.7%
" "	3	264	315	579	4.0%
**	4	8	11	19	0.1%
Total Primary		6,277	6,330	12,607	86.4%
Secondary	2	496	463	959	6.6%
**	3	417	427	844	5.8%
"	4	86	89	175	1.1%
Total Secondary		999	979	1,978	13.6%
Total all causes		7,276	7,309	14,585	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.

SUMMARY OF DEATHS FROM CARDIOVASCULAR AND RESPIRATORY CAUSES FOR CERTAIN OCCUPATIONS – 1971

(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).

	Civil Servani	ts	Commo		Factory Labour	ers
Age Group	Male	Female	Male	Female	Male	Female
40 – 44	1	-	-	-	2	_
45 – 49	1	-	1	-	2	-
50 - 54	_	-	-	-	3	
55 – 59	1	-	1		6	-
60 – 64	2	-	1	-	9	-
65 - 69	1	1	3	-	7	1
70 – 74	3	-	-	-	6	2
75 – 79	4	-	2	-	6	2
80 - 84	3	-	1	-	4	4
85 – 89	-	-	2	-	-	2
90 – 94	-	-	-	-	-	1
Totals	16	1	11	-	45	12
Deaths from all causes in these occupations	27	4	15	_	84	27

DETAILS OF THE BROAD GROUPS OF CAUSES USED IN THE SUMMARY BY AGE GROUP OF DEFINED CAUSES OF DEATH - 1971

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

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

Congenital Anomalies, etc. A 126-132, A 134, A 135.

> Neoplastic Diseases A 45-61.

Trauma A 138-150 inclusive.

> Degenerative Diseases A 82-85, A 98, A 102, A 109, A 136, A 137.

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

SUMMARY BY AGE GROUPS OF DEFINED CAUSES OF DEATH - 1971 (N.B.-Numbers relate to causes not individual deaths).

Cause M F Infectious/Infective Underlying Primary 36 38 Other Primary 111 111 Secondary Totals 51 50			9 T.	5-24	5-14 yrs 15-24 yrs 25-34	5-34 y	rs 35	44 yı	S 45-	54 yrs	yrs 35-44 yrs 45-54 yrs 55-64 yrs 65 yrs & overTotals	4 yrs	65 yrs	& ove	rTotal	S	as per	as percentage	9	Dorocatogo
ary 36 11 4 4 Totals 51		M	M		F M	Ī	M	Í.	M	Ш	M	T	M	(I	M	Ţ	M	Ţ	Total	Total Causes
51	00	3 2		441	4-1	4-1	11	122	39	212	1 125 98 98 54	79 47 19	528 402 153	506 445 100	748 553 230	682 531 131	52% 51% 64%	48% 49% 36%	1,430 1,084 361	9.8% 7.4% 2.5%
		4 2		6	2 5	5	19	15	83		74 277		1,083	1,051	145 1,083 1,051 1,531 1,344 53%	1,344	. 53%	47%	2,875	19.7%
Neoplastic Underlying Primary 3 2 Other Primary Secondary	2 1	1 3		9	7	∞41	24 6	23	255	97 40	280 77 3 14	192 58 11	511 132 73	476 130 63	932 241 93	804 239 77	54% 50% 55%	46% 50% 45%	1,736 480 170	3.3% 1.2%
Totals 3 2	2 1	12 4		6 3	7	12	31	29	120		140 371	261	716	699	1,266	1,120	53%	47%	2,386	16.4%
Degenerative Underlying Primary 1 1 1 Other Primary 5 3 Secondary	3.1	2 1	4.0	48	401		42 17 1	8 17 1	163 78 13	588	404 1184 61	187 1114 28	1,089 541 243	1,528 768 299	1,707 840 318	1,786 962 335	49% 47% 49%	51% 53% 51%	3,493 1,802 653	23.9% 12.4% 4.5%
Totals 6 4	4	2 2	1	12 1	6	2	09	26	254	124	649		1,873	2,595	329 1,873 2,595 2,865 3,083	3,083	48%	52%	5,948	40.8%

Congenital Underlying Primary Other Primary Secondary	74 37 16	62 31 14	- 11	7-1		11-		1 1 1	- 1 1	-21	11-	7 - 1	111		77	- 1 1	78 38 20	68 53 34 53 17 54	3% 47% 3% 47% 4% 46%		146 72 37	1.0% 0.5% 0.3%
Totals	127	107	1	8	2	-	1	1	-	3	-	3	1	-	3	-	136	119 53	53% 47%		255	1.7%
Trauma Underlying Primary Other Primary Secondary	7 1	101	17	241	119	611	16	vs 1	81 1	411	41 -	15	31	10	72	151	194	215 47% 8 27% - 100%	53%		409 11 2	2.8% 0.1% 0.0%
Totals	00	11	17	9	19	6	17	9	18	4	15	16	31 1	17	74	154	199	223 47%	% 53%	4	22	2.9%
Other Causes Underlying Primary Other Primary Secondary	111	041	2001	261	1-NW	4-6	200V	440	16 6	1144	23 53	20 36 1 22	53 141 62	444	219 380 244	331 454 336	329 614 336	431 43 570 52 419 45	3% 57% 2% 48% 5% 55%		760 1,184 755	5.2% 8.1% 5.2%
Totals	22	20	7	6	15	∞	15	11	28	19	93	78 2	256 1	154 8	843 1	,121	1,279	1,420 47	7% 53%		2,699	18.5%
				4.																		
Summary of above totals																						
Infectious/Infective	51	50	4	2	6	2	2	2	19	15	83	74 2	277 1	145 1,0	1,083 1	1,051	1,531	1,344 53	3% 47%	% 2,87.	75	19.7%
Neoplastic	3	2	12	4	9	3	7	12	31	29	120	140 3	371 26	-	716	699	1,266	1,120 53	3% 47%	% 2,386	98	16.4%
Degenerative	9	4	7	2	12	Н	6	2	09	56	254	124 6	649 3	329 1,8	,873 2	2,595	2,865	3,083 48	8% 52%	S	,948	40.8%
Congenital	127	107	П	3	7	-	ч	1	-	3	-	3	1	П	33	-	136	119 53%	% 47%		255	1.7%

18.5%

2,699

100%

566 435 1,584 907 4,592 5,591 7,276 7,309 49.9% 50.1% 14,585

78 256 154 843 1,121 1,279 1,420 47% 53%

Other Causes

Trauma

217 194

Totals

2.9%

53%

223 47%

74 154 199

16 31 17

ANALYSIS OF CAUSES OF MORTALITY

Deaths from certain Groups of Diseases in each decade from 1871 to 1970, and the year 1971

Tubercular (including diseases 17,00) (c) & (d) Cancer 19,869 (13.5) 29,763 (20.2) 14,747 (10.0) 91,584 (62.9) 2,015 (1.4) 17,870 (12.7) 32,507 (23.2) 13,186 (9.4) 86,311 (59.4) 2,820 (2.0) 16,714 (10.8) 35,819 (24.6) 18,491 (12.7) 84,539 (57.4) 4,223 (2.9) 16,054 (10.6) 32,995 (21.8) 18,163 (12.0) 81,179 (53.0) 6,480 (4.3) 14,946 (10.9) 36,480 (27.3) 12,282 (8.9) 74,125 (55.0) 7,603 (5.5) 15,664 (10.7) 29,447 (25.0) 8,184 (6.9) 58,126 (49.4) 9,852 (8.4) 12,664 (10.7) 29,447 (25.0) 8,184 (6.9) 58,126 (49.4) 9,852 (8.4) 12,664 (10.7) 15,728 (15.9) 4,328 (4.4) 29,723 (30.1) 13,265 (13.7) 15,063 (2.2) 15,315 (16.8) 2,570 (2.8) 20,569 (22.5) 15,986 (17.7) 12,664 (10.3) 2,603 (2.2) 1,480 (18.6) 1,736 (21.8)		(a) Infective	(b)	(c) Respiratory	(p)	Total	(e)	Total
27,205 (19.2) 19,869 (13.5) 29,763 (20.2) 14,747 (10.0) 91,584 (62.9) 2,015 (1.4) 14 19,748 (14.1) 17,870 (12.7) 32,507 (23.2) 13,186 (9.4) 86,311 (59.4) 2,820 (2.0) 14 13,515 (9.3) 16,714 (10.8) 35,819 (24.6) 18,491 (12.7) 84,539 (57.4) 4,223 (2.9) 14 13,967 (8.6) 16,054 (10.6) 32,995 (21.8) 18,163 (12.0) 81,179 (53.0) 6,480 (4.3) 15 10,417 (7.9) 14,946 (10.9) 36,480 (27.3) 12,282 (8.9) 74,125 (55.0) 7,603 (5.5) 13 6,473 (5.6) 9,413 (8.1) 18,196 (15.7) 5,987 (5.2) 40,069 (34.7) 12,619 (10.9) 11 2,645 (2.6) 6,987 (7.1) 15,728 (15.9) 4,328 (4.4) 29,723 (30.1) 13,265 (13.7) 9 265 (0.3) 512 (0.6) 14,674 (17.3) 2,014 (2.4) 17,465 (20.6) 17,159 (20.3) 8 26 (0.3) 26 (0.3) 1,268 (15.9) 160 (2.0) 1,60 (2.0) 1,736 (21.8) 8	Years	diseases (tess Influenza and Tuberculosis)		diseases (including Influenza)	Digestive diseases	from (a), (b), (c) & (d)	Cancer	from all causes
19,748 (14.1) 17,870 (12.7) 32,507 (23.2) 13,186 (9.4) 86,311 (59.4) 2,820 (2.0) 14 13,515 (9.3) 16,714 (10.8) 35,819 (24.6) 18,491 (12.7) 84,539 (57.4) 4,223 (2.9) 14 13,967 (8.6) 16,054 (10.6) 32,995 (21.8) 18,163 (12.0) 81,179 (53.0) 6,480 (4.3) 15 10,417 (7.9) 14,946 (10.9) 36,480 (27.3) 12,282 (8.9) 74,125 (55.0) 7,603 (5.5) 13 7,831 (6.6) 12,664 (10.7) 29,447 (25.0) 8,184 (6.9) 58,126 (49.4) 9,852 (8.4) 11 6,473 (5.6) 9,413 (8.1) 18,196 (15.7) 5,987 (5.2) 40,069 (34.7) 12,619 (10.9) 11 2,645 (2.6) 6,987 (7.1) 15,728 (15.9) 4,328 (4.4) 29,723 (30.1) 13,265 (13.7) 5 2,645 (0.3) 512 (0.6) 14,674 (17.3) 2,014 (2.4) 17,465 (20.6) 17,159 (20.3) 8 2,603 2,603 1,268 (15.9) 1,268 (15.9) 160 (2.0) 1,480 (18.6) 1,736 (21.8)	1871-1880	27,205 (19.2)		29,763 (20.2)	14,747 (10.0)	91,584 (62.9)	2,015 (1.4)	147,005
13,515 (9.3) 16,714 (10.8) 35,819 (24.6) 18,491 (12.7) 84,539 (57.4) 4,223 (2.9) 19 13,967 (8.6) 16,054 (10.6) 32,995 (21.8) 18,163 (12.0) 81,179 (53.0) 6,480 (4.3) 15 10,417 (7.9) 14,946 (10.9) 36,480 (27.3) 12,282 (8.9) 74,125 (55.0) 7,603 (5.5) 13 7,831 (6.6) 12,664 (10.7) 29,447 (25.0) 8,184 (6.9) 58,126 (49.4) 9,852 (8.4) 11 6,473 (5.6) 9,413 (8.1) 18,196 (15.7) 5,987 (5.2) 40,069 (34.7) 12,619 (10.9) 11 2,645 (2.6) 6,987 (7.1) 15,728 (15.9) 4,328 (4.4) 29,723 (30.1) 13,265 (13.7) 9 621 (0.7) 2,063 (2.2) 15,315 (16.8) 2,570 (2.8) 20,569 (22.5) 15,986 (17.7) 9 265 (0.3) 26 (0.3) 1,268 (15.9) 160 (2.0) 1,480 (18.6) 1,715 (20.3) 8	1881-1890	19,748 (14.1)		32,507 (23.2)	13,186 (9.4)	86,311 (59.4)	2,820 (2.0)	146,195
13,967 (8.6) 16,054 (10.6) 32,995 (21.8) 18,163 (12.0) 81,179 (53.0) 6,480 (4.3) 15 10,417 (7.9) 14,946 (10.9) 36,480 (27.3) 12,282 (8.9) 74,125 (55.0) 7,603 (5.5) 13 7,831 (6.6) 12,664 (10.7) 29,447 (25.0) 8,184 (6.9) 58,126 (49.4) 9,852 (8.4) 11 6,473 (5.6) 9,413 (8.1) 18,196 (15.7) 5,987 (5.2) 40,069 (34.7) 12,619 (10.9) 11 2,645 (2.6) 6,987 (7.1) 15,728 (15.9) 4,328 (4.4) 29,723 (30.1) 13,265 (13.7) 9 621 (0.7) 2,063 (2.2) 15,315 (16.8) 2,570 (2.8) 20,569 (22.5) 15,986 (17.7) 9 265 (0.3) 26 (0.3) 1,268 (15.9) 160 (2.0) 1,480 (18.6) 1,736 (21.8) 1,736 (21.8)	1891-1900	13,515 (9.3)		35,819 (24.6)	18,491 (12.7)	84,539 (57.4)		145,522
10,417 (7.9) 14,946 (10.9) 36,480 (27.3) 12,282 (8.9) 74,125 (55.0) 7,603 (5.5) 13 (5.6) 12,664 (10.7) 29,447 (25.0) 8,184 (6.9) 58,126 (49.4) 9,852 (8.4) 11 (5,473 (5.6) 9,413 (8.1) 18,196 (15.7) 5,987 (5.2) 40,069 (34.7) 12,619 (10.9) 11 (2,645 (2.6) 6,987 (7.1) 15,728 (15.9) 4,328 (4.4) 29,723 (30.1) 13,265 (13.7) 9 (21.6) (0.7) 2,063 (2.2) 15,315 (16.8) 2,570 (2.8) 20,569 (22.5) 15,986 (17.7) 9 (26.6) (0.3) 26 (0.3) 1,268 (15.9) 160 (2.0) 1,480 (18.6) 1,736 (21.8)	1901-1910	13,967 (8.6)		32,995 (21.8)	18,163 (12.0)	81,179 (53.0)	6,480 (4.3)	150,962
7,831 (6.6) 12,664 (10.7) 29,447 (25.0) 8,184 (6.9) 58,126 (49.4) 9,852 (8.4) 11 (6.473 (5.6) 9,413 (8.1) 18,196 (15.7) 5,987 (5.2) 40,069 (34.7) 12,619 (10.9) 11 (2,645 (2.6) 6,987 (7.1) 15,728 (15.9) 4,328 (4.4) 29,723 (30.1) 13,265 (13.7) 5 (13.1) (0.7) 2,063 (2.2) 15,315 (16.8) 2,570 (2.8) 20,569 (22.5) 15,986 (17.7) 5 (15.3) 26 (0.3) 26 (0.3) 26 (0.3) 1,268 (15.9) 160 (2.0) 1,480 (18.6) 1,736 (21.8)	1911-1920	10,417 (7.9)		36,480 (27.3)	12,282 (8.9)	74,125 (55.0)	7,603 (5.5)	137,323
6,473 (5.6) 9,413 (8.1) 18,196 (15.7) 5,987 (5.2) 40,069 (34.7) 12,619 (10.9) 11 2,645 (2.6) 6,987 (7.1) 15,728 (15.9) 4,328 (4.4) 29,723 (30.1) 13,265 (13.7) 5 (21 (0.7) 2,063 (2.2) 15,315 (16.8) 2,570 (2.8) 20,569 (22.5) 15,986 (17.7) 5 (2.5 (0.3) 512 (0.6) 14,674 (17.3) 2,014 (2.4) 17,465 (20.6) 17,159 (20.3) 8 2 (0.3) 2,6 (0.3) 1,268 (15.9) 160 (2.0) 1,480 (18.6) 1,736 (21.8)	1921-1930	7,831 (6.6)		29,447 (25.0)	8,184 (6.9)	58,126 (49.4)	9,852 (8.4)	117,756
2,645 (2.6) 6,987 (7.1) 15,728 (15.9) 4,328 (4.4) 29,723 (30.1) 13,265 (13.7) 9 (21.0) 2,063 (2.2) 15,315 (16.8) 2,570 (2.8) 20,569 (22.5) 15,986 (17.7) 9 (25.5) (0.3) 512 (0.6) 14,674 (17.3) 2,014 (2.4) 17,465 (20.6) 17,159 (20.3) 8 (2.3) 2,6 (0.3) 1,268 (15.9) 160 (2.0) 1,480 (18.6) 1,736 (21.8)	1931-1940	6,473 (5.6)		18,196 (15.7)		40,069 (34.7)	12,619 (10.9)	115,632
621 (0.7) 2,063 (2.2) 15,315 (16.8) 2,570 (2.8) 20,569 (22.5) 15,986 (17.7) 9 265 (0.3) 512 (0.6) 14,674 (17.3) 2,014 (2.4) 17,465 (20.6) 17,159 (20.3) 8 26 (0.3) 26 (0.3) 1,268 (15.9) 160 (2.0) 1,480 (18.6) 1,736 (21.8)	1941-1950	2,645 (2.6)	6,987	15,728 (15.9)	4,328 (4.4)	29,723 (30.1)	13,265 (13.7)	98,347
265 (0.3) 512 (0.6) 14,674 (17.3) 2,014 (2.4) 17,465 (20.6) 17,159 (20.3) 8 26 (0.3) 26 (0.3) 1,268 (15.9) 160 (2.0) 1,480 (18.6) 1,736 (21.8)	1951-1960	621 (0.7)	2,063	15,315 (16.8)	2,570 (2.8)	20,569 (22.5)	15,986 (17.7)	90,642
26 (0.3) 26 (0.3) 1,268 (15.9) 160 (2.0) 1,480 (18.6) 1,736 (21.8)	1961-1970		512	14,674 (17.3)	2,014 (2.4)	17,465 (20.6)	17,159 (20.3)	84,591
	1971	26 (0.3		1,268 (15.9)	160 (2.0)	1,480 (18.6)	1,736 (21.8)	7,974

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

Since 1962 the columns have included the following classes:-

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

9.9

: :

TUBERCULOSIS RATES

INCIDENCE, PREVALENCE AND MORTALITY RATES FOR PERIODS 1959 - 1971 INCLUSIVE

	Incidence Rat of population	Incidence Rate per 1,000 of population		Prevalence Rate of population*	Prevalence Rate per 1,000 of population*	0	Mortality Rat of population	Mortality Rate per 1,000 of population	
Year	Pulmonary	Non Pulmonary	Over-all Total	Pulmonary	Non Pulmonary	Over-all Total	Pulmonary	Non Pulmonary	Over-all Total
1959	2.15	90.0	2.22	10.53	0.87	11.40	0.135	0.004	0.139
1960	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	0.008	0.115
1962	0.59	0.07	0.65	9.05	0.61	99.6	0.099	0.009	0.109
1963	0.53	90.0	0.59	8.02	0.54	8.57	0.073	0.005	0.078
1964	0.37	0.04	0.41	7.14	0.51	7.64	0.052	0.004	0.056
1965	0.34	0.05	0.39	5.84	0.39	6.23	0.058	0.001	090.0
9961	0.33	0.04	0.37	5.17	0.39	5.56	0.065	0.007	0.072
1967	0.33	0.04	0.37	4.59	0.39	4.98	0.061	0.007	0.068
1968	0.32	0.05	0.37	4.05	0.39	4.44	0.057	0.007	0.064
6961	0.27	0.04	0.32	3.41	0.38	3.79	0.0354	0.0044	0.0398
1970	0.25	0.04	0.30	3.15	0.40	3.55	0.036	0.010	0.046
1971	0.28	90.0	0.34	2.99	0.32	3.31	0.035	0.008	0.043

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 pregalence 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.

NOTIFICATIONS – AGE GROUPS – 1971

TUBERCULOSIS

Age	Male	Female	Total
-1	1	_	1
1-	-	-	-
1- 2- 3- 4- 5-	1	1	2
3-	1	1	2
4-	_	2	2 2 2 11 5
	6	5	11
10-	4	1	5
15-	5	2 9	7
20-	9	9	18
25-	8	6 5	14
30-	4	5	9
35-	8	1	9
40-	12	7 7	19
45-	9	7	16
50-	12	5	17
55-	17	5 8	25
60-	12	1	13
65-	8	6	14
70-	7	_	7
75-	3	2	5
80-	4	2 3	7
Age unknown	-	-	11.73
Totals	131	72	203

ANALYSIS OF ALL DEATHS BY OCCUPATION - 1971

Code No.	Occupation	Male	Female	Tota
1	Accountants	12	1	13
2	Agricultural workers, gardeners	41	_	41
3	Architects, designers	3	-	3
4	Artists, musicians	4	2	6
5	Bakers, confectioners	15	2	17
6	Boilermakers, platers	27	_	27
7	Boilermen, stokers, firemen	16	1	17
8	Boot and shoemakers, repairers	11	_	11
9	Bricklayers	26	_	26
10	Builders' labourers	69		69
11	Bus and tram drivers, guards	76	1	77
12	Cabinetmakers, polishers	23	_	23
13	Carpenters, joiners	53	_	53
14	Chefs, cooks and kitchen staff	32	29	61
15	Civil servants	27	4	31
16	Cleaners, charwomen etc.	8	23	31
17	Chemical process workers	27	4	31
18	Clergymen and church officials	8	7	15
19	Clerks and typists	299	84	383
20	Collectors (club, etc.)	3	1	4
21	Commercial travellers	15		15
22	Dentists	4	_	4
23	Dock and harbour workers	40	_	40
24	Dock labourers	198	_	198
25	Domestic servants and housekeepers	1	71	72
26	Electricians	54	_	54
27	Engineers	99		99
28	Factory labourers	84	27	111
29	Factory machinists	37	29	66
30	Fitters and turners	124	1	125
31	Gas board workers	5	_	5
32	Gas fitters and plumbers	38		38
33	General labourers	251	1	252
34	Hairdresssers, manicurists	9	4	13
35	Hospital employees (not nurses)	12	12	24
36	Housewives	-	3,110	3,110
37	Insurance agents	22	2	24
38	Laboratory technicians	7	5	12
39	Laundry workers	3	8	11
40	Lawyers	3	_	3
41	Leather workers	9	_	9
12	Local Government officers	19	1	20
13	Local Government manual workers	74	2	76
14	Managers and staffs of theatres	15	_	15
15	Managerial staffs – trade and industry	110	13	123
16	Masons and stone workers	5	_	5
47	Machine tool workers	9	2	11
48	Members of HM forces	11	2	11

49 50			Female	Total
	Metal workers	52	1	53
	Miners	4	_	4
51	Mill workers	16	2	18
52	Motor drivers, lorrymen, etc.	200	_	200
53	Miscellaneous	175	13	188
54	Nurses, midwives	2	31	33
55	Other professional occupations	19	5	24
56	Packers	15	15	30
57	Paint factory workers	2	-	2
58	Painters and decorators	78	1	79
59	Post office workers (excluding clerks)	58	5	63
60	Porters, doormen, liftmen etc.	66	1	67
61	Publicans, barmen etc.	29	5	34
62	Plasterers	7	-	7
63	Railway drivers, firemen, guards	46	_	46
64	Railway porters etc.	59	_	59
65	Printers, compositors etc.	34	11	45
66	Rubber workers	20	_	20
67	Seamen, marine firemen etc.	140	_	140
68	Ships' officers, engineers	46	-	46
69	Ships' stewards etc.	12	5	17
70	Shipyard workers	62	_	62
71	Smiths and forge workers	19	-	19
72	Salesmen, shop assistants	58	35	93
73	Social and welfare workers	1	1	2
74	Spinsters – no occupation	_	141	141
75	Sweeps	2	_	2
76	Storekeepers	75	3	78
77	Shopkeepers	108	18	126
78	Steel erectors	12	_	12
79	Slaters, tilers	7	_	7
80	Street traders, hawkers	4	2	6
81	Tailors and assistants	17	32	49
82	Teachers	19	38	57
83	Tobacco factory workers	3	7	10
84	Waiters, waitresses	2	10	12
85	Window cleaners	5	_	5
86	Wood turners, machinists	15	-	15
87	Watchmen	106	1	107
88	Warehousemen	52	1	53
89	Medical practitioners	14	_	14
90	Pharmacists, chemists	8	1	9
91	Policemen, firemen	41	2	43
_	No occupation	240	152	392
	Totals	3,988		7,974

B.C.G. VACCINATION SCHOOL CHILDREN - 1971

Number of School Children offered B.C.G. vaccination	10,386
Number of acceptors	10,042
Number Heaf-tested (Number read 8,771)	9,790
Number of positive Heaf tests (of these 1,037 were previously vaccinated)	1,579
Number of children vaccinated with B.C.G.	7,192

B.C.G. VACCINATION OF SCHOOL CHILDREN, HEAF TESTS - 1957 - 1971

Year	Number Tested	Number Positive	Percentage of Number Tested Found Positive
1957	7,224	1,581	21.9
1958	8,587	1,717	20.0
1959	11,313	1,810	16.0
1960	10,569	1,480	14.0
1961	11,542	1,442	12.5
1962	9,777	1,305	13.3
1963	9,247	1,373	14.8
1964	8,456	1,309	15.5
1965	8,601	1,352	15.7
1966	8,356	1,135	13.5
1967	9,213	1,206	13.1
1968	7,394	1,130	15.3
1969	11,333	2,202	16.0
1970	9,586	1,504	15.7
1971	9,790	1,579	16.1

	Children (0-4 years)		Schoolchild (5-14 years		Adolescents (15+ years)	& Adults
Year	Pulmonary	Non- Pulmonary	Pulmonary	Non- Pulmonary	Pulmonary	Non- Pulmonar
1928	93	159	407	244	1,968 1,975	242
1929	106	164	425	238	1.975	269
1930	98	178	470	256	1,890	263
1931	88	163	365	267	1,805	289
1932	71	125	277	279	1,757	268
1933	77	138	262	266	1,941	250
1934	56	107	223	234	1,624	244
	36	93	167			231
1935				178	1,494	
1936	36	85	185	165	1,424	197
1937	30	77	128	159	1,397	172
1938	43	82	117	118	1,281	186
1939	24	64	72	78	1,117	175
1940	26	59	51	67	1,234	148
1941	33	68	44	79	1,225	158
1942	32	63	54	84	1,284	201
1943	47	60	64	107	1,368	168
1944	29	45	68	58	1,344	147
1945	35	45	60	70	1,360	133
1946	35	40	63	72	1,380	125
1947	50	37	88	69	1,341	128
1948	51	49	79	49	1,490	130
1949	63	41	77	63	1,479	107
					1,479	
1950	106	32	113	41	1,353	91
1951	106	26	101	47	1,328	87
1952	90	37	161	35	1,318	67
1953	77	18	130	27	1,175	78
1954	46	22	114	28	975	97
1955	46	24	82	23	951	71
1956	34	9	88	13	938	81
1957	46	9	79	12	892	80
1958	47	17	61	11	686	48
1959	29	12	54		1,550	30
1960	17	3	24	6 5	398	36
1961	19	6	26	6	360	42
1962	24	3	23	2	391	45
1963	35				319	
	16	3	17	2	240	38
1964	16 9 12 6 7 8	3 3 3	37 17 15 15 9	2 2 3 4 3	240	23 28
1965	12	3	15	3	225	20
1966	12		15	4	208	26
1967	6	1	9	3	219	25
1968	7	-	9	3	203	30
1969	8	1	9	-	169	27
1970	8	2 3	16	1	145	25
1971	4	3	10	6	155	25

Health Education

At the present time the need for education in health matters is becoming more self-evident. There are the influences on the health of the community for good and ill from many organisations. For this reason, a soundly based health education system is very necessary. This requires the services of highly and suitably trained personnel under the supervision of the Medical Officer of Health. Such a section consists of a Health Education Officer, personnel capable of understanding and using technical equipment, and teaching staff.

Increasing interest in this expanding and important field is being shown not only by medical personnel but also by those engaged in social work and education generally.

The section has three main functions:-

- (a) to provide health education in the form of lectures and discussions together with displays and exhibitions.
- (b) to co-ordinate and organise the health education activities of Health Department staff.
- (c) to give advice and guidance on health education and health matters generally to outside workers.

Formal lecturing has obviously a large part to play in this form of education. Nevertheless, contact with small groups and discussions are very valuable. This stimulates a response from the groups and questions can be asked and answered in an informal atmosphere. Obviously the age and content of groups and associations to whom the section directs its attention vary widely. These range from school children through to members of youth clubs, and beyond that there are many and varied adult groups up to those of the senior citizen.

Health Education Officer

Mr. P. Nash, our Health Education Officer, left the Department in August.

He provided 72 lectures to schools, colleges, youth clubs and the general public in the first six months of the year. Since then, these activities have been maintained by other members of the staff undertaking the extra work. This has been undertaken in a very co-operative manner which is appreciated and contributed to the success of the section. Members of the medical staff were active in this field and specialised lectures were given to student district nurses, public health inspectors and health visitors.

Visual Aids

16 mm films and slides are being increasingly used by the staff and aids require expert attention within the department. Additionally there is a wide variety of pamphlets and posters available for distribution. These are called upon by many organisations both within and without the Corporation. Of necessity then, the content and scope must be kept up-to-date.

Liverpool Show

This is an occasion which provides an opportunity par excellence for health education and contact with the public. At the Show this year, an exhibition was staged to underline the importance of immunisation of children; a need shown by the number of children in the city not immunised. Visual aids, pamphlets and direct contact were used to get the message over to the public.

Liaison

The section works very closely with the Merseyside Cancer Education Committee in providing lectures and information to the public. The emphasis is on cancer prevention, the importance of early diagnosis of the disease, and the fact that cancer is not an incurable disease.

Besides working with this Committee, liaison is maintained with other sections and departments of the Corporation and very many outside organisations including private firms.

Control of Radiation Hazards

Registered Users under Radioactive Substances Act 1960
Two additional users were added to the Register of Users during 1971.

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

Forty-four 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

Nature of Source	Size of Source	Number of Sources
Americium 241	90 millicuries	1
	100 ,,	1
Carbon 14	0.5 microcurie	1
	0.75 ,,	1
	1 "	1
Caesium 137	0.5 millicuries	1
	10 "	1
Cobalt 60	1 ,,	1
Iridium 192	500 ,,	1
	20 curies	2
Radium 226	500 microcuries	1
	7.5 millicuries	1
Strontium 90	469 "	1
Thallium 204	24 ,,	1
	30 ,,	î î
Thulium 170	300	î
manam 170	20 curies	î
Tritium	60 millicuries	î
***********	10 curies	2
	960 millicuries	2

RADIOACTIVE SEALED SOURCES – EDUCATIONAL ESTABLISHMENTS

Nature of Source	Size of Source	Number of Sources
Americium 241	0.125 microcuries	28
	5 ,,	7
Cobalt 60	5 ,,	41
Plutonium 239	0.1 ,,	14
	5 ,,	2
Radium 226	5 ,,	52
	5 millicuries	1
Strontium 90	0.125 microcuries	27
	1 "	13
	5 ,,	9
	9 ,,	22

Medical Care of Immigrants

Medical Arrangements for Long-Stay Immigrants

The scheme introduced by the Ministry of Health in January 1965, has continued. Under the scheme 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.

When notification is received of the arrival of an immigrant in Liverpool arrangements are made for a health visitor to call at the address given. An annual return of figures relating to the visits is made to the Department of Health and Social Security.

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

Advice notes were received relating to 323 persons, including 26 not Liverpool addresses. The latter were forwarded to the correct local authorities.

Of the 297 persons with Liverpool addresses successful visits were made to 245, and in addition successful visits were made to 13 persons whose advice notes were received towards the end of 1970.

Not traced during the year: 52 persons.

Occupational Health

Any organisation, large or small, is concerned with the health of its employees. Liverpool Corporation with its many departments and thousands of employees has oversight of the health of these through the Medical Officer of Health's Occupational Health Section.

General

This section not only deals with occupational health but also with medical aspects of concessionary travel passes and driving licences. Much of the work is that of routine medical screening. For this purpose, the section is equipped with electrocardiograph, vitalograph and other diagnostic aids.

With the recent alteration in policy with regard to mass radiography, administrative changes have had to be made. Thus large X-ray films are taken at X-ray Units when asked for, otherwise mass miniature radiographs are arranged only for those whose work suggests the need for X-ray, such as those in contact with children.

When necessary, persons are referred either to their own general practitioner or directly to a consultant.

Officer grades and others such as home helps or cooks are examined for fitness to undertake the duties of these posts. Those classed as manual workers are examined when superannuation is considered. Ideally, they should be examined on entry but the nature of their work makes a changing population.

Persons with prolonged sickness records require investigation as to future fitness, and the section makes the necessary investigations. From these, obviously, advice as to future work can be given. For this reason, there is close contact between the section, the employing department and the Town Clerk's Personnel Unit. In addition medical examinations are carried out on a reciprocal basis for other local authorities.

Passenger Transport Executive

Until July 1971, employees of this department were examined in the Occupational Health Section for superannuation purposes. With the formation of the Merseyside Passenger Transport Executive all medical examinations are now undertaken by the medical officers of that authority.

Police

The Medical Officer of Health is the medical consultant to the Liverpool and Bootle Constabulary.

Under this heading, medical examinations are made of cadet and adult recruits. The medical supervision continues at half-yearly intervals during their training period. Sickness and accident cases are investigated with a view to future work in the force and, if necessary, pension rights.

Also medical examinations are made of traffic wardens and crossing patrols. The latter tending to be of the older age group frequently of necessity require half-yearly supervision.

Fire Service

There again the Medical Officer of Health acts as medical consultant. The personnel have similar examinations to that of the Constabulary. Additionally examinations are made of those attending on breathing apparatus courses at the Fire Training School. Obviously, from the very hazardous nature of this employment, consultation and oversight has to be constant and close.

Special Examination

As already mentioned, examinations are undertaken with regard to concessionary travel passes. These are undertaken under the Travel Concessions Act 1946 and require a minimum leg disability of 35% before being granted.

Mersey Tunnel workers are examined six monthly, chiefly because of their exposure to exhaust fumes. Additionally, those constructing the new tunnels are examined as and when necessary. This latter work is in co-operation with the Factory Inspectorate.

To safeguard the health of the employees and of the general public, employees working on water mains are examined with particular emphasis on freedom from infection.

Heavy goods vehicle drivers are now, by law, required to have medical examinations before being granted driving licences. Such applicants were drawn from various departments including the Fire Service.

In conclusion, the work of this section is responsible and owes its smooth running and quality to the medical and clerical staff. They undertake their work cheerfully and their efforts are much appreciated.

Diseases of the Cardio-Vascular System		
Ischaemic heart disease		
(including cases of myocardial infarction)	37	
Hypertension/Hypertensive heart disease	25	
Cor pulmonale	1	
Valvular disease of heart	8	
Peripheral arteriosclerotic vascular disease	5	
Varicose veins	3	
	79	(19.4%)
Diseases of the Respiratory System		
Chronic obstructive respiratory disease	24	
Bronchial asthma	5	
Pulmonary tuberculosis	1	
Interstitial pulmonary fibrosis	3	
Bronchogenic carcinoma		
Chronic bronchitis	42	
	78	(19.1%)
Diseases of the Digestive System		
Duodenal ulcer	5	
Malabsorption syndrome	1	
Cholecystitis	2 2	
Hiatus hernia	2	
Gastric ulcer	2	
	12	(2.9%)
Diseases of the Urogenital System		(/
Pyelonephritis	3	
Renal carcinoma	3 2 1	
Undescended testes	1	
Menorrhagia	1	
	7	(1.7%)
Diseases of the Endocrine System	,	(1.7%)
Thyrotoxicosis	1	
Diabetes mellitus	3	
Diabetes memtas		
	4	(1.0%)
Diseases of the Musculo-Skeletal System		
Osteoarthritis	15	
Rheumatoid arthritis	7	
Lumbar intervertebral disc lesions	12	
Cervical spondylosis	8	
Chronic osteomyelitis	3	
Post-traumatic sequelae	11	
	56	(13.7%)
Diseases of the Skin	30	(15.770)
Chronic allergic dermatitis	1	
Keloid acne	1	
Eczema	1	
	3	(0.7%)
Diseases of the Ear, Nose and Throat		
Chronic otitis media	1	
Meniere's disease	1	
Acquired perceptive deafness	1	
	3	(0.7%)

Diseases of the Eye		
Visual defects	8	
Detachment of retina	1	
Keratitis	1	
Diabetic retinopathy	1	
	11	(2.7%)
Diseases of the Central Nervous System		
Ataxia	1	
Cerebrovascular disease	7	
Epilepsy	6	
Motor neurone disease	5	
Multiple sclerosis	2	
Sciatica	1	
Parkinsonism	1	
	23	(5.6%)
Mental Disorders		(0.070)
Schizophrenia	6	
Schizo-affective psychosis	3	
Manic-depressive disorder	10	
Anxiety neurosis	14	
Endogenous depression	9	
	42	(10.3%)
Miscellaneous Conditions	72	(10.5/0)
Inguinal hernia	3	
Sickness records	76	
Obesity	9	
Poor physique	2	
	90	(22.1%)
Total	408	(100%)

MEDICAL EXAMINATIONS - RETURN FOR THE YEAR 1971

		nission uper. d	of	Extension of sick pay		Fitness of new officers		Suitable to continue in employment	
Department	Fit	Unfit	Fit	Unfi	t Fit	Unfit	Fit	Unfit	
Airport	4	2	_	_	15	1	3	1	26
Ambulance	4		-	_	19	1	5	1	30
Art Gallery	2	1	_	_	5	-	2	_	10
Building Surveyors	-		_	-	11	_	-		11
Central Purchasing	2	_	_		16	_	1	_	19
City Architect's	_	_	_	_	22	_	1		23
City Engineer's	174	28	_	_	241	4	25	29	501
City Estates	32	9	-	_	59	_	22	15	137
City Lighting	19	8	_	_	7	_	5	2	41
City Planning	-	-	-	-	22	_	_	_	22
City Treasury	_	1	_	_	98	1	4	2	106
Day Nurseries	_	_	_	_	58	1	_	_	59
District Nurses	_	_	-	_	25	_	_	_	25
Education	73	9	2	-	666	6	53	77	886
Fire Service	_	_	1	_	251	12	75	5	344
Health	4	1	_	_	6	_	1	1	13
Health Visitors	_	_	_	_	6	_	1	_	7
Home Helps	1	_	_	_	116	_	11	6	134
Housing	10	2	_	_	85	1	10	3	111
Libraries	8	1	-	_	86	_	1	4	100
Magistrates	_	_		_	8	_	_	-	8
Markets	2	_		-	2	_	3	2	9
Mental Health	3	_	_	_	5	_	_	_	8
Mersey Tunnel	12	_	-	_	159	2	9	2	184
Museums	2	_	-	_	8	_	8	_	18
Passenger Transport	248	15	_	_	12	_	_	15	290
Personal Health	240	15	_	_	10	_	1	-	11
Police	29	1	1	_	517	9	56	16	629
Port Health	27				317	-	30	10	-
Probation					39	1			40
Public Health Inspector's	5		1	_	16	_	3	_	25
Programme Planning	3		_		1				1
Recreation etc.	92	12		_	32	_	13	8	157
Social Services	15	1	1	-	264	5	18	15	319
Town Clerk's		1	1	-	102		2		105
	74	11	1	_		1		17	
Water		11	1	_	42	2	20	17	167
Welfare	3	-	-	-	55	2	6	4	70
Works	97	16	1	_	24	1	43	15	197
Total	915	118	8	-	3,110	50	402	240 4	,843
Total Fit	4	,435		Canc	elled			127	
Total Unfit		408		Othe	r Auth	orities		35	

Mental Health

Thomas L. Begg, MB Chb, DPH, MFCM Principal Medical Officer (Mental Health) Medical Adviser in Mental Health.

Since 1948 the Medical Officer of Health's annual reports have contained a section on the Mental Health Service which, until the reorganisation locally and nationally, operated as a section of the Health Department.

The Mental Health Service ceased to operate as a unit in 1971 after the Social Services Department was set up and eleven social services districts were formed in the city. Apart from the emergency admission service each district became responsible for dealing with mental health problems in its area.

The Medical Officer of Health remained as adviser on all medical matters to the authority and, under him, the Principal Medical Officer (Mental Health) as medical adviser on mental health.

It was envisaged that so far as mental health was concerned, there would be regular consultation between social services management and medical staff in relation to existing and proposed provisions but unfortunately, such consultation has not really taken place at this level. Happily, however, personal relationships have remained good and there has been no lack of willingness on the part of social workers to refer individual problems once they began to appreciate the role of the medical officer.

In past years the report on the Mental Health Service has been written with clear knowledge of the existing and proposed provisions but on this occasion since no consultation has taken place on these matters this report can only give general impressions of the services for the mentally disordered. The Director of Social Services has, however, kindly supplied some statistical information for inclusion at the end of this report.

Apart from the demise of the Mental Health Service with the setting up of the Social Services Department, one other major change during 1971 was the transfer on 1st April of junior training centres for the mentally subnormal to the Education Department in accordance with the Education (Handicapped Children) Act, 1970, and the change of title to E.S.N.(1) Schools. There were mixed feelings amongst the staff of the centres about the transfer and it remains to be seen how the children will benefit from the resources which should be made available to them from the Education Authority. Facilities continued to be provided in the schools for severely and doubly handicapped children both over and under the age of 5 years.

It will be essential for such provision to continue in view of the change of emphasis in relation to application for hospital care for the mentally subnormal. In the past such application was made for a variety of reasons, often largely social, but it is now expected that admission to hospital should only be on the grounds that the patient needs medical treatment or nursing care which can only be provided in a hospital. It is probable, therefore, that

the Social Services Department will have to provide some form of residential accommodation for mentally subnormal children who do not require hospital admission but for social reasons are unable to live at home. It may well be that with greatly increased social work support and other resources such as home helps and short-term care, a number will be able to be retained in the family setting. It is considered, however, that residential provision is required for about 60 children.

The adult training centres and workshop for the mentally subnormal at New Hall continued to provide an extremely valuable service but they are nearing the stage of reaching maximum capacity. Fortunately a start has been made on the new purpose-built adult training centre and workshop at Netherley and when this is completed in 1973 there will be a more even distribution of facilities for the adult mentally subnormal in the City.

The number of beds in the hostels for the adult mentally subnormal at New Hall has been increased from 148 to 170 plus 6 short-term care beds by using accommodation originally intended for staff. Whilst one cannot be entirely happy at this increase in numbers in view of the difficulty in obtaining agreement from the Department of Health to the original number of 148 when New Hall was being planned, the increase can probably be justified on the grounds that the total accommodation provided by the local authority at present is only about half of what is considered necessary for the adult mentally subnormal.

It is evident then that although a great deal of provision has been made for the mentally subnormal, much remains to be done and in this field alone the Social Services Department is faced with a great task.

In the field of mental illness the situation regarding residential provision presents an even greater problem. It was expected that the City's first eight-bedded hostel for the mentally ill would be opened during the year but for reasons beyond the control of the Social Services Department, the opening was delayed. It was anticipated, however, that the three eight-bedded hostels originally planned would be occupied during 1972.

It is estimated that residential accommodation would be required for 600 mentally ill patients in Liverpool and it would seem that serious consideration will have to be given to the provision of a crash programme if the residential needs of the mentally ill are to be met. The Hospital Plan for England and Wales envisages the run-down and eventual closure of the existing large mental hospitals but such a scheme can only be effective if community care resources are adequate. This applies not only to residential accommodation but to facilities such as occupational therapy units and workshops and unless these are provided as a matter of urgency, there is a grave risk that the patient will suffer.

At the present time there is a severe shortage of occupational therapy facilities for the mentally ill in the City. The main provision is at Johnson Street which can take 30 patients daily. The unit at Longmoor Lane was originally intended to take both mentally ill and physically handicapped patients but it is underused in relation to the mentally ill.

During the year a centre was opened at Beechley where ex-hospital patients living at the Salvation Army Hostel could attend during the day and be kept occupied. This has met a need for this particular group.

On reorganisation, land in the Toxteth area was transferred from the Health Department to the Social Services Department so that an occupational therapy unit and workshop for the mentally ill could be built. Such provision is urgently required, firstly because of the present inadequate facilities and secondly because many of the patients who will be admitted to local authority and other hostels will be unable to hold employment and will therefore need the training and work facilities which such a unit should provide. Without it there is a danger that the patients will vegetate in the hostels or deteriorate because of lack of stimulation.

It is difficult to comment on the work done during 1971 by social workers since, as indicated earlier, there appeared to be a lack of understanding of the role of the medical officer. This is not intended as a criticism of the social workers but rather as an indication of the lack of information or knowledge regarding the overall organisation of the Social Services Department and the relationship of the Medical Officer of Health and his staff to it.

It was interesting to note that once a social worker had realised that medical advice was available within the authority, he or she then continued to make use of this service. From the contacts that were made it was evident that a number of the social workers felt rather insecure in dealing with mental health problems. It was interesting to note that this did not apply only to the younger, less experienced social workers but to those who had previously worked in disciplines other than mental health. The impression was gained that some rethinking should be done regarding the scheme of making social workers generic, since it seemed that, although the service is now generic, better results might be obtained if the social workers could largely follow a chosen discipline rather than be expected to cover the whole field of social services. This would not mean that the social worker, having opted for one discipline would be excluded from dealing with cases involving other disciplines since he would be expected to deal with a total family situation and any problems arising within it. So far as mental health is concerned, it is felt that this sort of arrangement should ensure that the social workers concerned are working in a field in which they have a particular interest which should result in a better service to their clients.

It is also considered that there is a real need for social workers in the mental health field to form a close working relationship not only with family doctors but with consultant psychiatrists and the psychiatric hospitals. This will become increasingly important when the hospital catchment areas are finalised. If the suggestion made in the preceding paragraph could be adopted and a minimum of three mental welfare officers (social workers) on each district were dealing primarily with mental health problems it should then be possible for a really close relationship to be formed between them and the hospital service, and for the setting up of a comprehensive 24 hours-a-day service providing psychiatric cover in the City. It should not be forgotten that the local authority still has to appoint mental welfare officers who have statutory

functions and responsibilities under the Mental Health Act, 1959, and it is not doing a service to the social worker to resolve that he should be a mental welfare officer without ensuring that he has the necessary experience and ability to carry out the statutory duties imposed on him. This could place both the officer and the patient in a difficult position and there is always the risk that an inexperienced officer could take away a patient's liberty without just cause. The present system whereby inexperienced officers spend one week on emergency admission duty with an experienced officer is not considered enough to provide adequate experience. With about 150 basic grade social workers it will take about three years for each of them to do this duty.

This duty is still done during working hours from the old mental health centre in Johnson Street but it is understood that this will be phased out over about three years when each district will be responsible for dealing with its own acute mental health referrals. If this is so it would seem essential to plan now to ensure that there are sufficient experienced mental welfare officers on each district to deal adequately with such referrals.

During 1971 the emergency admission service was still being operated by officers who had experience as mental welfare officers prior to the reorganisation and this would appear to be reflected in the following comparative figures:

	1969	1970	1971
Section 29	225	227	239
Section 25	293	287	238

In the past, Liverpool has been criticised for excessive use of Section 29 (emergency) admissions but these have been significantly reduced since 1967. There was some concern that with the loss of direct control over this procedure there might be a tendency for the number of Section 29 admissions to increase and a watch was kept on these monthly admissions. In October a request was made for the reports on these admissions during that month to be submitted for scrutiny and it is perhaps of interest to note from the following table that the numbers, which had shown an increase during July through to October, dropped again in November and December.

Month	Rai	inhill	Sef	ton	Wh	iston	Ormskirk Winwick Deva		Out of Region		Totals				
	29	25	29	25	29	25	29	25	29	25	29	25		25	
January	14	15	6	9	1	3	_	1	_	-	_	_	-	1	50
February	7	12	5	3		1	-	-	1		-	-	-	-	29
March	10	13	9	8	1	-	-	-	-	-	-	-	-	-	41
April	13	10	5	3		2	-	-	-	2	-	-	-	-	35
May	11	14	13	6	-		-	-	-	-	-	-	-	-	44
June	11	11	3	2		-	-	-	-	-	-	-	-	-	27
July	14	23	11	7	-	_	-	-	-	-	-	-	-	-	55
August	14	9	9	5	***	2	1	-	-	3	-	-	-	-	43
September	15	14	8	1	-	-			-	-	-	-	-	-	38
October	10	16	12	6	-	_	1	1	-	-	-	-	-	-	46
November	8	6	8	4	-	1	-	-	1	-	_	-	-	_	28
December	10	12	6	10	-	1	-	-	-	-	1	-	-	1	41
Totals	137	155	95	64	2	10	2	2	2	5	1	_	-	2	477
Total 29 & 25	2	292	1	59	1	2	4		7		1		2	2	

Total Section 29 = 239

Total Section 25 = 238

There could be a number of reasons for this fluctuation but it could indicate the need to ensure that mental welfare officers are fully aware of their responsibilities and exercise their powers correctly. If the reduction in numbers in November and December resulted because individual reports were being looked at then some continued supervision would appear to be necessary (or should we now say that performance should be monitored!) Whatever the reasons, however, it is considered essential that those carrying out the statutory duties of a mental welfare officer should have adequate training and experience.

A logical step in relation to emergency referrals would be to form links with the proposed catchment area psychiatric teams in the City so that when a case is referred to the mental welfare officer, he would have immediate access to an approved doctor who could see the patient and it might then be possible to prevent some hospital admissions. Such a scheme would need the agreement of the family doctors, the consultant psychiatrists and the Social Services Department and it is hoped that serious consideration will be given to implementing it.

I do not think I can end this rather brief report without some reference to those with whom I have worked since I came to Liverpool in 1952 to take charge of the Mental Health Service first under the late Professor Frazer and from 1953 with direct responsibility to Professor Semple.

Professor Frazer retired about six months after my arrival and since that time I have had a close working relationship with Professor Semple who has always shown a keen interest in mental health and fully supported the many changes which led to an improved service.

In the early years the Mental Health Service tended to work in isolation but gradually we were able to move towards a close relationship with the Regional Hospital Board and the psychiatric hospital service. My appointment to various medical and other committees in the hospitals and elsewhere has led to a greater understanding of mutual problems and I must thank the many consultant psychiatrists with whom I am now in regular contact for their willingness to work towards a more integrated service for the mentally disordered. It is, perhaps, unfortunate that our plans could not have reached fruition before the reorganisation of the local authority services but we hope that they can still be achieved.

I must also thank the staff of the Mental Health Service of whom there were over 200 of all grades for the support they gave me over many hard and sometimes extremely difficult years. It is never easy to mention one out of so many but I feel it is only right that I should pay tribute to Miss E. M. Archer, Senior Mental Welfare Officer, who retired in June after nearly 44 years service to the mentally disordered first in hospital and since 1951 in the community. She will long be remembered with affection not only by her colleagues but by many patients and their families to whom she devoted herself both during and outside normal working hours.

For myself this has been an unusual but interesting year. Many of the responsibilities which I personally carried for 19 years were divided amongst a number of different officers in the Social Services Department when the Mental Health Service as such ceased to exist. I wish those officers now responsible, success in their allotted tasks and hope that increasing provision will be made for the mentally disordered in Liverpool.

My own responsibilities have changed but the work-load has not decreased and seems unlikely to do so as services expand.

STATISTICS FOR 1971 (Provided by Director of Social Services)

	Males	Females
Rainhill Hospital		ne tell 120
Admitted Informally	229	192
Section 29 (Emergency)	61	76
Section 25	67	88
Regraded from informal status to Section 25	3	15
Regraded from Section 25 to Section 26	8	8
Direct admission Section 26	-	1
Admitted Section 60 from the Courts	8	
Absconders returned	14	10
Referred for compulsory admission but after intervention by M.W.O. admitted informally	2	9
Psychiatric Units - Sefton General Hospital		
Admitted informally	38	51
Admitted Section 29	48	47
Admitted Section 25	21	43
Regraded from Informal status to Section 25	30	74
Regraded from Section 25 to Section 26	4	23
Absconders returned	4	3
Referred for compulsory admission but after intervention by M.W.O. admitted informally	2	2
Other Psychiatric Units		
Informal Admissions	39	44
Section 29 Admissions	3	4
Section 25 Admissions	10	9
Regraded from Informal status to Section 25	1	-
Regraded from Section 25 to Section 26	-	1
Absconders returned	1	1
Referred for compulsory admission after intervention by M.W.O.	1	2

Emergency Care of the Elderly

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

Most cases visited, because of illness or general senility, can no longer be cared for at home and require hospital or residential accommodation for recovery or the maintenance of reasonable health. Whenever this situation occurs the medical and welfare problems are fully discussed with the person, and an offer of suitable premises away from home is made. The majority, when discovered in need, can be persuaded to accept admission for care and attention. The remainder, because of their condition, have no insight into their problems, and require firmer measures. In these cases Section 47 of the National Assistance Act, 1948 is invoked.

The emergency care of the elderly is undertaken in co-operation with the Social Services Department. In fact, the emergency arises as a result of their request to assist them in difficult situations.

Rehousing on Medical Grounds

Medical rehousing is designed to enable the Medical Officer of Health to give assistance in those cases which, for reasons of health, should receive some degree of priority in rehousing.

During 1971, a total of 9,326 applications were received for rehousing on medical grounds. Of these 2,932 were from residents living in non-Corporation property applying for medical points or special medical priority on the Liverpool Housing Register. The remaining 6,394 applications were from Liverpool Corporation tenants who found their present accommodation unsatisfactory and requested a medical transfer to more suitable accommodation. In view of the excessive number of applications, the Medical Officer of Health could only recommend the most urgent.

The details of each individual application were closely examined and where necessary visits were made by a medical officer, health visitor, social worker, occupational therapist or a public health inspector. An assessment of the medical factors was then made and consideration was given not only to the individual applicant but to the whole of the family as a unit. Special recommendations were made to rehouse handicapped people in the type of accommodation most suited to their disability.

Of the applicants in Council property a total of 436 was recommended for a transfer to alternative accommodation and of these 83 transfers were effected by the end of the year. In the group living in property owned by private landlords 205 cases were recommended for special priority allocation of which 64 were rehoused by the end of the year. From previous years recommendations 115 transfers and 63 priority cases were rehoused during 1971. In addition, 254 applicants were awarded points. Details are given in the table below:—

1971	Special Priority Cases	Transfer Cases	Totals
Number of applications received	2,932	6,394	9,326
Number recommended	205	436	641
Number rehoused	64	83	147
Number still not accommodated	141	353	494

In nearly every case the medical factors were genuinely related to the housing conditions and benefit would have been obtained from suitable rehousing. However, owing to the severe shortage of housing accommodation in the City of Liverpool only the more serious cases could be considered and a medical recommendation was only made where there was a reasonable prospect that the applicant could be rehoused.

The major medical conditions for which recommendations were made were cardiovascular, respiratory disorders and conditions affecting locomotion.

Diagnosis	Number Awarded Points	Number Recommended for Special Priority	Number Recommended for Transfer	Totals
Cardiovascular	82	59	85	226
Conditions Affecting Locomotion	37	53	112	202
Respiratory Disease	72	42	103	217
Psychiatric Cases	31	6	16	53
Malignant Disease	10	12	25	47
Debilitating Disease	18	30	84	132
Blindness and Deafness	4	3	11	18
Totals	254	205	436	895

The most important single factor encountered was the inability to climb stairs and many recommendations had to be made for rehousing into accommodation accessible without the use of stairs. This, of course, includes flat accommodation accessible by a lift. A ground floor flat is only specified in cases were the applicant would be unable to work a lift. A summary of the type of recommendation is given in the table below:—

Table showing type of recommendation made

Recommendation	Special Priority Allocation	Transfer	Total	
No stairs	105	270	375	
No more than one flight of stairs	7	25	32	
Ground floor	40	47	87	
House	41	83	124	
Warden controlled	5	6	11	
Indoor bathroom essential	7	5	12	
Total	205	436	641	

Cremation

The Medical Officer of Health continues to act as medical referee to the Liverpool Crematorium. The Principal Medical Officer (Epidemiology) (and Acting Deputy Medical Officer of Health in absence of M.O.H.) and the Principal Medical Officer (Mental Health) acted as deputy medical referees. The documents, which are statutory, are scrutinised at the central offices of the Liverpool Health Department before authority is given to cremate. The number of cremations carried out during the year at the Liverpool Crematorium was 4,327. This is a slight increase over the number undertaken during 1970 (4,234).

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

Water Engineer's Report

WATER SUPPLY

The water supply in the area during 1971 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 dwelling houses, flats and shops with domestic living accommodation supplied from the public water mains in Liverpool was 196,077. None was supplied by a standpipe. The population of the City as estimated by the Registrar General for the 30th June 1971, was 603,210.

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 0.08 to 0.16 p.p.m.

During the year 1971 bacteriological examinations were made on 3,927 samples of water from the aqueducts, wells, storage reservoirs, trunk mains and the distribution system. Of the 3,927 samples, 650 were taken within the City from the two wells, two service reservoirs and from sampling points on the mains other than the trunk mains. Of the 650, 97% were free from B.Coli in 100 ml. and 87% were free from coliform organisms in 100 ml.

Of the 3,927 samples, 1,671 were taken from the trunk mains which serve the City and other parts of the area of supply. Of the 1,671, 99% were free from B.Coli in 100 ml. and 90% were free from coliform organisms in 100 ml. Also, 68 chemical analyses were made and the results were satisfactory. For plumbo-solvency, 302 analyses were made. The average amount of lead absorbed in these samples (excluding those taken from houses by Public Health Inspectors) of water that had passed through test lengths of lead piping was .05 p.p.m. The supplies from both Rivington and Lake Vyrnwy were treated with hydrated lime in order to raise the pH value.

WATER ANALYSES

During the year a total of 388 samples of water were submitted and gave the following results:—

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

194 Average lead content 0.097 mgm/l.

194 Average lead content 0.055 mgm/l.

Merseyside Cancer Education Committee

Programme development

Speakers were provided for 95 meetings in 1971, a reduction on the previous year. However, this is largely accounted for by the transfer of part of the schools cancer education programme to the school nurses, as forecast by the Administrator in 1970. Such meetings are no longer included in these figures.

There was a marked increase in the service to people at their place of work, the main concentration being on factories employing women, to encourage the use of cervical cytology facilities. This involved co-ordination with the Personal Health Department so that indicated willingness to have the test was responded to promptly either by special clinics on works premises, specially arranged sessions at local clinics or individual appointments at standard clinics. These arrangements had also to be dovetailed with seasonal fluctuations in work load within the factories and so a great deal of work was involved in arranging these tests. However, as the women concerned were those in the high-risk groups this effort represents concentration of resources on a prime target area and worked smoothly and successfully.

Special projects

- 1. Forward planning by the Personal Health Service for a special project on cervical cytology in a defined area of the City led to the preparation by the Administrator of a preliminary appraisal of the problems involved and recommendations concerning the health education content of such a project.
- 2. The report 'By Chance or By Design?' on the Merseyside Cancer Education Committee's evaluation of a teaching programme on Breast Self-examination was published in 1971. A copy of the full report is lodged with the Medical Officer of Health and the smaller 'Extracts from the Report' has been distributed to doctors who are on the Panel of Speakers and is available also to other medical and nursing staff in the Department.

Chest Physicians' Reports

SOUTH LIVERPOOL CHEST CLINIC

Dr. F. E. Crawley, Consultant Chest Physician, writes:

The year has seen an appreciable fall in the notifications of respiratory tuberculosis from 88 last year to 55 this year but non-respiratory notifications have increased from 11 to 15. Of the 570 patients on the Tuberculosis Register at the end of this year, 121 were under active treatment, the others being under supervision at varying intervals.

At the time of writing this report there is only one female patient under inpatient treatment but 14 males are in Aintree Hospital. The incidence of notification has been greater in males for many years and tuberculosis in the male is increasingly a problem of the over-fifties and particularly of the male left to his own devices and neglectful of his own health, i.e. in the single, widowed, alcoholic or drifter. It is unfortunate that in this group one also finds a considerable proportion of patients who discontinue treatment before there is any real prospect of the disease being cured and who, in their habits before the disease was recognised or after relapse, are most dangerous sources of spread of infection among their contacts who often share the same social disadvantages.

Of the 14 males in sanatorium four are immigrants—a group in which there also appears to be a greater incidence of non-respiratory disease.

The Health Visitors now give injections to patients needing such treatment after discharge from sanatorium and so maintain a closer link with some of the patients in their area in their readjustment to life outside the hospital.

NORTH CHEST CLINIC

Dr. W. D. Gray, Consultant Chest Physician, writes:

The number of new cases notified suffering from tuberculosis in 1971, has gone up to 60 as compared with 42 in 1970, 53 of these were pulmonary and 7 non-pulmonary. This increase in 50% is rather alarming and of course with it comes an increase in work of examining contacts and giving B.C.G. 494 contacts were examined as compared with 406 last year and 313 patients were given B.C.G. as compared with 249. The number of tuberculin tests performed was 322 as compared with 254. On the other hand the number of patients on Tuberculosis Register in North Liverpool has gone down from 724 to 574, mainly due to a large number having been removed from the Register as recovered, 76 in 1971 as compared with 17 in 1970.

In order to cover the preventive work adequately at the Clinic, I feel that our allocation of two Health Visitors is not adequate and it is most unfortunate that we have been reduced from our original four and also that they are having to spend time going around doing injections which is work which should really be done by District Nurses. The overall total work at the Clinic was slightly down with total attendances of 4,413 as compared with 4,909 in 1970, 1,588 being attendances due to tuberculosis as compared with 2,094 in

1970 and 2,825 being non-tuberculous attendances as compared with 2,815 in 1970; the latter was a slight increase. Deaths from tuberculosis this year were 13 as compared with 15 in 1970 and this fall in mortality though slight is following recent trends. Nevertheless the increase in the number of new cases in 1971 is a disturbing feature which, if repeated during 1972, must give us cause to think again and would certainly be evidence in favour of continuing the running of an adequate Chest Clinic service soundly based on preventive principles.

EAST CHEST CLINIC

Dr. Luke Harris, Consultant Chest Physician, writes:

The work of the clinic in 1971 was much the same as during the previous year. Approximately two-thirds of the work concerns non-tuberculous conditions. The number of patients on the tuberculosis register remains around 400, but new cases have again fallen from 57 in 1970 to 40 in 1971.

CENTRAL CHEST SERVICE

Dr. H. N. Bleasdale, Consultant Chest Physician, writes:

The year 1971 has seen an increase in the activity of the Central Chest Service. The number of patients attending for the first time was 561 (273). Those found to be suffering from tuberculosis numbered 39 (24) whilst the remainder were found to have other chest conditions. The number of contacts examined was 296 (125). Patients attending the clinic by appointment numbered 1,272 (731), this figure including observation cases.

Visits made to the homes of patients by the Health Visitors were 1,397 (916), whilst 66 contacts were given B.C.G. vaccination.

It was anticipated that the work of the Clinic would increase as the site is convenient to patients and family doctors. In the current year it is hoped to improve the amenities by the provision of self-contained toilet accommodation.

It is clear that tuberculosis is not a disease of the past and that continual vigilance must be exercised to contain the disease within its present limits. As a long term policy, the B.C.G. vaccination of infants who live in areas with less good housing accommodation might offer a contribution to this end, whilst the intensity of case finding with the facilities available within the Service might be augmented.

Throughout the year the Clinic has enjoyed loyal and painstaking assistance from the Health Visitors whose activities have earned the respect of both patients and staff. As in the past our relationships with family doctors have been most cordial.

In these notes, the figures in brackets refer to the year 1970.

LIVERPOOL CENTRAL CHEST SERVICE

(Mass Radiography Section)

Mr. C. C. Warmer, Senior Administrative Officer, writes:

Since January 1970, the Mass Radiography Service has formed a composite part of the Liverpool Central Chest Service, having its headquarters in Kingsway House, Hatton Garden, Liverpool 3.

The Service has a static unit at headquarters and a mobile unit which covers those areas in S.W. Lancashire and Cheshire administered by the Liverpool Regional Hospital Board.

The work of the static unit in 1971 comprised x-ray examinations arising mainly from the following sources:—

- (1) Patients referred by family doctors.
- (2) Examinations made at the request of the Medical Officer of Health.
- (3) The examination of contacts of cases of tuberculosis.

The work of the mobile unit included the x-ray examination of contacts in various firms and establishments and visits to industry where hazards to the respiratory system were considered to be present. Visits were also made to Liverpool University, Teacher Training Colleges, centres for the attendance of Health and Eduçation staffs and to mental hospitals, prisons, and remand homes.

During the year 13,428 x-ray examinations were made at Kingsway House, 8,113 of these being at the request of family doctors (60%).

The mobile unit x-rayed 49,532 people, bringing the total examinations made by the Service to 62,960.

The number of cases of active pulmonary tuberculosis discovered was 45 (static unit 21, mobile unit 24). Of this number, 26 were Liverpool residents.

Maternity and Child Health

MIDWIFERY SERVICE

During the year 336 midwives notified their intention to practise midwifery in the City. This was 8 more than in 1970. Notifications from hospital midwives numbered 283. Those from domiciliary midwives numbered 53, . of which 13 were Lancashire County and Bootle midwives who delivered patients in Fazakerley Hospital.

The number of domiciliary births was 385 compared with 628 in 1970. The number of patients nursed at home after hospital confinement was 7,011. In 1970, the number was 8,118. This shows a decrease in domiciliary births of 243 from the previous year, and a decrease of 1,107 patients nursed at home after hospital confinement.

The total number of patients discharged from hospital to the care of the domiciliary midwives was 7,645, but of these 634 were premature babies who were cared for by three specially trained midwives.

Staff

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

- 1 Non-Medical Supervisor of Midwives
- 1 Assistant Supervisor
- 1 Midwifery Tutor
- 1 Training Superintendent
- 27 Full-time Midwives
- 3 Premature Baby Midwives
- 4 Part-time Midwives

During the year the Assistant non-medical Supervisor of Midwives died, the Training Superintendent left and two domiciliary midwives were appointed to these posts. Six midwives left the staff, three of them due to retirement. One part-time midwife transferred to full-time. Two midwives were appointed during the year, one full-time and one part-time.

Training of Part II Pupil Midwives

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

An average of 23 pupil midwives each quarter worked under the supervision of their Teaching District Midwives. Tutorial and practical teaching were given by the Tutor and Training Superintendent.

To conform with the requirements of the Central Midwives Board, the follow-up care of patients to the 28th day of the puerperium and the presentation at their examination of three case studies, necessitated pupil midwives commencing domiciliary training one month earlier, and returning to hospital one month before the examination. To complete the added experience necessary to their training, an extensive community care programme was also planned.

Ninety-two pupils took the Course and 91 qualified as midwives. At the end of the year 16 were still in training.

During 1971, 27 midwives worked as approved district teachers.

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

An average of 20 student nurses, every 3 months, spent a morning visiting with a midwife, and attended a Child Health Clinic in the afternoon.

Midwives Accommodation

Sixteen midwives occupied Corporation houses or flats. One lived in furnished accommodation.

Transport

Twenty-nine midwives (both full-time and part-time), the premature baby team, and the administrative staff were car owners and drivers.

Two midwives were cyclists and 8 used public transport.

Postgraduate Courses

The statutory courses held in various parts of the country were attended by 4 midwives during the year.

Ante-Natal Care

Ante-natal care of the mother was carried out at 26 general practitioners' clinics including the Health Centres at Toxteth and Cantril Farm, at Local Authority clinics run by midwives and also by visits to the homes of patients.

Midwives attended 1,322 sessions with family doctors, 82 sessions at medical officers' clinics and 644 at their own clinics.

Visits to the homes of patients numbered 4,620.

One hundred and three analgesia demonstrations were given by midwives at Local Authority Parentcraft classes.

The Emergency Obstetric Unit

The emergency obstetric unit was called out 12 times to the homes of patients. Blood transfusion was necessary on 3 occasions.

Reasons for calling the unit were:-

Retained placenta	5
Primary post-partum haemorrhage	4
Asphyxia Neonatorum	2
Delay in Second Stage of Labour	1

Six patients were transferred to hospital and 6 were able to remain at home.

Emergencies

Midwives were called to emergencies by the ambulance service on 54 occasions. These calls were to patients who were booked for hospital, but called the ambulance too late, or to patients who had received no ante-natal care. In all, 42 mothers were transferred to hospital in labour, or immediately after delivery and 12 mothers and babies were nursed at home.

Post Natal Care

After confinement midwives paid 6,162 visits to their booked cases, 40,621 visits to mothers and babies discharged home from hospital before the end of the lying-in period, and 6,224 visits to patients referred from hospital for the assessment of home conditions. The figures show an increase of 1,212 visits to mothers discharged from hospital from the previous year.

There is a decrease of 2,147 visits to patients referred from hospitals for the assessment of home conditions.

Co-operation with General Practitioners

Co-operation with General Practitioners has increased steadily during the last few years, and the changing role of the domiciliary midwife can be seen in the way her work involves her with patients who are booked for hospital confinement as closely as it does with domiciliary booked patients, thus strengthening the liaison between midwife and general practitioner.

4,373 visits were made by patients to General Practitioner ante-natal clinics at which a midwife was in attendance. 627 attendances were made by patients booked for home confinement and 3,746 by patients booked for hospital confinement.

764 visits were made to patients in their own homes, of these 537 were to defaulters from clinic, and a full ante-natal examination was carried out. 227 visits were made during the year at the request of General Practitioners for various other reasons.

A considerable number of patients booked for hospital confinement were later discharged home early to the care of the midwives who had seen them at the General Practitioner's clinics and it was felt that this was of psychological benefit to the patients concerned.

Premature Babies

Twenty premature babies were born at home, of these one was transferred to hospital and the remaining nineteen were nursed at home; 634 premature and 'at risk' babies born in hospital were later discharged to the care of the specially trained midwives. Among these babies discharged from hospital were 27 sets of twins and 3 babies who were one of twins.

The midwives caring for premature babies made 342 visits to home deliveries and 3,176 visits to those discharged from hospital. They also visited 260 homes before the babies were discharged to assess the home conditions and to advise the mothers on conditions suitable for small babies.

MATERNAL DEATHS

There were five maternal deaths during 1971. Two of these were directly due to delivery. One death was due to obstetrical shock following Caesarian Section, the other occurred from septicaemia following general peritonitis of the Caesarian Section.

Note – One death was not registered until 1972, and for statistical purposes will be counted in that year. The remaining three deaths were not due to pregnancy or to childbirth. One was due to severance of the spinal cord following a traffic accident, one to carcinomatosis associated with a cylindroma of the left maxilla three months after delivery and one to status asthmaticus eight weeks after delivery.

MIDWIFERY SERVICE - HOSPITAL DISCHARGES - 1971

Hospital	2nd Day	3rd Day	4th Day	5th Day	6th Day	7th Day	8th Day	9th Day	10th Day+	Prem. Births	Total
Liverpool Maternity Hospital	137	246	260	317	423	269	98	87	28	131	1,996
Mill Road Maternity Hospital	271	116	39	74	139	677	258	46	53	172	1,845
Broadgreen Hospital	149	84	31	98	263	327	59	23	8	69	1,111
Fazakerley Hospital	92	117	71	294	455	69	47	15	12	135	1,307
Sefton General Hospital	90	133	55	80	134	380	194	97	18	125	1,306
Other Hospitals	32	5	6	5	2	16	9	2	1	2	80
Total	771	701	462	868	1,416	1,738	665	270	120	634	7,645

REASONS FOR MIDWIVES CALLING MEDICAL AID - 1971

	Babies	
8	Sticky eyes	17
8	Jaundice	7
7	Oral thrush	5
7	Inflammation of umbilicus	5
6	Twitching	4
4	Snuffles	4
7	Septic spots and rashes	3
4	Offensive stools	3
3	Slight umbilical haemorrhage	3
3	Bloodstained stools	2
3	Feeding problems	2
2		2
	Stillbirth	2
	Pyrexia	1
2	E. # 100 C.	1
1		1
1		1
5		1
1		1
1		2
1		1
9	and, and provide the same of t	
87		68
	8 7 7 6 4 7 4 3 3 3 2 2 2 2 1 1 1 9	8 Jaundice 7 Oral thrush 7 Inflammation of umbilicus 6 Twitching 4 Snuffles 7 Septic spots and rashes 9 Offensive stools 9 Slight umbilical haemorrhage 9 Bloodstained stools 9 Jack Price

Total 155

Of these 124 were patients discharged from hospital before the tenth day and 31 were for patients delivered at home.

Patients on Doctors' Maternity Medical List	142
Patients not on Doctors' Maternity Medical List	13
	155

MIDWIFERY SERVICE – PATIENTS TRANSFERRED TO HOSPITAL

Mothers		Babies
Postmaturity	16	Asphyxia neonatorum
Ante-partum haemorrhage	8	Prematurity
Premature rupture of membranes	8	Coryza
Delay in first stage of labour	7	Hirschsprung's disease
Multiple pregnancy	4	Cleft palate
Breech presentation	5	Convulsions
Pre-eclampsia	4	Hydrocephalus
Domestic reasons	8	_
Premature labour	4	Total
Miscarriage	3	
Hypertension	3	
Unstable lie	3	
Disproportion	3	
Anaemia	3	
Pre-diabetic	2	
Foetal distress	2	
Multiparity	2	
Rhesus negative with antibodies	2	
Elderly primigravida	1	
Brow presentation	1	
Hyperemesis gravidarum	1	
Intra-uterine death	1	
Threatened abortion	1	
Total	92	Total 99

MIDWIFERY SERVICE - ASSESSMENT OF HOME CONDITIONS - 1971

Hospital Requests	Suitable for Early Discharge	No Contact	Not Suitable for Early Discharge
3,142	2,812	71	259

MIDWIFERY SERVICE – WEIGHTS OF PREMATURE BABIES CARED FOR BY SPECIALLY TRAINED MIDWIVES

A read or wheel and the second or the second	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 3lbs 4ozs	_	1	_
3lbs 5ozs to 4lbs 6ozs	-	-	-
4lbs 7ozs to 4lbs 15ozs	2	-	15
5lbs to 5lbs 8oz	13	-	366
5lbs 9ozs and over	4	-	253
Total	19	1	634
Sets of Twins			27
One of Twins			3

HEALTH VISITING SERVICE

New Premises

The Family Health Centre in Sheil Park was opened in November. These premises are to be part of a new community, and are, at present, in an area where demolition has taken place, and rebuilding has not started yet. This means that it will be some time before the clinic is in full use, but a well baby clinic and the distribution of welfare foods have already started.

Health Visitor Training

Recruitment for training continues to be a problem as many candidates lack the requisite educational qualifications of 5 'O' levels. Nine candidates were accepted for sponsorship during the year.

In September 1971, eleven students completed their training and were successful in their examination, and were appointed to the staff: at the same time the nine sponsored students commenced their training.

Staff

During the year twelve health visitors (10 full-time: 2 part-time) left and eleven newly qualified were appointed in September: 4 State Registered Nurses were employed to meet the need of extra family planning sessions. The staff at the end of the year was as follows:—

- 1 Principal Nursing Officer (Health Visitors)
- 1 Senior Nursing Officer (Health Visitors)
- 1 Principal Tutor
- 1 Tutor
- 11 Principal Health Visitors
- 18 Full-time Health Visitors working as Fieldwork Instructors
- 43 Full-time Health Visitors
- 6 Part-time Health Visitors
- 9 Full-time State Registered Nurses
- 12 Part-time State Registered Nurses
- 24 Family Planning Nurses (sessional)

Care of Children

9,676 babies born during 1971 were visited for the first time after their discharge from hospital, or from the care of the domiciliary midwife. These visits included 300 to babies who were born outside Liverpool but who moved into the city before the first visit could be paid in another area. These first visits are paid to ensure that all is well with the mother and baby; to give advice on home and family management; and to help with any problems which might have arisen.

Routine blood testing of all babies for phenylketonuria continued and at the end of the year a total of 10,709 tests had been made, 10,506 blood tests; 203 urine tests.

643 babies survived being born prematurely and of necessity these babies required to be visited more frequently as did those other babies born at risk, with physical and mental handicaps. A great deal of time was spent with the parents of these children to reassure them and to help them in the acceptance and handling of their handicapped children.

141,521 effective visits and 25,634 non-effective visits were paid to 50,833 children under the age of 5 years and their families. The purpose of these visits is to give advice and support to parents, and to help them to recognise the normal development of their children. The health of the whole family is also reviewed at these visits. Any child whose development deviates from the usual pattern can be referred to the School Health Service for further assessment and advice. During the year 479 children were referred for the following reasons:—

Mental and physical assessment	30
Hearing assessment	35
Speech defects	21
Education tests	32
Eye defects	222
Orthopaedic defects	139
Total	479

During the year 17,140 cases of a special nature were visited; 2,964 of these were elderly persons and altogether over 15,000 visits were made to them. Some of these visits were requested by the geriatricians to implement nursing and social services until hospital beds were available. The period spent waiting for admission to hospital can be very difficult for both the patients and their relatives, and they may require a great deal of help and support during this time. Varying periods of convalescence were arranged for 220 elderly people during 1971.

Families with Problems

During the year assistance was sought by the health visitors from other workers on 8,571 occasions, as follows:—

General Practitioners		1,180
Ministry of Social Security		343
Medical Social Workers		1,142
Social Services Department		2,813
Health Inspectors		594
Education Welfare		235
Occupational Therapist		459
Probation Officers		157
Moral Welfare		74
N.S.P.C.C.		69
District Nurses and Chiropodists		1,505
	Total	8,571

Convalescence for Mothers and Children

Twelve mothers and 62 children went away for varying periods of convalescence, although it is still difficult to find accommodation for mothers and children to stay together.

Immunisation

Despite special efforts made by the staff throughout the year to improve the situation, the level of immunisation in children under 5 years continued to be disappointing. This prophylactic treatment is carried out at the local Health Clinics or by General Practitioners according to the parents choice and the following is the result at the end of the year:—

CHILDREN 0-5 YEARS IMMUNISED AND VACCINATED AT:

	Child Health Clinics		General P	ractitioners	Total	
	1970	1971	1970	1971	1970	1971
Triple	3,641	4,318	2,283	2,335	5,924	6,653
Polio	4,078	4,458	2,192	2,347	6,270	6,805
Measles	1,400	1,832	904	887	2,304	2,719
Smallpox	1,830	1,211	1,509	1,153	3,339	2,364

It will be seen from these figures that there was a slight increase in the number of children immunised against Diphtheria, Whooping Cough, Tetanus and Poliomyelitis, during 1971 over the number immunised during 1970. Routine vaccination against Smallpox was discontinued following the circular from the Department of Health and Social Security in November 1971.

Special Work

937 persons suffering from diabetes were under surveillance during the year, 679 by a health visitor who specialises in this work, and 258 by the general staff.

250 persons suffering from epilepsy and other neurological conditions have been visited also by a health visitor attached to the neurology department of Walton Hospital.

The purpose of these two services is to help the patients to understand and follow the medical advice given to them, and to help them live as normal a life as possible. In order to do this, it is necessary to keep in close contact with the hospital consultants, and also with social workers and resettlement officers.

Hospital Liaison

Eight of the City's hospitals were visited by health visitors who provided information for hospital staff and support for patients to enable them to benefit to the full from their medical treatment. The hospital staff and health visitors worked well together and much good work was achieved by this happy relationship.

Training Visits

Courses in Community Health, Communications and Management include a visit to a Family Health Clinic and a lecture by one of the Senior Nursing Officers. These visits have proved interesting and beneficial, as members of the nursing profession from other fields have become aware of the range of services available outside hospital. Student nurses, pupil midwives and other post-graduate students, including doctors visited local authority centres, and learned the extent of the work undertaken by health visitors. Church groups and other organisations continued to ask for speakers for their meetings. A total of 90 lectures and talks have been given throughout the year, and the two parent clubs at Norris Green Clinic and St. Christopher's Church have been well attended throughout the year, with a very interesting syllabus of lectures.

V.D. Welfare

Work in this field continued throughout the year as follows:-

Number of cases written to	358
Number of letters despatched	1,044
Number of cases reporting after receipt of letter	191
Number of letters returned (Dead Letter Office)	29
Number of cases visited	197
Number of visits made	788
Number of cases reporting after visiting	115
Number of cases promising to attend but failing	19
Number of cases removed or not known at address given	46
Number of cases not contacted	10
Number of cases refusing to attend	4
Number of cases transferred to other clinics	3

FAMILY HEALTH CLINICS

The following is a summary of the activities of our Family Health Clinics:-

Total number of centres at which ante-natal clinics were held

Number of sessions held per week (Doctors)	4
Number of cases attending Doctors' sessions	527
Total attendances at Doctors' sessions	901
Total attendances at post natal clinics	15
Total number of Midwives' Clinics	8
New cases attending Midwives' Clinics	645
Total attendances at Midwives' Clinics	895
Number of centres conducting mothercraft and relaxation classes	11
Number of mothers attending mothercraft and relaxation classes	588
Number of attendances at above	2,466
Total number of centres at which Child Health Clinics were held	28
Number of clinic sessions per week	59
Number of new cases - under 1 year	7,090
1-5 years	736
Total number of children who attended	16,559
Attendances - under 1 year	49,644
aged 1-2 years	9,362
aged 2-5 years	8,629
Number of centres at which cytology clinics were held	19
Number of sessions held	668
Total number of smears taken	5,077
Number of centres at which Family Planning Clinics were held	22
Total number of sessions per week	29
Total number of women who attended first time for advice	4,658

Cervical Cytology

During the year cytology sessions were held at local authority premises and at factories, and other places of employment. 5,077 women attended for examination at local authority clinics, and 475 at factories and other places.

Family Planning

Family Planning advice is now given at 15 local authority family health clinics and at 7 of the City's hospitals. 1,472 sessions were held during the year, at which over 24,000 attendances were made.

Domiciliary Family Planning

This service is given to women who for various reasons are unable to attend clinics or their general practitioner's surgeries. 397 women received 710 visits from medical and nursing staff.

WELFARE FOODS SERVICE

This service arranges for the distribution to the public of National Dried Milk, Vitamin Drops, Vitamin Tablets and Orange Juice, from 38 centres in the City.

The distribution figures for 1971 are as follows:-

National Dried Milk (packets)	23,624
Cod Liver Oil (bottles)	2,872
Vitamin Tablets (containers)	9,589
Orange Juice (bottles)	120,823
Vitamin Drops (bottles)	10,174

A, D and C Vitamin Drops for children and A, D and C Vitamin Tablets for mothers, replaced cod liver oil and orange juice which were no longer available after 30th April and 31st December respectively.

National Dried Milk at *reduced price* ceased to be issued from 4th April 1971, but is obtainable at full price or on Free Welfare token.

During the year one distribution centre held in a Church Hall was transferred to the new clinic at Sheil Park, which opened during September 1971. In other parts of the City, sessions were altered to meet the need, which varied as the population moved to new areas.

REGISTER OF CHILDREN BORN AT RISK (including abnormalities)
The total number of children under the age of 2 years on the register at the end of 1971 was 3,962. Of these, 2,097 were born during the year.

HANDICAPPED CHILDREN REGISTER

The register of children born with obvious congenital abnormalities was maintained during 1971. The number of children notified was 307 compared with 256 in 1970.

	1971	1970
Central Nervous System	38	34
Ear and Eye	5	4
Alimentary System	20	29
Heart and Great Vessels	58	41
Respiratory System	1	3
Urogenital System	30	12
Limbs, etc.	121	92
Other skeletal deformities	1	3
Skin, muscle and endocrine disorders	18	29
Blood disorders	2	7
Others not specified	1	2
	302	256

FAMILY PLANNING SERVICE

Clinics

There has been a noticeable expansion in this particular service. In some districts the attendance increased so much that a second clinic session had to be opened. The total number of attendances in 1971 was almost twice the number in 1970.

The total number of clinic sessions in 1971 was 26 per week, nine of these being hospital sessions.

Total number of attendances in 1970	10,005
Total number of attendances in 1971	19,641 (including home visits)
Total number of new patients in 1971	5,120

Of the 5,120 new patients:-

1,084 were provided with Condoms

2,284 were provided with Oral Contraceptives

739 were provided with Intra Uterine Contraceptive devices

418 were provided with other methods (spermicides)

Tests were made for early detection of cancer.

	1970	1971
Total number of Smears taken at		
Family Planning Clinics	1,041	2,343

Domiciliary Family Planning Service

In 1971 this service also has expanded. In 1970, one part-time medical officer and one nurse were providing the service, when 187 visits were made. In 1971 there were two part-time medical officers and one nurse and the total number of visits was 710. Of these:—

The total number of new patients was 397
Total number of return patients visited 313

There is provision for a full-time medical officer in the field of Family Planning. The post has been advertised.

Family Advisory Clinic

The Family Advisory Clinic at the Domestic Mission, Mill Street, has been so successful that another clinic session will be opened in 1972 at Sheil Park Clinic.

Total number of patients seen

200

Training of Health Visitors and Nursing Staff in Methods of Family Planning

With the help of the Family Planning Association, a two-day course of lectures was arranged. Thirty-nine members of the staff took the lecture course. Three clinics—Netherfield Road, Livingston Drive and Speke were recognised by the Family Planning Association for practical training. Ten Health Visitors and Nurses have taken their practical training and have obtained their certificates.

A similar form of training is being planned for 1972 and will include District Nurses and Midwives.

CERVICAL CYTOLOGY 1971

The total number of smears taken was similar to 1970. Fewer factory sessions were held in 1971.

Comparison of figures in 1970 and 1971

		1970	1971
Total Number		8,496	8,74
Number at Cytology (Clinics	5,243	5,90
Number at Family Pla	nning Clinics	1,401	2,34
Number at Factories		1,852	498
Statistics per month -	1971		
	January	770	
	February	704	
	March	690	
	April	700	
	May	659	
	June	904	
	July	933	
	August	566	
	September	833	
	October	720	
	November	786	
	December	476	
	Total	8,741	
Number of empare tec	hnically unsatisfactory as	nd reneated	53
	wing abnormality requir	A STATE OF THE STA	33
	carcinoma in situ)	ing nospitalization	62
	wing carcinoma in situ		1
Number of frank carci	-		2
Number of various oth	ner abnormalities found i	n 1971:	
Erosion of Cervix			1,695
Fibroids			18
Cervical Polyps			115
Vaginal discharge			384
Vaginitis mainly se	nile		63
Prolapse needing to			4
Low Hb. (Anaemia			23
Breast Neoplasms	1800		1
Menstrual disorder	S		87
Others, including (Pervicitis		498

CHIROPODY SERVICE

During the year, owing to the national and local shortage of chiropodists, the natural loss of full-time and sessional chiropodists due to retirement, sickness, pregnancy and staff leaving the area, there has been a further reduction in the number of clinic sessions. The postal strike from 29th January to 8th March was also a contributing factor in the reduced numbers of treatment given.

On 31st December 1971, the following chiropody staff were employed in this service. One Chief Chiropodist responsible for the general administration of the department; 2 full-time Senior Chiropodists and 21 Sessional Chiropodists. During the year, the situation was worse than at present, but is now showing an encouraging upward trend.

	1970	1971
Total number of sessions	5,272	4,657
Total number of sessions in clinics	5,110	4,350
Total number of sessions in hostels	165	307
Total number of patients	11,677	13,056
Total number of patients at clinics	10,005	10,508
Total number of patients in hostels	328	1,043
Total number of domiciliary patients	1,344	1,505
Total number of treatments given	39,284	34,273
Total number of treatments given at clinics	34,296	29,112
Total number of treatments given at home	3,712	2,707
Total number of treatments given at hostels	1,276	2,454

DISTRICT NURSING SERVICE

The most important undertaking by the District Nursing Service this year has been the inauguration of a Night Nursing Service to provide nursing care and attention for the very ill throughout the night; and to allow the attendant relative to obtain adquate sleep. It will be appreciated that the demand is great and the resources necessarily limited at first. The staff consists of 3 District Nursing Sisters (one of whom is full-time and two part-time) and 6 Nursing Auxiliaries.

An automatic telephone answering system is in use which enables the Sisters to travel freely in the city and deal with calls and messages within half an hour of their being recorded by the machine. Despite the newness of this project, many letters of appreciation have already been received from patients who have experienced night care.

Renal Dialysis

A second advance in the concept of nursing care in the home was the secondment of three District Nursing Sisters to a Unit of the Regional Urological Centre at Mossley Hill Hospital where they undertook a course of three months' duration in renal dialysis. Here they worked with patients about to be discharged and whom they would visit in their own homes, thus relationships were established in the early stages of the treatment.

The role of the District Nursing Sister in this scheme is to provide a supportive service which will reassure the patient and attendant relatives in the first few days of the machine's use at home, and subsequently to assist in cases of domestic difficulty or crisis, e.g. a Sister recently attended a patient when her husband was admitted to hospital as an emergency with acute appendicitis.

General Work

Despite the many specialities now evident in the District Nursing Service, the majority of patients still required the general clinical skills for which the District Nurses are so well known, and nursing visits to the sick in their own homes continued to represent the greatest demand upon the Service, the establishment of which remained unchanged from previous years and was structured in the following manner:—

- 1 Principal Nursing Officer
- 1 Senior Nursing Officer
- 1 Tutor
- 3 Area Superintendents
- 6 Assistant Area Superintendents
- 69 Trained District Nurses, 16 of whom work in the following specialities: -
 - 3 in the myelomeningocele team;
 - 3 District Nurse Liaison Officers;
 - 9 General Practitioner attached;
 - 1 Clinic duties at Toxteth Health Centre
- 12 State Registered Nurses
- 32 State Enrolled Nurses
- 4 Part-time Trained District Nursing Sisters
- 2 Part-time Nursing Auxiliaries
- 18 Part-time Nursing Auxiliaries

Visits

407,270 nursing visits were made to 14,438 patients during the year, showing a slight decrease from 1970. Again, there was an increase in the number of patients attending who were over 65. This age group often represents the chronically ill who require considerable nursing care with a resultant greater demand upon the Nurses' time. There was a marked increase in the number of visits made to patients requiring late-night sedations.

Comparable Tables of Work in the District Nursing Service

	1970	1971
Patients	14,672	14,438
Visits	414,431	407,270
Patients 65 years and over at time of first visit	6,861	7,305
Visits to patients over 65 years	217,674	257,735
Late-night visits	5,642	7,810

Night Service

This service commenced in July 1971, since when 29 seriously ill patients have received nursing care throughout the night for five nights per week.

In-Service Training

A special course of one week was provided for Senior District Nursing Sisters to enable them to undertake the special role of Practical Work Instructor, the object being to provide a nucleus of highly-skilled personnel who, as well as undertaking their own case load, would introduce students to their work in the community and teach them to adapt skills learned in the hospital to the home situation.

Lunch Time Lectures

A most welcome invitation was given by the Chairman of the Committee of the Liverpool Medical Institution for a number of District Nursing Sisters to attend a series of lunch-time lectures for General Practitioners which they hold at regular intervals in the city. This afforded a splendid opportunity for nursing staff to meet the General Practitioners for informal discussion over a buffet lunch followed by the lecture which provided an ideal way of keeping up to date with the latest developments and treatments in both medicine and surgery.

Training for the National Certificate of District Nursing

Twenty-eight State Registered Nurses undertook the training leading to the National Certificate of District Nursing; 26 of these were staff students and two were from other authorities. In addition, 7 students attended Liverpool for the theoretical part of the syllabus only. Six State Enrolled Nurses undertook the Course of Assessment leading to the National Certificate and a further two attended from another authority for theory only.

Visits to the Service

Programmes were arranged for 274 hospital student nurses to make rounds of observation with the District Nursing Sisters. Many equiries were received from overseas regarding the management, structure and function of the District Nursing Service and visitors were made welcome; comprehensive programmes being arranged to suit individual needs.

Immunisation and Vaccination

DIPHTHERIA IMMUNISATION

The number of persons under the age of sixteen receiving a primary course of diphtheria immunisation in 1971 was 8,345, an increase on the 1970 figure of 7,752.

During 1971, totals of 1,316 primary courses and 4,249 booster doses were given in schools. These figures are lower than the previous year's totals of 1,429 primary courses and 4,822 booster doses.

The number of primary courses carried out in Maternity and Child Health Clinics was 4,481, an increase of 645 on the 1970 figure; in addition, 2,618 were given by general practitioners. The number of booster doses given in Maternity and Child Health Clinics was 838, an increase of 90 on the previous year, whilst the number given by general practitioners increased from 1,028 in 1970 to 1,258 in 1971. These figures, together with 4,249 boosters given in school, give an overall total of 6,345 booster doses, a decrease of 245 on the 1970 figure of 6,590.

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

PRIMARY DIPHTHERIA IMMUNISATIONS - 1961-1971

Where immunised	1961	1962	1963	1964	1965	1966	1961	1968	1969	1970	1971
Maternity and Child Health Clinics	5,479	5,016	5,263	5,710	6,023	5,843	4,799	2,155	4,098	3,836	4,481
Schools	1,332	1,332 1,464	1,362	2,732	1,401	1,818	1,698	1,678	1,253	1,429	1,316
General Practitioners	6,375	6,375 3,523	3,399	3,397	3,405	3,189	3,458	3,346	2,623	2,586	2,618
Total	13,186	13,186 10,003	10,024	11,839	10,829	10,850	9,955	7,179	7,974	7,851	8,415

Table B DIPHTHERIA IMMUNISATION – 1971

		Year of I	Birth				
		1967-71	1963-66	1956-62	Total	1954 and before	Total
Where In	nmunised	(0-4 years)	(5-8 years)	(9-15 years)	(0-15) years)	(16 and over)	all ages
Primary Course	Maternity and Child Health Clinics	4,367	107	7	4,481	_	4,481
	General Practitioners	2,360	129	60	2,549	69	2,618
	Schools	76	1,190	49	1,315	1	1,316
	Total	6,803	1,426	116	8,345	70	8,415
Booster Doses	Maternity and Child Health Clinics	167	656	15	838	3	841
	General Practitioners	221	875	162	1,258	33	1,291
	Schools	310	3,844	95	4,249	1	4,250
	Total	698	5,375	272	6,345	37	6,382

WHOOPING COUGH IMMUNISATION

The number of primary courses of whooping cough immunisation in 1971 was 6,912 compared with 6,077 in 1970. In addition, 1,188 booster doses were given, an increase of 233 on the 1970 figure of 955.

Table C WHOOPING COUGH IMMUNISATION – 1971

		Year of Bir	rth			
		1967-71	1963-66	1956-62	Total	
Where In	nmunised	(0-4 years)	(5-8 years)	(9-15 years)	(0-15 years)	
Primary Course	Maternity and Child Health Clinics	4,318	89	5	4,412	
	General Practitioners	2,335	111	54	2,500	
	Total	6,653	200	59	6,912	
Booster Doses	Maternity and Child Health Clinics	57	157	3	217	
	General Practitioners	188	681	102	971	
	Total	245	838	105	1,188	

TETANUS IMMUNISATION

The number of children under the age of sixteen receiving a primary course of tetanus immunisation increased in 1971 to 8,433, as compared with 7,822 in 1970. Booster doses numbered 6,430 as compared with 6,671 in 1970.

Separate figures are included in Table D for persons age sixteen years and over.

Table D
TETANUS IMMUNISATION – 1971

		Year of I	Birth				
		1967-71	1963-66	1956-62	Total	1955 and before	Total
Where In	nmunised	(0-4 years)	(5-8 years)	(9-15 years)	(0-15 years)	(16 years and over)	all
Primary Course	Maternity and Child Health Clinics	4,367	107	8	4,482	4	4,486
	General Practitioners	2,366	145	125	2,636	298	2,934
	Schools	76	1,190	49	1,315	1	1,316
	Total	6,809	1,442	182	8,433	303	8,736
Booster Doses	Maternity and Child Health Clinics	167	657	15	839	3	842
	General Practitioners	229	897	215	1,341	104	1,445
	Schools	310	3,845	95	4,250	1	4,251
	Total	706	5,399	325	6,430	108	6,538

Table E
PRIMARY COURSES OF ANTIGEN

Diphtheria/Tetanus and Whooping Cough	6,926	
Diphtheria and Tetanus	1,770	
Diphtheria	7	
Tetanus	328	

Table F

SMALLPOX VACCINATION - 1971

	Primary Vaccination	rccination		Revaccination	ion				
Age at date of vaccination	Maternity and Child Health Clinics	General Practitioners Total	Total	Maternity and Child Health Clinics	General Practitioners Total	. Total	Total	Vaccination at clinic for International Travel	Total
0-3 months	3	4	7						
4-6 months	7	10	17	1		1			
7-9 months	9	17	23	1		1 1	73		
10-12 months	7	27	34	1	5	4	30		
1 year	851	517	1,368	1	16	1 91	1 394		
2-4 years	344	969	940	_	15	16	1000		
5-15 years	20	189	209	2	140	142	351		
Total under 16	1,238	1,360	2,598	6	176	179	2,777		
Others	16	228	244	39 (/	(A) 1,157	1,196	1,440		
Total	1,254	1,588	2,842	42 (A	(A) 1,333	1,375	4,217	(B) 5,257	9,474

The revaccination figures for general practitioners include vaccinations for persons travelling abroad. The vaccination figures of the vaccination clinic for international travel include persons of all ages, some of whom are not resident in Liverpool. The majority are adults. Notes-(A) (B)

90

SMALLPOX VACCINATION

During 1971, 2,598 children under sixteen received primary smallpox vaccination. Smallpox vaccination has been discontinued in Maternity and Child Health Clinics on the recommendation from the Department of Health and Social Security.

Smallpox vaccinations carried out at the clinic held for the purpose of people travelling abroad numbered 5,257.

POLIOMYELITIS IMMUNISATION

The level of poliomyelitis immunisation in children under sixteen increased in 1971, 8,240 primary courses being completed as compared with 7,770 in 1970. Booster doses decreased slightly from 6,549 in 1970 to 6,516 in 1971.

POLIOMYELITIS IMMUNISATION – 1971 Completed Primary Courses

Table G

	Year	of Birth	1							
Where Immunised	1971	1970	1969	1968	1967	1963-66		sTotal under 16	and over	Total all ages
Maternity and Child Health Clinics	79	3,088	899	261	127	109	6	4,569	12	4,581
General Practitioners	247	1,484	433	115	68	120	54	2,521	100	2,621
Schools	_	3	-	5	32	1,074	36	1,150	1	1,151
Total	326	4,575	1,332	381	227	1,303	96	8,240	113	8,353
Reinforcing Dose	s									
Maternity and Child Health Clinics	_	2	3	7	139	629	24	804	75	879
General Practitioners	_	30	66	38	112	818	162	1,226	101	1,327
Schools	13	3	-	17	252	4,084	117	4,486	2	4,488
Total	13	35	69	62	503	5,531	303	6,516	178	6,694

MEASLES IMMUNISATION

During the year 3,184 measles vaccinations were carried out compared with 2,692 in 1970.

Table H
MEASLES IMMUNISATION – 1971

	Year	of Birth	h				- Others	
Where Immunised	1971	1970	1969	1968	1967	1963-66	under 16	Total
Maternity and Child Health Clinics	4	912	573	243	100	47		1,879
General Practitioners	3	436	246	148	54	80	15	982
Schools	-		-	3	17	298	5	323
Total	7	1,348	819	394	171	425	20	3,184

RUBELLA IMMUNISATION

During the year, 4,477 rubella immunisations were given to girls between their 11th and 14th birthday.

Table J

RUBELLA IMMUNISATION – 1971

	Year	of Birth				1055	
Where Immunised	1960	1959	1958	1957	1956	1955 and earlier	Total
General Practitioners	53	25	35	13	1	2	129
Schools	153	244	1,402	1,970	572	7	4,348
Total	206	269	1,437	1,983	573	9	4,477

VACCINATIONS FOR INTERNATIONAL TRAVEL

A total of 17,758 doses of vaccine for international travel were given at the clinic which is held every afternoon for the purpose. This compares with 15,373 in 1970.

Table K
INOCULATIONS AND VACCINATIONS FOR INTERNATIONAL TRAVEL – 1971

Month	Yellow Fever – Number of Persons	Smallpox – Number of persons vaccinated	T.A.B. – Number of doses	Cholera – Number of doses	Total
January	232	296	72	235	835
February	275	371	45	336	1,027
March	247	511	88	315	1,161
April	177	561	70	211	1,019
May	307	462	132	241	1,142
June	351	646	221	446	1,664
July	303	625	341	1,489	2,758
August	244	494	187	1,213	2,138
September	334	399	105	1,396	2,234
October	208	352	74	1,003	1,637
November	285	309	64	535	1,193
December	296	231	47	376	950
Totals	3,259	5,257	1,446	7,796	17,758

ANTHRAX IMMUNISATION

During 1971 the number of anthrax immunisations increased to 191 as compared with 22 in 1970. In addition, booster doses increased from 68 in 1970 to 80 in 1971.

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 material as wool, camel hair, horse hair, hides and hoof and horn meal, particularly those imported from India, Pakistan, the Middle East, Africa, Asia, Central and South America.

Table L
ANTHRAX IMMUNISATION

Year	1st Injection	Booster
1967	23	76
1968	27	22
1969	27	49
1970	22	68
1971	191	80

Tuberculosis

Statistics

The number of new cases found during the year was six more than the previous year; a total of 203 cases were discovered consisting of 169 pulmonary and 34 non-pulmonary cases. These figures give an incidence rate of 0.28 per 1,000 for cases of pulmonary tuberculosis and 0.06 per 1,000 for cases of non-pulmonary tuberculosis. The figures for 1970 were 0.25 and 0.04 respectively.

It is, of course, impossible on the basis of one year's figures to assess the significance of the increase mentioned above. It is to be hoped that next year's figures will show a resumption of the downward trend in the numbers of new cases found each year. However, taking the yearly totals of new cases for the past five years as a guide, it is reasonable to state that the incidence rate of tuberculosis in this city has now reached the position where dramatic decreases can no longer be anticipated. Forty-two per cent of this year's new pulmonary cases were found to have positive sputum on diagnosis, so that there are still depots of infection in the City and their eradication may well prove to be a slow-moving and difficult process and it is clear that there can be no relaxation of the existing regimen of sustained antituberculosis measures in the immediate future.

During the year 173 patients were removed from the Register; 153 of whom had suffered from pulmonary and 20 from non-pulmonary disease. These included those who had recovered during the year. The number of cases on the Register at the beginning of the year was 1,997, comprising 1,806 with pulmonary disease and 191 with non-pulmonary disease and excluding a total of 13 cases where diagnosis had not been completed. This gave a prevalence rate per 1,000 population of 2.99 pulmonary and 0.32 non-pulmonary with an overall tuberculosis prevalence rate of 3.31 per 1,000 at mid-year.

The total number of cases remaining at the end of the year was 1,805, comprising 1,615 of pulmonary disease and 190 non-pulmonary disease and excluding a total of 22 cases where diagnosis had not been complete. The number of new cases found as the result of illness was 163 which is 14 more than in 1970. The number of new cases found by examination of apparently healthy persons was 39 which represents a decrease of 9 compared with the figure for 1970.

Of the new cases of pulmonary tuberculosis 115 were male and 54 were female, 68 per cent of the total being male and 32 per cent female. Details of age and sex distribution are given in the statistical section.

The total of 26 deaths from tuberculosis in 1971 comprised 21 from pulmonary tuberculosis and 5 from non-pulmonary tuberculosis. These figures represent death rates of 0.035 per 1,000 for pulmonary tuberculosis and 0.008 per 1,000 for non-pulmonary tuberculosis, making an overall rate of 0.043 per 1,000 for all forms.

After-Care and Prevention

The number of tuberculosis visitors at the end of the year was eleven. The policy of concentrating visits on cases with the greatest need and on regularly visiting cases where social and housing conditions were affecting the disease was continued throughout the year. In addition, a large number of special visits are made for a variety of reasons and prominent among these are visits to investigate and submit written reports on housing applications made on medical grounds including a considerable number from persons suffering from respiratory diseases other than pulmonary tuberculosis. Finally, increasing attention is being paid to other lung conditions such as bronchitis, bronchiectasis, emphysema, carcinoma of the lung and post-operative conditions.

B.C.G. Vaccination

During the year B.C.G. vaccination of new-born babies continued in the maternity wards of the Sefton General, Fazakerley, Mill Road, Broadgreen and Liverpool Maternity Hospitals. The total number of babies vaccinated throughout all these units in the City was 266.

Re-housing on Medical Grounds

The following table gives details of cases of tuberculosis rehoused on medical grounds during 1971.

	Special Priority Allocations	Transfers	Totals
Number of applications received	51	102*	153
Number recommended	29	46†	75
Number re-housed	18	13	31
Number refused offers	5	1	6
Number still not rehoused	6	32	38

^{*}Includes 14 Slum Clearance houses.

[†]Includes 9 cases recommended under Slum Clearance.

Work of the Chest Clinics

An analysis of the work done during 1971 at the four Chest Clinics is given in the following table.

TUBERCULOSIS CASES ON REGISTERS OF CHEST CLINICS - 1971

Number of persons examined for the first time	3,267
Number found to be definitely tuberculous as detailed in 'A' below	216
Number found to be free of disease	1,327
Number found to be suffering from other conditions	1,724

		Resp	oira to	ry	Nor Res	ı- pirato	ory	Tota	ıl		
Di	agnosis	Adu M	lts F	Child- ren	Adı M	ılts F	Child- ren	Adu M	lts F	Child- ren	Grand Total
A	New Cases examined during the year	117	57	13	10	10	9	127	67	22	216
В	Contacts examined during the year (a) Definitely tuberculous (b) Diagnosis not completed (c) Non-tuberculous	2 2 240	357	3 2 869	- - 4	- - 4	- - 4	2 2 244	1 - 361	3 2 873	6 4 1,478
C	Cases written off the Register as Recovered	70		11	5	15		75	87	bend 1	173
D	Number of Cases on Register on 31st December 1971 (a) Definitely tuberculous (b) Diagnosis not completed	911	582	122	72	94	24	983	676	146 5	1,805 22
	amber of attendances of patien amber of visits paid by the Tub during 1971					A DOMESTIC				ients	9,726 28
	otal number of cases vaccinated *Children Others	with	B.C.	G. duri	ng 1	971:					759 187
Nı	amber of patients under medic	al trea	tmen	t at ho	me o	on 31:	st Dece	mber	1971		410
	tal number of visits paid to the during 1971										9,632
	*Includes newly born babies in General, Mill Road and Livery	Mate	rnity lateri	Wards nity Ho	in S	efton	Genera	l Hos	pital,	Walton	

Venereal Disease

INCIDENCE OF SYPHILIS

The gradual decrease in cases of syphilis over the last 4 years came to an end in 1971, when there were 15 more cases of primary and secondary syphilis than in 1970.

A 2 i	196	4	1965	5	196	6	1967	7	196	8	196	9	197	70	197	1
Age in years	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Under																
15	-	-	-	-	-	-	-	-	_	_	_	-	-	-	-	-
15 - 17	2	1	2	-	1	-	4	4	1	1	-	2	-	1	3	-
18 - 20	18	5	12	3	9	5	12	12	8	5	8	6	2	2	9	1
21 - 25	36	6	42	14	20		18	14	16	7	16	2	5	3	3 9 8	2
26 - 30	20	6	23	2	15	3	20	3	14	8		2 6 2 1 4	2 5 5 4	2 3 2	6	3
31 - 35	9	_	14	1	10	4	12	6	5	1	8	4	4	_	6	2
36-40	9 3 5	1		_	7	6 3 4 3 3	11	4	4		8 8 3		_	_	1	2 3 2 2
41-45	5	1	7 5	1	5	3	16	4	5	1 2	1	_	2	-	1	1
46 and				-				10		-						-
over	3	-	8	-	7	_	15	4	5	_	3	2	4	1	1	_
Total	96	17	113	21	74	24	108	51	58	25	47	17	22	9	35	11
Total		••••••		•••••						••••••		•••••	•••••		••••••	•••••
Total M & F	1	13	1	34	98	8	13	59	8	33	6	4		31	4	6

INCIDENCE OF GONORRHOEA

There has been a slight decrease in the number of cases of gonorrhoea. In 1971 the total number of cases was 1,992 compared with 2,191 in 1970.

Statistics over recent years are as follows:-

!	1964	1	1965		1966		1967	,	1968		1969		1970)	1971	
age in	M	F	M	F	2,19	F	M	F	M	F	M	F	M	F	M	F
Inder																
5	-	-	-	_	-	1	1	1	1	2	2	1	1	2	-	-
5-17	49	43	23	21	26	45	27	56	24	55	28	60	36	64	53	51
8-20	228	129	143	94	164	126	176	120	198	140	192	131	242	150	149	131
1 - 25	541	140	418	149	400	157	392	148	428	168	435	198	480	192	411	199
6 - 30	377	66	281	59	334	74	383	109	324	82	391	112	363	113	437	86
1 - 35	170	29	130	19	157	28	123	24	181	41	172	38	244	46	141	58
6-40	91	8	70	10	90	21	89	22	105	20	93	15	97	20	96	28
1 - 45	70	2	51	7	48	8	64	3	50	8	58	5	56	10	76	20
6 and		-	-				٠.		-	-	00	_	-		, 0	20
ver	43	5	35	6	59	3	48	5	43	4	48	7	61	5	44	8
otals	1,569	422	1,151	365	1,278	463	1,303	488	1,354	520	1,419	567	1,589	602 1	,407	585

CONTACT TRACING

The following table indicates results obtained:-

	Male	Female	Total
No. of alleged sources of infection	6	90	96
No. of individual persons	6	78	84
No. of cases traced and interviewed	5	36	41
No. of cases traced, but interviews not effected	-	4	4
No. of cases reporting following interview	5	36	41
No. of reports passed to other authorities	-	5	5
No. of cases untraced (due mainly to lack of information)	1	33	34
No. of visits made - Lodgings, clubs, homes, etc.	8	114	122

RESULTS OF HOME VISITS

		Total
138	634	722
226	1,336	1,562
36	341	377
32	84	116
34	114	148
etc. 32	80	112
_	8	8
4	7	11
	226 36 32 34	226 1,336 36 341 32 84 34 114 etc. 32 80

RESPONSE TO LETTERS

	Male	Female	Total
No. of cases written to	545	1,318	1,772
No. of letters despatched	749	2,662	3,411
No. of cases reporting in response	137	715	856
No. of letters returned by Dead Letter Office	84	70	154
No. of cases traced and transferred	4	12	16

Cases referred by Maternity Units

Thirty-one cases were referred for further investigation and for treatment. Findings were as follows:—

Early syphilis	1
Early latent syphilis	1
Latent syphilis	-
Congenital syphilis	-
Gonorrhoea	16
Non-venereal	13
Total	31

Infantile Incidence

No cases of congenital syphilis were reported, but there were 5 cases of ophthalmia neonatorum.

Ambulance Service

The total number of patients carried throughout the year amounted to 251,525, a decrease of 3,497 patients on the previous year. 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 the ambulance transport can be controlled. 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 system, the assistance of all the hospital staff is required.

The total number of miles travelled in 1971 was 952,041.

Ambulance Training and Equipment

Guidance has been given throughout the year by the Department of Health and Social Security to ambulance authorities regarding training and equipment as follows:—

- A recommendation that ambulance staff who have been awarded the ambulance service proficiency certificate or have qualified as Instructors in the ambulance service could wear appropriate badges on their uniform.
- 2. New instructors notes for two week and six week courses.
- Recommended maintenance and safety precautions for ambulances to reduce fire risk.
- A recommended ambulance patient report card to assist hospital staff on taking over an accident or emergency case from the ambulance service.
- 5. Advice on the carriage of dangerous substances by road.
- Hospital training for ambulance crews. The object being to give the
 ambulanceman a better understanding of the purpose of his training in
 medical matters by relating his training to problems arising with hospital
 patients.
- 7. The use of Entonox in the ambulance service to reduce pain associated with a wide variety of conditions without risk to the patient and giving guidance on the circumstances in which Entonox could be used.

8. Radio Communications

The Ministry of Posts and Telecommunications informed each ambulance authority of its frequency allocation under the new frequency plan for a co-ordinated ambulance system in England and Wales.

The frequency plan, except on a few instances has allowed County Borough Services to remain on their existing frequency channels although services will be required to change their system to "Frequency Modulation" (F.M.).

Ambulance authorities were advised to equip their ambulances with sets capable of being switched to a reserve frequency (EMERGENCY RESERVE CHANNEL) so that all ambulances allocated to deal with a major accident can be controlled from this channel.

Advice on the planning of ambulance services for major accidents emphasised that neighbouring authorities should co-ordinate their major

accident planning. It suggested also that such plans should be undertaken by authorities whose control and vehicle resources were sufficient to provide at all times an adequate initial response and handle the ambulance service role at a major accident as well as continue to provide their normal emergency and routine services. It is suggested that authorities without these resources should restrict their major accident contribution to providing under prior arrangements immediate support by way of manned vehicles and staff for First Aid work at the accident site within the major accident plan of the neighbouring ambulance authority whose joint plan would include cover for the area of both authorities.

Ambulances equipped with multi-channel radio and crystalled on other authorities services will create a more efficient service both locally and with neighbouring groups to co-ordinate work.

All these recommendations except the radio changes have been put into force in the City. Arrangements are in hand for the radio modifications, but the final alterations in this field have to wait for the new Ambulance Control Centre.

Premises

An ambulance station was completed and became operational in September 1971. This station, in Old Swan, will cover emergency and general out-patient duties for this densely populated area and during the first twelve weeks of operation attended to 682 emergency calls.

Sites are also available for new stations in West Derby Road, Liverpool 6, and Lower Lane, Fazakerley.

Difficulty has been experienced in finding a suitable site or premises for ambulance control administration and teaching facilities. The present premises at Ambulance Headquarters, Lower Breck Road, are now inadequate for the service and the land is required by the Regional Hospital Board for the building of a new Hospital Laundry. Two alternative plans have been suggested to the Department of Health and Social Security and a decision is expected soon.

	A	В	C
Month	Accident/ Emergency calls	False calls with good intent	Malicious false calls
January	2,199	142	21
February	1,786	128	24
March	2,044	138	27
April	2,008	142	33
May	2,299	184	25
June	2,029	121	34
July	2,342	185	29
August	2,218	161	33
September	2,111	138	23
October	2,095	119	26
November	2,075	151	29
December	2,359	179	33
Total	25,565	1,788	337

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 - 1971

		Unamital to		Type	
Month	Admissions/ Discharges	Hospital to Hospital Transfers	Total	Sitting Cases	Ambulance Cases
January	100	14	114	80	34
February	75	11	86	48	38
March	64	8	72	43	29
April	42	9	51	27	24
May	72	14	86	52	34
June	60	19	79	42	37
July	70	15	85	56	29
August	64	22	86	56	30
September	84	25	109	71	38
October	82	43	125	88	37
November	74	31	105	80	25
December	76	30	106	75	31
Total	863	241	1104	718	386

COMPARATIVE STATISTICS FOR 1970-71

	1970	1971
Petrol Ambulances	14.8 miles per gallon	15.06 miles per gallon
Dual-purpose Ambulances	14.05 miles per gallon	14.23 miles per gallon
Sitting-case Ambulances	17.00 miles per gallon	17.37 miles per gallon
Vehicle Mileage	960,561	952,041
Fuel – Petrol	65,220 gallons	64,232 gallons
- Oil	940½ gallons	992¼ gallons

AVERAGE MILEAGE FOR THE FLEET WAS AS FOLLOWS:

	Average Annual Mileage		Percentage Increase/Decrease on 1969
	1970	1971	
Ambulance - Petrol	18,503	17,402	-6.49%
Sitting-case Ambulances	12,933	12,831	-0.8%
Sitting-case Cars	5,924	5,868	-0.9%

FUEL CONSUMPTION

Stretcher-case Ambulances	15.06 miles per gallon	
Sitting-case Ambulances	14.23 miles per gallon	
Cars	17.37 miles per gallon	

VEHICLES - 1971

Age of vehicles	0-1	1-2	2-3	3-4	4-5	5-6	6-7		
in years	Nil	7	9	16	8	14	11	=	65

PATIENT REMOVALS - 1971

Number of Persons Carried	Jan.	Feb.	March	arch April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Non-Infectious -													
Out-patients	15,497	15,497 15,139 16,975 15,212 15,608 16,816 15,857	16,975	15,212	15,608	16,816	15,857		14,661 15,284		16,453	15,238 16,453 14,591 187.331	187.331
Hospital Admissions/Discharges		2,576	2,786	2,436	2,436 2,575	2,533	2,533 2,538		2,293 2,489		2,354 2,462	2.769	30.588
Inter-Hospital Transfers	591	568	689	909	576	671	585	540	618	909	620		
Infectious –													
Hospital Admissions/Discharges	100	75	64	42	72	09	70	64	84	82	74	76	863
Inter-Hospital Transfers	14	11	∞	6	14	19	15	22	25	43	31	30	241
Accident / Emergency	2,128	1,716	1,928	1,900	2,174	1,928 1,900 2,174 1,947 2,230 2,218	2,230	2,218	2,041	2,053	2,096	2,235	24.666
Other Persons	53	52	70	40	41	130	34	27	43				597
Totals 1971	21,160	21,160 20,137 22	22,520	20,244	21,060	,520 20,244 21,060 22,176 21,329 19,825 20,584 20,399 21,773	21,329	19,825	20,584	20,399		20,318 251,525	251,525
Totals 1970	20,556	20,556 20,805 20,970 22,126 21,528 22,508 72,141 19,204 71,010 71,000 12,005 36,005	0.970	22.126	21 528	22 508	22 141	10 204	01010	21 902	1367	30,00	200 330

MILEAGE, PETROL, DIESEL AND OIL PERFORMANCE - 1971

Ambulance		Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
	Mileage	51,617 47,100 55,290	47,100	55,290	53,368	49,816	53,368 49,816 52,545 55,692 51,825 53,385	55,692	51,825		52,108 50,923	50,923	52,833	626,502
Petrol	Fuel-Gallons	3,583	3,238	3,747	3,486	3,128	3,573 3,602	3,602	3,283	3,500	3,578	3,587	3,277	41,582
	Oil-Quarts	216	182	214	204)	233%	204½ 233½ 204½ 215	215	196	216	1923	192% 136	190	2,400
1	Mileage	27,531 16,478	16,478	27,027	23,570	28,168	27,365	24,365	24,373	24,641	30,003	28,357	26,057	27,027 23,570 28,168 27,365 24,365 24,373 24,641 30,003 28,357 26,057 307,935
Dual-Purpose	Fuel-Gallons	1,935	1,935 1,785	1,910		1,574 1,804	1,815 1,616	1,616		1,644 1,653	2,051	2,051 1,983	1,867	1,867 21,637
	Oil-Quarts	102%	1021/2 103	126	76	141	257	69	94	130	154	1031/2		176% 1,532%
	Mileage	1,092	834	1,278	918	886	1,838	1,838 1,407	3,413	859	1,725	1,808	1,444	17,604
Sitting Case	Fuel-Gallons	70	57	89	58	61	103	85	86	63	116	114	66	1,013
	Oil-Quarts	ı	1	7	ı	3/2	27/2	41/2	2 7	í	1/2 23	21/2 61/2		5½ 36½

(Oil figures in quarts). Figures in brackets show fuel obtained from other local authorities.

ANALYSIS

	1970		1971			
	Fuel M.P.G.	Oil M.P.P.	Fuel M.P.G.	Oil M.P.P.		
Petrol Ambulances	14.8	136.9	15.06	130.52	Vehicle mileage	952,041
Dual-purpose Ambulances	14.05	110.9	14.23	100.46	Fuel - Petrol	64,232 gallons
Sitting-case Ambulances	17.00	237	17.37	241.14	Oil	9921/4 gallons

Rehabilitation for the Physically Handicapped

By Dr. H. P. Jones, F.R.C.S., D.Phys. Med.,

Medical Officer (Rehabilitation)

Within the Corporation most of the work for rehabilitation of the physically handicapped has been undertaken by the Occupational Therapy Service.

The most important aspects of this service are:—

- To enable the handicapped to re-acquire lost functions through definitive therapy directed at specific functions, with the diversional aspect of occupational therapy reduced to the minimum.
- The preliminary assessment of patients to decide on their suitability for treatment and on the extent of benefit likely to be conferred on them by treatment, either at home or at one or other of the Occupational Therapy Units.
- 3. The provision of aids to assist in attaining independence at home.
- 4. Adaptations to existing premises.
- 5. Rehousing to accommodation suitable to their medical needs.
- After attaining the maximum of re-ablement, to take the necessary steps to ensure resettlement into suitable employment, bearing in mind the capabilities and medical condition of the patient.
- To assist patients to take part in social activities such as holidays and the weekly wheelchair club.

As in the past, the backbone of this service has been the domiciliary occupational therapy service, whose invaluable work is concerned with items 2, 3, 4, 5 and 7 above.

Of the factors which have prevented the occupational therapy service from being as effective as one would wish during 1971, the following are noteworthy:—

- (a) Shortage of suitably qualified staff for both the domiciliary service and the rehabilitation units. The optimum of one domiciliary occupational therapist to each area seems as far away as ever.
- (b) The lack of suitable transport for handicapped persons to bring patients to the rehabilitation units has meant that those units have, of necessity, been working at a capacity well below their maximum, with the result that they became financially inefficient. It is to be hoped that the recent appointment of an Organiser for Handicapped Persons' Transport and the anticipated increase in the number of vehicles, will help to obviate this unsatisfactory state of affairs, and reduce the waiting list for treatment at the Units to a more realistic level.

The cumulative effects of these two factors has meant that the delay from referral to department to a visit by a domiciliary occupational therapist and thence to one of the Units, if considered suitable for such treatment, is such that the patient has either died in the meantime, or, less commonly, has improved to such an extent that he no longer needs to attend at one of the Units.

Staff

During the year the number of occupational therapists in post has varied between 8 and 12, including the Head Occupational Therapist and her deputy. 5 new staff were engaged during the year, including 1 on a temporary post, and 5 were lost, mainly for domestic and family reasons. The Senior Occupational Therapist at the Longmoor Lane Unit left during the year for family reasons, and the Senior Occupational Therapist at the Balliol Unit, who worked part-time in the domiciliary service, was transferred to Longmoor Lane, full-time. There has been a shortage of applicants to fill the Basic Grade Posts at the Units, thus contributing to the under-usage of the Units already mentioned. During the year, a number of students from the Occupational Therapy College at Huyton have attended for tuition in the various aspects of the work carried out by the Department, and it is hoped that this will improve future recruitment of newly qualified occupational therapists into the service.

The Medical Officer (Rehabilitation) appointed in 1970, has remained in post during 1971 and has paid several monthly visits with the Head Occupational Therapist to the Regional Paraplegic Unit at Southport. At these visits decisions are made on anticipated home modifications, and/or rehousing, and plans are set in motion with a view to having the necessary changes completed by the time the patients are discharged from the hospital. He also attends the Case conferences at the Liverpool Royal Infirmary with Mr. C. R. Helsby, F.R.C.S. to discuss the management of those amputees of the Liverpool area under the care of Mr. Helsby. In addition, it has been possible for the Rehabilitation Medical Officer to attend meetings in physical medicine under the aegis of the Royal Society of Medicine and the British Association of Physical Medicine and Rheumatology. Difficulty continues to be experienced in connection with the prescription of appliances for patients (splints and calipers) under the National Health Service, and to have modifications made to existing appliances, and it is a very great inconvenience for patients when they have to be referred to their parent Hospital to obtain the signature of a Hospital Consultant for such appliances. It is hoped that when reorganisation of the National Health Service takes place in 1974, bringing the present 3 sections of the National Health Service under a unified administration, difficulties such as this, with all their inherent inconveniences for patients, will be eliminated.

Patients' Activities

Among the extra-mural activities for patients, mention has to be made of horse-riding, which a selected number of patients have been able to carry out for one session a week. This is due to the co-operation of a riding school in Formby, assisted by local volunteers. In addition to strengthening leg muscles, balance is improved, with benefit to the patients' confidence and morale.

It is hoped to be able to start taking some of the patients attending the Longmoor Lane Unit for swimming sessions during the forthcoming year, as it is felt that swimming, in addition to being good general exercise, is a valuable aid in improving muscle power by performing specific exercises in the water with the effect of gravity eliminated.

Another activity under active encouragement has been that of gardening. The Unit at Longmoor Lane is a most suitable one for this activity as there is already a raised flower bed at the back of the Unit, and the veranda facing on to Longmoor Lane could be used as a greenhouse. Another suggestion under active consideration has been the one of appointing a professional horticulturalist to the Corporation. Part of his time could be allocated to teaching gardening methods to disabled persons and the remainder of the time spent with the Parks and Gardens Department.

General Comments

A constant threat to the rehabilitation of patients in the Units is the inbred resistance in so many patients to any change in treatment, such as transfer to Craft Centre or Day Care Centre for the Elderly, with the result that they tend to become too dependent on the social, rather than the therapeutic aspect of their attendance. This undermines the whole purpose of their attendance and is frustrating to members of the staff.

Attendances at Occupational Therapy Units during 1971:

Longmoor Lane	4,836
Rumney Road	3,016
Balliol	1,080
Johnson Street	5,702

Environmental Health

The major task during the year was in connection with the survey of houses to enable a decision to be made on properties considered suitable for improvement or rehabilitation. In addition surveys were carried out on properties with a view to clearance, and during the year 2,239 houses were represented as unfit for habitation. Since the slum clearance programme commenced in 1947, a total of 42,287 houses have been represented as unfit for habitation and included in clearance areas or dealt with individually. The details of action under the Housing Act are included later in the Report.

The increasing importation of food in "containers" has resulted in additional time having to be provided for inspection of food which arrived in Liverpool without having been previously inspected at the port of entry. A total of 3,598 containers were received during the year.

Details of Visits

Inspectors visit houses to make enquiries following notifications of certain infectious diseases. The number of visits amounted to 736 and the number of enquiries regarding contacts was 298.

Investigations have continued in connection with ingestion disease enquiries and inspectors obtained information about contacts and modes of infection. The number of specimens submitted for bacteriological examination amounted to 4,229 from 2,284 persons, of which 1,389 from 739 persons proved positive.

One lodging house was closed during the year, and there are now 7 registered common lodging houses in the city, 6 providing accommodation for 688 males and one providing accommodation for 94 females. The public health inspector made 134 visits both day and night, resulting in notices being issued in respect of byelaw infringements. The reduction in the number of lodging houses resulted in approximately 20% of the total beds available, being vacant at any one time.

A total of 1,109 beds were examined and 225 beds or articles were found to be verminous and subsequently cleansed by the local authority. During the year it was found necessary to cleanse 121 persons living in these houses.

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 539 houses. The work included the clearing of 54 drains, the restoration of the water supply to 368 houses provided with joint supply pipes and the remainder of the work was mainly in connection with repairs to roofs. The cost of the work will be recovered from the owners of the premises.

During the year it was necessary for 71 prosecutions to be taken and penalties and costs which were imposed amounted to £250.

A total of 44,557 requests was received for inspectors to visit premises and 8,348 notices were issued under the Acts and Regulations.

Defective drains caused rodent infestation, flooding and subsidence.

Drainage systems tested to remove these problems numbered 1,038 and notices were issued in respect of 399 drainage systems which were found to be defective. In addition, choked or defective public sewers were referred to the Chief Engineer's Division 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 3 bodies during the year and the remains of one person were shipped abroad.

Other departments have co-operated by forwarding references in respect of matters requiring attention of inspectors and 5,329 references were forwarded to other departments.

Housing and Slum Clearance

The detailed inspection of substandard housing accommodation has continued throughout the year, resulting in 2,239 houses situated in 30 clearance areas being classified as suitable for demolition, having regard to the standard of fitness laid down in the Housing Act, 1957. Since the programme recommenced in 1947 a total of 42,287 houses have been represented as unfit for habitation and included in clearance areas or dealt with individually.

There were 2,042 houses in 25 clearance areas made the subject of 12 compulsory purchase orders, 2 compulsory purchase orders comprising 57 houses were submitted to the Secretary of State for the Environment for confirmation and 1 clearance order in respect of 29 houses was also made and submitted for confirmation.

Three Public Inquiries were held, involving a total of 893 houses in 4 orders, and during the year 7 compulsory purchase orders involving 2,571 houses were confirmed.

There were 2,572 families rehoused from houses included in confirmed orders.

The General Purposes Sub-Committee dealt with a number of individual unfit houses under the provisions of Part II of the Housing Act, 1957, a total of 54 dwellinghouses being represented to the Sub-Committee as unfit for human habitation. These premises were occupied by 74 families.

The Sub-Committee considered the condition of 48 houses, including a number which had been represented the previous year. Of these it was resolved that demolition orders be made in respect of 1 house and closing orders in respect of 47 houses. In addition, 18 representations in respect of rooms and parts of premises occupied as separate dwellings which were unfit for human habitation were considered and in each case it was decided that closing orders should be made.

Following upon the rehousing of the occupants in premises subject to operative orders, 148 houses were demolished and 74 were closed and sealed. In addition, 34 dwellings being parts of premises were also closed.

Premises were reinspected where owners had carried out works as required to make premises fit for habitation, and as a result of the works undertaken the Committee during the year rescinded 13 closing orders.

During the year a special survey was carried out, to determine the suitability of improvement of some 43,000 older houses in the private sector, and a report on the result of the survey was submitted to the City Council.

Rent Acts, 1957/1968

A total number of 39,230 visits has been made by public health inspectors to dwellinghouses, under the provisions of the Rent Acts, 1957/68, since the 6th July 1957, when the Act became operative, and a total of 9,400 applications for certificates of disrepair have been received. Some 3,294 tenants have applied for certificates as to the non-remedying of defects specified in undertakings given by landlords, and 2,718 applications have

been received from owners for certificates as to the remedying of defects in undertakings which they have given to tenants. Figures in 1971 were:—

Total number of applications for certificates of disrepair	55
Number of notices served on landlords of local authority's intention to issue certificates of disrepair (Form J)	45
Number of undertakings to carry out repairs received from landlords (Form K)	30
Number of certificates of disrepair issued to tenants (Form L)	15
Number of landlords who completed the repairs within the statutory period following the service of Form J	13
Number of applications (Form O) from tenants who have applied after owners have failed to comply with undertakings given (Form H or K)	5
Number of certificates (Form P) issued to tenants	5
Number of applications (Form O) from owners who have completed their undertakings	17
Number of certificates (Form P) issued to owners	12
Number of applications (Form M) received from owners for a cancellation certificate	8
Number of objections to cancellation received from tenants	5
Number of cancellation certificates issued	3

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

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

Housing Act, 1969

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

The Act also introduces a new system governing the rents of privately rented dwellings which have been brought up to a satisfactory standard. Controlled tenancies can be converted to regulated tenancies where the qualifying standard is attained; the rent will be determined under the Rent Act, 1968, but it will be subject to phasing under the Housing Act, 1969.

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

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

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

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

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

The following statistical information is in respect of applications received during the year:—

Improvement cases

Number of applications for qualification certificates	
under Section 44 (2) under consideration	57
Number of certificates of provisional approval	
issued	140

Standard amenities already provided

Number of applications for qualification certificates under Section 44 (1)	2,405
Number of qualification certificates issued under Section 45 (2) in respect of:-	
(1) dwellings with rateable value £60 or more	402
(2) dwellings with rateable value £40 to less than £60	232
(3) dwellings with rateable value less than £40	10

Loans on Mortgage

During the course of the year, the City Council again considered applications for loans on mortgage from prospective owner/occupiers and 1,244 houses were inspected for this purpose.

Shops Acts, 1950 to 1965

The work of the department for the purposes of the Shops Acts has been curtailed mainly by the concentration of inspectors upon Housing Act duties which includes the Clearance Programme and Improvement Area surveys.

All complaints, however, associated with Sunday and evening trading, and staff welfare matters such as statutory holidays and rest intervals and the record of hours involving the employment of young persons have been fully investigated.

It is important to record that many of the duties associated with the inspection of shops incorporate many enactments and, in this connection, the requirements of the closing provisions of the Shops Acts are dealt with whilst carrying out inspections under the Food Hygiene Regulations and Office Shops and Railway Premises Act. The complex requirements of the Shops Acts are fully explained to the owners of businesses whenever necessary.

The welfare sections of these enactments are still of considerable importance, and the working conditions of personnel are always given careful attention.

The general pattern of trading has not changed during the year, and complaints from traders regarding other shopkeepers not observing the Sunday and evening closing provisions have been few, but a total of 247 observations were made during the year, and 96 infringements were dealt with by warning letters and numerous matters required advisory action.

Several anonymous enquiries have been made by shop assistants regarding their conditions of work and in all cases they were advised and assured that the matters would be investigated without disclosing the source of the complaint.

There is a growing concern regarding the increase in the number of shops open on Sundays, and these include the trades of furniture and floorcoverings. The proprietors usually state that their premises are open only for the viewing of goods by the public. Inspectors carry out observations and appropriate action is taken whenever necessary.

A Bill based on the Crathorne Committee's recommendation for Retail Trading is still going through the processes of Parliament, and it is anticipated that this will eventually strengthen the powers of enforcing authorities.

Hairdressers and Barbers

The number of registered hairdressers at the end of the year was 830. There were 7 new businesses registered and 11 transfers of business to new owners during the year. 76 visits were made to hairdressing establishments and 23 contraventions of the bye-laws were dealt with by warning letters.

There have been a few complaints concerning hairdressing businesses, which included the cleanliness of the premises and equipment in particular, but the conditions in general were found to be satisfactory.

A number of complaints have been linked with Shops Act work, involving the hours worked by young persons under the age of 18 years, and it was necessary in some cases to inform the employers regarding the correct meal break interval and the maximum number of working hours for their employees.

Pet Animals Act 1951

There were 31 licences issued under the above enactment, during the year, and 39 visits were made to Pet Shops.

The number of infringements totalled 20 and matters concerning fire precautions were dealt with by the Fire Service, who are responsible for the fire precautions provisions under this enactment.

Animal Boarding Establishments

Three licences were issued in respect of premises in which dogs and cats are boarded, this being similar to the previous year.

No infringements were recorded, but a number of advisory matters were dealt with.

The requirements of this enactment are similar to those operative under the Pet Animals Act and the duties involve the Public Health Inspectors and the Fire Officer.

Food Hygiene

The main work of the Division under the Food Hygiene Regulations has been associated with general complaints. Routine duties have been limited by priority work under the provisions of the Housing Acts by the concentration of inspectors upon improvement and clearance area surveys. However, all complaints have been investigated and inspections of various types of food premises were made during the year. Appropriate action was taken during the course of routine and other special visits. The number of inspections was 18,222, and 2,723 infringements were dealt with informally by the inspectors, as most traders accept advice and co-operate with the Inspectorate.

In all cases traders have complied with the specific requirements and measures taken by the Division have achieved a high level of success which is reflected in the relatively few complaints.

It is important that the Regulations dealing with the provision of hand-washing facilities and sinks for washing utensils and equipment in food premises are continued to be given the fullest attention.

Generally the hygiene standards were found to be satisfactory.

Street Trading and Delivery Vehicles

Special attention has been given to the problem of food hygiene with regard to street trading, and during the year 641 inspections of barrows and mobile shops have been carried out, in addition to 154 inspections of food transport vehicles.

One street trader was prosecuted for three offences, and he was convicted by the Stipendiary Magistrate for failing to keep his hands clean, and for smoking whilst serving open food. He was fined a total of £3. For not wearing clean overclothing he was conditionally discharged.

A total of 100 informations have been laid against 63 traders since the Regulations became operative in 1967, and fines totalling £117 have been imposed and 14 cases have been conditionally discharged.

Very few complaints have been received about street trading in general, but a number of shopkeepers have lodged objections, alleging unfair trading competition, and the obstruction of roads and footpaths, but these are matters outside the legislation enforced by this Division.

Offices, Shops and Railway Premises Act, 1963

This is the eighth annual report since the enactment became operative in 1964, and it outlines the work of the Public Health Inspectorate to secure the safety, health and welfare of persons employed in offices, shops and certain railway premises.

There are now 11,372 premises registered under the Act, and the number of new registrations during the year was 261 compared with 507 in 1970. Notices involving 452 infringements have been served in respect of various sections of the Act, for which this Division is responsible.

Since inspections under this enactment commenced during the second half of 1964 a total of 43,535 general and additional inspections have been completed and 29,067 infringements have been brought to the attention of employers, occupiers or owners of premises by written intimation. These recorded contraventions do not include many minor matters which have been dealt with in an advisory manner by the inspectors.

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

Inspections

The urgency and extent of certain other special work, in particular housing surveys, has necessitated the curtailment of routine duties under various enactments, including those under the Offices, Shops and Railway Premises Act 1963. However, matters brought to the attention of the Division, either by complaint or general enquiry, have received the fullest attention.

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

Work under this enactment is linked with duties under certain other legislation, especially the Shops Act 1950 which still retains certain staff welfare clauses. A total of 22,080 inspections of shops and other work places have been made for these purposes, and it will be appreciated that these inspections have been complementary to the work under the Offices, Shops and Railway Premises Act and, consequently, have secured further improvements in conditions, which have benefited those who work in those premises.

The total number of persons employed in all establishments registered up to the end of 1971 was 118,475, of whom 62,670 were females.

There has been continued co-operation between the Chief Building Surveyor, the Fire Service and this Division, and the established arrangements have operated very satisfactorily.

Relevant information and copies of all forms O.S.R.1 (Registration of Employees), are forwarded to these officers and consultations with them occur from time to time in order to deal with special matters.

Her Majesty's Factory Inspectorate are responsible for the enforcement of this Act in certain premises including offices and shops in factories, railway and local authority premises.

Many premises are multi-let for a variety of business purposes, and some buildings are used for shop and factory activities by the sole occupier. These varied activities and uses of buildings create occasional problems of enforcement, and demarcation of responsibility between the factory inspectorate and inspectors of this Division is not always clearly defined. These enforcement problems have always been readily solved through a happy and successful liaison between the two Inspectorates. The work under the general provisions of the Act, as already indicated, has been of a routine nature.

Dangerous Machines

The number of accidents notified to this Division during the year, arising out of the use or cleaning of machines, was 12 compared with 14 in 1970. Four of these accidents happened to young persons under the age of 18, whilst using machines, and one occurred when a boy was cleaning a machine. Whilst one continues to be concerned about the problem of young people using machines in shops and offices, there appears to be a positive improvement in the awareness of employers in regard to their responsibilities under these sections of the Act.

The publication of the leaflet "The Safe Use of Food Slicing Machines" (SHW14) has undoubtedly contributed to an improvement in the observance of the law and in the safeguards operated by management and staffs. Some employers have used the specimen warning notice illustrated in the leaflet as a basis for notices of their own, and others have copied the specimen.

The notification of accidents in shops and offices was 379 compared with 355 in 1970. A considerable majority of these accidents are, fortunately, of a minor nature and most of them are not caused by defects in structure or equipment, or by the failure of the employer to provide or maintain

certain services. In fact, of the 379 reported accidents this year, some 76% did not require action by this Division, following investigaion of the circumstances.

It is the practice of public health inspectors in this City, during the course of general inspections and other work, to advise employers and other responsible persons of the various requirements of the Act, including the notification of accidents. Personnel are also advised of measures found necessary to improve the margin of safety in the premises.

There were two fatal accidents during the year; the first occurred in a large multiple office building, where the deceased worked for an Insurance Company. Evidence at the inquest confirmed that the deceased had fallen from a casement window in a toilet on the fifth floor, on to a flat roof at first floor level. An open verdict was returned by the jury.

The second fatal accident occurred to the licensee of a public house, who fell down the steps from the bar to the bar cellar. The accident happened outside normal working hours, at approximately 1 a.m., and the accident was not seen by anyone. The police gave evidence regarding the condition of the steps, which were wooden, not steep, provided with a handrail and entered through a normal door adjoining the bar (not by way of a trapdoor in the floor as is so often the case in public houses). The top step, at ground level, had a metal strip about one inch wide along the edge. The constable found that his foot slipped off the strip, but it was properly secured and was not loose or defective.

When a senior public health inspector later examined the staircase he found the metal strip to be satisfactory, but there was a slight movement of the tread below the ground floor level. This movement did not appear to be of significance in relation to the accident, but the occupier of the premises dealt with the matter. It was also recommended that an additional light point be provided on the staircase.

In order to effectively reduce the risks to which employees may be exposed it is essential that all accidents in shops and offices are notified to the appropriate authority on Form O.S.R.2, obtainable from H.M. Stationery Office or a local law stationer.

It is the desire of the authorities to advise employers and staff, and it should be the concern of employers to avail themselves of this advice.

Hoists and Lifts

Since the implementation of the Offices, Shops and Railway Premises (Hoists and Lifts) Regulations 1968, 244 reports have been received detailing 822 matters requiring the attention of the owners of passenger, service and goods lifts and goods hoists.

Public health inspectors have made such visits as were considered necessary to buildings in which the lifts or hoists were situated and, in certain instances, inspectors interviewed representatives of the owners to expedite some of the requirements. There have not been any particular difficulties, but consideration has had to be given to the deferment of certain matters pending a decision on the redevelopment of particular premises.

Only one accident was recorded in connection with lifts and hoists, and this occurred in an administrative building of a large shop. An employee was about to enter an automatic lift when the door closed, pushing the person against the frame of the lift. A witness stated that when the lift arrived at the basement there were two men in it (apparently strangers to the employees), and it was thought that one of the men had pressed a floor selector button before the member of the staff could get inside the lift. The person suffered shock. The lift was inspected by a public health inspector, and it was found to be in good working order, including the automatic safety switch on the closing edge of the lift door.

In addition to dealing with any matters arising from engineers reports, inspectors carry out general observance of lifts in premises they visit for the purpose of other duties, and they deal with any visible faults which appear to affect the safe working of the lift.

Licensed Premises and Clubs

During 1971, 9 applications for new club registration certificates and 33 applications for the renewal of existing certificates under the provisions of the Licensing Act 1964 were considered by Magistrates.

The departments concerned were notified of the applications by the Town Clerk. Public Health Inspectors are responsible for enforcing the provisions of the various enactments relating to food hygiene and public health matters, and the clubs were visited by an inspector on receipt of the applications. Specifications were issued in many cases requiring work to be carried out in order to bring the premises up to the required standard, often involving the clubs in considerable expenditure. On completion of the work to the satisfaction of the local authority the Magistrates granted or renewed the club registration certificates. A club registration certificate is granted for a period of twelve months, but on the second or subsequent application the Court may renew the certificate for a period of up to ten years.

At the end of 1971 the total number of registered clubs was 248 and a further 77 clubs were subject to on-licences under Section 55 of the Licensing Act 1964.

The total number of off-licensed premises for the sale of beer, wines and spirits was 190 and there were 52 restaurants licensed for the sale of intoxicating liquor, 3 premises with residential licenses and 6 premises with residential and restaurant licences.

Other Clubs

At the end of 1971 there were 22 bingo clubs in the city, 6 gaming casinos and 5 members clubs registered for gaming. Regular visits were made to these premises to ensure that their condition was satisfactory in all matters for which the public health inspector is responsible for enforcement.

There were 2 entertainment clubs in the city at the end of the year, and each was visited, on receipt of the application for renewal of registration of the premises, to ensure compliance with the Liverpool Corporation (General Powers) Act 1961 relating to lighting, sanitation and ventilation.

Supervision of Food Supply

1. Chemical Sampling

During the year a total of 3,510 samples of food and drugs were procured and submitted for analysis; of these 227 were formal samples and 3,283 informal. The Public Analyst reported that 201 samples (5.73%) were not genuine, either by reason of deficiency of composition or labelling. The samples obtained covered the whole range of foodstuffs, including milk, imported foods, fish and meat products, and a number of samples of raw foods were examined for pesticides.

(a) Milk

Milk is a widespread and staple source of food which is easily adulterated and, therefore, figured prominently in the sampling programme. 2,300 milk samples were submitted for analysis, 24 formal and 2,276 informal. Of these 164 were found to be adulterated by the addition of water or the abstraction of fat. Legal proceedings were instituted against one dairy farmer for the addition of water to ten churns of milk. Fines totalling £200 and £15 costs were imposed, and the Milk Marketing Board revoked the producer's contract.

(b) Pesticide Residues

During the year 37 samples (mainly fruit and vegetables) were submitted for examination for pesticide residues, and none was found to contain residues above the recommended limit.

(c) Mercury

Forty six (46) samples of canned fish (tuna, crab, salmon etc.), were submitted for examination for mercury, none of which was reported to contain an excess of mercury.

2. Bacteriological Sampling

Samples of all heat treated and untreated milk processed or sold in the city were taken regularly throughout the year, and the results in general indicate that the standards of heat treatment and cleanliness continue to be satisfactory. During August one of the large milk processing plants in the city ceased trading, and its production was absorbed by another of the city's major dairies. There are now four pasteurisation plants and two sterilisation plants operating in the city. These have been visited regularly throughout the year and both operation and hygiene have been found to be satisfactory.

A total of 1,054 heat treated milks were submitted to the Public Health Laboratory for examination, comprising 853 pasteurised milks, 153 sterilised milks and 48 ultra heat treated milks (UHT). None of the pasteurised or sterilised milks failed the appropriate tests for heat treatment. However, five pasteurised milks failed the Methylene Blue Test for bacterial quality. The causes of these faults were traced and rectified. Only one ultra heat treated milk failed to satisfy the prescribed Colony Count Test, and this adverse result was brought to the attention of the authority in whose area the plant is situated.

A small percentage of the milk sold in the city is untreated, all of it being obtained from two cowkeepers who have herds within the city.

Samples of this milk are obtained at regular intervals, and the Public Health Laboratory carry out tests for the causative organisms of Tuberculosis and Brucellosis. Twenty (20) routine herd samples were taken during the year, all of which were negative for Tuberculosis. However, one routine sample was found positive for Brucellosis. An order was made immediately so that this milk was heat treated prior to sale, then the offending animal traced and removed from the herd before the Heat Treatment Order was lifted.

Ice Cream

A total of 230 samples of ice cream were submitted to the Public Health Laboratory for examination by the Methylene Blue Test. 117 were found to be in Grade I, 40 in Grade II, 27 in Grade III and 46 in Grade IV. Samples in Grades III and IV are considered unsatisfactory, and it is the practice to take further samples to see if the results are consistently poor. Appropriate action was taken in respect of unsatisfactory samples, and advice given to manufacturers concerning the sterilisation of the processing plant. The Methylene Blue Test for ice cream, while being a useful indicator, is not prescribed by statute, and it is not possible to take legal proceedings solely on the basis of unsatisfactory results.

Other Foods

Samples of foods which are normally eaten without further cooking, such as meat pies, cooked meats and confectionery, are examined for their suitability for human consumption, including examination for food poisoning organisms. 79 samples were submitted during the year, and the results were generally satisfactory. In no case were food poisoning organisms reported to be present.

3. Inspection of Imported Foodstuffs

The Imported Food Regulations 1968 allow for containers of foodstuffs to be passed through the port of entry unexamined, and for the examination to be carried out at the inland destination. During 1971 a total of 3,598 containers arrived in the city requiring inspection. This represents an increase of 66 per cent on the figure for 1970. All containers were inspected on arrival. Thirty seven samples of frozen hen egg whites were submitted for bacteriological examination from consignments imported from Holland. Nine of these were reported to contain salmonella organisms and arrangements were made for the entire consignments to be repasteurised.

Four consignments of cooked, peeled prawns were sampled and examined bacteriologically, a total of 30 samples being submitted. All samples were found to be satisfactory.

Eleven samples of groundnuts in shell were examined for the presence of aflatoxin, a carcinogen. All were found to be free of this contaminant.

Inspection of Food for Fitness

Public Health inspectors have made daily visits to the Wholesale Fish Market and to the Wholesale Fruit, Vegetable and Flower Market. Poultry and game on sale at the wholesale market is inspected prior to sale to the retail trade, 740 lbs. being rejected and destroyed as a result of these inspections, the main cause of condemnation being decomposition. Inspections at the

Wholesale Fish Market resulted in the condemnation of 26,955 lbs. of fish and 6,398 lbs. of shell fish.

The daily inspection of fruit and vegetables at the wholesale market and in warehouses throughout the city resulted in the rejection of 705,948 lbs. of fruit and 1,026,861 lbs. of vegetables as being unfit for human consumption.

A variety of food premises, wholesale warehouses, cash and carry premises etc., have been visited for the purpose of the inspection of canned goods and grocery sundries, and retail shop stocks are inspected on routine visits. These inspections resulted in the rejection of 105,830 lbs. of foodstuffs as being unfit for human consumption. In addition, 49,442 items of frozen food and 29,621 lbs. of butchers meat were rejected due to the breakdown of refrigerator elements. The various types of canned goods rejected were:—

Canned Meats	36,403
Canned Fruit and Vegetables	42,819
Canned Fish, Milk, Soups etc.	7,135

Consumer Complaints

A total of 578 consumer complaints were received from members of the public or were referred to this department by other authorities. All consumer complaints were thoroughly investigated, and advice given to the responsible vendor or manufacturer to prevent similar occurrences, and the complainants were generally reimbursed for any loss incurred.

Liverpool Corporation Act 1921

Subject to the premises being of the required standard, the local authority are empowered to grant licences for the keeping of dairy cows, store cattle and pigs. Licences were issued in respect of 17 premises.

The Milk (Special Designation) Regulations 1963/65

The licences issued under the above regulations, for the use of the special designations in relation to milk sold or processed by the various premises in the city, were due for renewal during 1971 and the public health inspectors visited the 1,398 premises for which licences were in existence, and as a result of this 755 new licences were issued when the inspectors were satisfied that the premises complied with the appropriate legislation. A large number of licences were not renewed, due to the demolition of the property or a change of trade.

Poultry Processing Premises

There is only one premises in the city used for the slaughter of poultry. This is operated under the control of the Schechita Board for the slaughter according to the Jewish Rite. 51,000 birds were slaughtered at the premises and then distributed, plucked but uneviscerated, to Kosher butchers throughout the Merseyside area. All types of birds are slaughtered, and less than 1% was rejected as unfit for human consumption, a total of 149 lbs. weight.

The premises are visited daily, and the standard of the poultry and the premises has been satisfactory throughout the year.

1.	Number of poultry processing premises	1	
2.	Number of visits to premises	200	
3.	Total number of birds processed	51,000	
4.	Types. All types		
5.	Percentage rejected	Less than 1%	
6.	Weight of birds	Small	
7.	Poultry hygiene and inspection	Satisfactory	

Meat Inspection

The building of a new private slaughterhouse was commenced at the beginning of the year, to replace an existing slaughterhouse in Woolton, and this is the first new slaughterhouse to be built in the City since the Abattoir in Prescot Road was established in 1931.

Since the 1st January 1969, the slaughterhouse at Stanley has been operated as a private slaughterhouse, and during the past three years considerable reorganisation and improvements have taken place.

A charge is made for meat inspection services, and the Meat Inspection (Amendment) Regulations, 1971, increased the amount which may be charged for this service, and increased charges operated from 1st November 1971.

Tuberculosis

Only one cow was sent in this year by the Ministry of Agriculture, Fisheries and Food for slaughter under the Tuberculosis eradication scheme. Several lesions were found within the organs.

Brucellosis

Five cows were sent in by Veterinary Officers of the Ministry, under the Brucellosis (Accredited Herds) Scheme, compared with forty-two the previous year.

Cysticerous Bovis

Thirty-four beef carcases were found to contain bovis cysts, an increase of twenty-one on the previous year. The affected carcases were all refrigerated for the required time, at the correct temperature, before being passed as fit for consumption.

Condemned Carcases

Pigs

229 carcases were condemned and destroyed as being unfit for human consumption.

Sheep

466 sheep and lamb carcases were condemned, the main causes being:— Oedema, Emaciation, Septic conditions and Pyaemia. This represents a 50% reduction on last year's figures.

Calves

Enteritis, Immaturity, Umbilical Pyaemia accounted for 48 calves being condemned.

Cattle

Only three bullock carcases were condemned this year. The number of cow carcases totally condemned amounted to 27. This combined figure of 30 is 17 carcases less than the previous year.

The weight of organs and livers condemned was 113 tons, including 33 tons of distomatotic livers which were sent for pharmaceutical manufacture.

Animals Slaughtered

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

Cattle (Including Cows)	Calves	Sheep and Lambs	Pigs	Total
38,434	522	92,802	82,704	214,462

Condemned Meat - Details are as follows:-

	Part	Whole	Weight		
			Tons	Cwts.	Lbs.
Cattle (excluding cows)	282	3	5	17	103
Sheep and Lambs	1,888	466	10	7	56
Pigs	895	229	21	18	24
Cows	671	27	13	6	67
Calves	-	48	_	18	11

Meat Market

Carcases and meat dealt with in the market, excluding the meat and offal from the 214,462 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	4,396	788,647	308	5
Slaughtered outside Stanley Abattoir	92,252	160,048	176,955	1,454

In addition to the above 463,302 packages of meat, poultry and rabbits were handled.

Slaughtering Licences

A total of 48 licences were granted by the City Council, including 2 licences for Jewish Ritual Slaughter, 3 licences for Mohammedan Ritual Slaughter.

Training Courses

The training courses for Meat Inspection and Food Hygiene and Public Health Inspection were well attended this year. The examinations were held at the Abattoir and all students successfully passed the examination.

Specimens for Examinations

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

Specimens for Teaching Purposes

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

Diseases of Animals Act

The Diseases of Animals Inspectorate and duties under the Act and Regulations were transferred to the Public Health Inspectors Division with effect from the 1st April 1971. Prior to this date this section was incorporated within the Markets Division.

The period of three months from 1st January 1971 to 31st March 1971 was included in the Annual Report submitted by the General Manager, Markets Division, for the year 1st April 1970 to 31st March 1971. This three months period is again included in this report.

The Diseases of Animals Act 1950

Under the Act the Ministry of Agriculture, Fisheries and Food is empowered to make Orders to:—

- (i) Control certain scheduled diseases of animals
- (ii) Prevent the entrance of disease into the United Kingdom
- (iii) Regulate the transport of animals and poultry.

In the majority of cases these Orders are enforced by the Local Authority.

The following new Orders under the Act were made during the year:-

The Diseases of Animals (Approved Disinfectants) (Amendment) Order 1971

The Live Poultry (Restrictions) Order 1971

The Diseases of Animals (Extension of Definitions) Order 1971

The Brucellosis (Eradication Areas) (England and Wales) Order 1971

The Brucellosis (Eradication Areas) (Scotland) Order 1971

The Live Poultry (Restrictions) Amendment Order 1971

The Equine Animals (Importation) Amendment Order 1971

The Diseases of Animals (Approved Disinfectants) (Amendment) (No. 2) Order 1971

The Poultry Carcases (Landing) Order 1971

The Brucellosis (Area Eradication) (England and Wales) Order 1971

The Brucellosis (Eradication Areas) (England and Wales) (Amendment) Order 1971

The Anthrax Order 1938

Three dead cattle and one dead deer were treated as Antrax suspects during the year and the Ministry of Agriculture, Fisheries and Food notified for veterinary examination. In all cases laboratory tests proved negative and the cadavers were released for processing. There has been a decline in the number of positive Anthrax cases in the United Kingdom during the year. Any animal "found dead" in the abattoirs in the city area is regarded with suspicion and if any possible symptoms of disease are seen the Ministry of Agriculture is notified for further investigation.

The Swine Fever Order 1963

During the year there were three confirmed outbreaks of the disease in the United Kingdom, affecting some 189 pigs. These outbreaks were the first for some years, but no suspect cases of Swine Fever were found in, or received into, this city for either slaughter or store purposes.

The Regulations of Movement of Swine Order 1959

Under the Order, markets must be specially authorised for the sale of live pigs. Movement of live pigs from markets and pig dealers' premises is controlled by licence issued by the Local Authority. Some 422 licences involving a total of 7,556 pigs were dealt with under the Order for the movement of pigs for slaughter in the City or to pig keepers' premises in the Liverpool área. 484 visits were made to farms, pig keepers' premises and the Woolton slaughterhouse and bacon factory, when 48,744 pigs were inspected for signs of notifiable disease.

The Foot and Mouth Disease Orders 1928 - 1969

The United Kingdom has been quite free of Foot and Mouth Disease during the year. A close daily watch is kept upon all animals awaiting slaughter in the City, for any possible symptoms of the disease.

The Rabies Order 1938

The Ministry of Agriculture, Fisheries and Food is always concerned about the risk of Rabies being introduced into Great Britain from overseas. This country has been free of Rabies for a number of years. However, in 1970 two cases were confirmed in animals in the south of England. A notice was served under the Rabies Order concerning an animal in the City area during the year. Veterinary investigation showed that Rabies was not present, and in due time the notice was withdrawn.

The Importation of Meat etc. (Wrapping Materials) Order 1932-1939 The Importation of Carcases and Animal Products Orders and Amendments 1954-1966

These Orders are designed to prevent the introduction and spread of Foot and Mouth Disease and other diseases into the country. 404 visits were paid to horticultural premises in the City under the Orders. Several consignments of carcase meat and offal were moved from Royal Naval ships to cold stores in the City under licence of the Ministry of Agriculture, Fisheries and Food. The premises concerned were visited by inspectors of the Division.

The Diseases of Animals (Waste Food) Order 1957

The feeding to livestock of unboiled waste food is prohibited by the above Order. Any waste food so used must be sterilized in plant licensed by the Local Authority. This sterilisation is considered to be of the greatest importance. 45 visits were made to licensed sterilising plants in the city area to ensure compliance with the requirements of the Order.

The Markets Sales and Lairs Order 1925 – 1965

A twice daily visit is made to the lairages for animals awaiting slaughter at Stanley Abattoir, and a daily visit paid to the lairage at the slaughterhouse and bacon factory under private ownership at Woolton, for any signs of notifiable disease. The watering, feeding, bedding, hygiene, rotation and prevention of cruelty regulations are also overseen.

In the course of the year the following dead animals were dealt with 3 cattle, 1 deer, 3 calves, 74 sheep, 40 pigs.

The Poultry Premises & Vehicles (Disinfection) Order 1956 The Poultry Orders 1937 – 1966

Daily visits were made to one poultry slaughterhouse in the city area and a second, smaller, slaughterhouse is regularly visited. During the year 4,476 crates of live poultry and 4,184 empty crates were inspected for disinfecting and cleansing and action taken as necessary. Close attention is also given to the maintenance of a high standard of cleanliness in vehicles used for the transport of live poultry. Action is taken as required.

The Conveyance of Live Poultry Order 1919

The protection of live poultry during conveyance by road, rail or water is given by this Order. Provisions are included concerning handling, prevention of overcrowding, stowage, ventilation, watering and the use of suitable receptacles. During the year 2,700 crates of live geese were received in Liverpool from the Republic of Ireland, and were inspected either on board ship or on road vehicles prior to transport to East Anglia. Action was taken concerning the provisions of the above Order as necessary.

Fowl Pest Orders 1936 - 1963

During the period under review more than 4,000 outbreaks of Fowl Pest have been confirmed by the Ministry of Agriculture, Fisheries and Food. New outbreaks are still being reported. Two outbreaks of the disease have been confirmed in the City area. In both cases the number of birds affected was small and the outbreak contained. The premises concerned were declared an "Infected Place" by the Ministry. Regular visits are made to poultry keepers by inspectors of the Division.

The Transit of Animals Orders 1927 - 1947

The following inspections were made for the purpose of supervising the cleansing and disinfection after use by animals:—

Irish and Manx boats 889 visits Railway stations and cattle pens 3,816 visits

Road vehicles used for the transport of livestock have to be contructed with regard to ventilation, egress, the proper securing of animals and the separation of mixed consignments. 2,449 road vehicles were inspected during the year and action taken as necessary.

Some 1,664 calves, 120 horses, 166 cattle, 350 sheep passed through Liverpool dock area during the year as consignments of pedigree stock. All animals and their accommodation were inspected and action taken as necessary.

The Transit of Calves Order 1963

This Order provides for the handling, feeding, water and protection of calves in transit by road. Consignments of calves arriving in Liverpool for shipment to the Isle of Man and elsewhere were inspected and the requirements of the Order enforced. Informal action has been taken upon several occasions.

The Animals (Landing from the Channel Islands, Isle of Man, Northern Ireland and the Republic of Ireland) Orders, 1955 – 1964

Some 644 licences issued by the Ministry of Agriculture, Fisheries and Food

were received for the movement of 7,981 cattle, 542 pigs and 77 sheep for slaughter in the Liverpool area or for store purposes were handled following importation from the areas covered by the order.

The Animals (Importation) Order 1930

A total prohibition is made under this Order for bringing cattle, sheep, goats, ruminating animals and swine into any part of the United Kingdom unless a licence has previously been granted by the Ministry of Agriculture. During routine visits to ships berthed in the Liverpool area a watch is always kept for any such animals and the provisions of the Order brought to the attention of ships' officers and action taken as necessary.

The Importation of Dogs and Cats Orders and Amendments 1928 – 1971
The purpose of these Orders and Amendments is to prevent the introduction of Rabies into Great Britain via dogs and cats brought into the country. Any dog or cat landed in the United Kingdom must go into quarantine for a period of six months at the expense of the owner. Any such animal brought into any port in the country and not intended for landing must be kept on board the vessel in a secure place, and must not leave the ship. All ships in the Liverpool docks are visited by inspectors of the Division and the ships' Masters, where necessary, are informed of their obligations. In the course of the year a total of 251 dogs and 53 cats not intended for landing were detained on board ship and 1,032 visits made to ensure that such animals were not landed.

Several unwanted cats on board vessels were painlessly destroyed, at the request of the Master, by inspectors of this Division, and the cadavers later landed and incinerated under control of the inspectors.

The Exotic Animals (Importation) Order 1969

Under this Order a wide variety of exotic animals are listed, the importation of which is prohibited unless with a licence previously granted by the Ministry of Agriculture, Fisheries and Food. The ban is designed to prevent the introduction of Rabies into the country by such animals. During routine visits to ships in the Liverpool area enquiries are always made about small animals which may be carried on the vessels as the property of crew members. In the event of any such prohibited animal being found, the importation ban is explained and action taken as necessary. Several illegal landings have been made and in all cases the animals concerned have been surrendered to the inspector and destroyed, the cadavers later incinerated. Several such exotic animals have been destroyed on board the vessels at the request of the owners or ships' masters, the cadavers later landed and incinerated under the control of the inspector.

The Importation of Horses, Asses and Mules Order 1957 The Equine Animals (Importation) Order 1969 – 1971

Consignments of Polo ponies, horses etc., pass through Liverpool Docks. In the course of the year 43 ships and 62 horse boxes were visited and inspected for cleanliness, washing and disinfecting prior to landing in accordance with the Orders.

The Exportation of Horses and Ponies Order The Transit of Horses Etc. Orders 1951 – 1966 The Horses (Sea Transport) Order 1952 – 1958

To ensure compliance with the above Orders and a miscellary of Orders a total of 2,852 ships were boarded in the course of the year and inspections made and action carried out as necessary. Some 120 road vehicles delivering livestock to the docks in the Liverpool area were inspected in relation to construction and suitability etc. Attention was also given to the construction of stalls, pens and boxes and their method of stowage on board.

Factories Inspection

The inspectors continued to carry out the Council's responsibilities under the relative sections of the Factories Act 1961, and the statistical analysis is shown in the appendix.

The continued mutual exchange of information and consultation with H.M. Inspector of Factories is appreciated by the local public health inspectorate both under the above enactment and the Offices, Shops and Railway Premises Act 1963, particularly concerning the extent of each officer's responsibility before the initial inspection of a new factory or commercial establishment.

Regular visits to industrial premises within the various districts are a safeguard against the many nuisances which can occur from industrial dust or smoke, obnoxious odours and excessive mechanical noise.

During a recent "environmental care study" in Liverpool 8, one particular exercise involved visits to all commercial and industrial premises within the area being studied to obtain specific details including the following three items:—

- (i) To record the type of boiler or steam raising plant in use.
- (ii) To observe and note the various types of production processes.
- (iii) Identify any particular aspect of the plant or process that could give rise to industrial nuisance.

Unfortunately there was not sufficient time available to measure the impact this period of regular inspection had upon the staffs of the various firms concerned. The inspectorate involved have been encouraged recently by the type of complaints and enquiries received and the comments passed during subsequent interviews. All these experiences tend to show there is an awareness amongst industrialists of their own environmental responsibilities.

Food Factories

The demand for "convenient pack" commodities appears to be transferring the toil of food preparation from the smaller canteen kitchens to larger specialised firms catering for this outlet, and for that of the "home deep freeze" market. Likewise the inspectors' surveillance has been extended to include these new trade premises to advise and promote satisfactory standards of hygiene in handling the power-operated equipment, which various managements readily install to increase output and efficiency,

Outworkers

The outworkers returns which are received twice yearly by the department ensure that the accommodation used by the listed persons is examined in accordance with sections 133 and 134 of the Factories Act, 1961.

The returns of the outworkers during the current year were as follows:-

(i)	Number of outworkers during the year	122
(ii)	Number of returns received from other authorities	1
(iii)	Number referred to the Medical Officers of Health of districts outside the city	1

Rag Flock and other Filling Material Act, 1951

New regulations which replace the Rag Flock and other Filling Material Regulations, 1961 to 1965 came into operation on the 3rd November 1971.

The regulations bring further materials within the scope of the Act, especially the synthetic and rubberised fibres, which were hitherto excluded, but because of the increased use of these fibres, and in the interests of public health, the provisions of the regulations now apply to them.

The standard of cleanliness (the chloride limit) applied to loose or layered fillings requiring washing before use, in the interests of public health is now reduced to 20 parts in 100,000 as against 30 parts in 100,000. This brings the statutory requirements into line with British Standard 1425: 1960 as amended.

The new regulations introduce other revisions relating to prescribed analysts, their fees, and methods of examination.

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

(i) Licensed to manufacture rag flock	1
(ii) Licensed to store and sell rag flock	5
(iii) Registered for use of fillings materials	51

Industrial Nuisances

Most complaints under the above heading throughout the year concerned building and demolition contractors who subjected their immediate surroundings to all, or some of the following nuisances, dust and dirt, excessive noise and smoke.

Dust and Dirt

The nature of demolition operations is such that it often precludes most effective forms of remedial measures. Spillage of the larger debris can be adequately prevented by the provision of suitable screening, and attention to clearance of the adjoining footwalks and carriageways at the end of each working day.

Nuisances arising from the process of cleaning exteriors of buildings can be minimised by the choice of a "wet process" and the skilful use of protective "drapes".

Excessive Noise

Twentieth century man appears to have allowed noise to become accepted as a necessary evil. Such a fact is an indictment of our efforts to reduce this unwanted phenomenon at its source. Most mechanical power-operated machinery and plant in factories is capable of making excessive noise and the equipment used by contractors is no exception. This robust equipment when in daily use soon necessitates frequent maintenance. The public health inspectors endeavour to ensure that unnecessary noise is reduced to a minimum and particular attention is given to remedial measures which include improving maintenance and resiting of plant, screening of equipment and the proper use of "mufflers" in the case of pneumatic drills.

The Noise Abatement Act 1960, Part III of the Public Health Act 1936 and the Public Health (Recurring Nuisances) Act 1969 provide powers to deal with offenders, but the inspectorate when faced with an aggrieved complainant, initially seek the co-operation of offenders in finding a solution to the particular problem.

Other complaints of excessive noise investigated by the department were found to be caused by circular cutting saws, ventilation extract fans, air compressors in car body repair premises and the machinery of factories, when night shifts were operated.

Offensive Trades

Complaints investigated concerning offensive odours from the above type of premises were, with few exceptions, found to be caused by mechanical breakdown, mistakes or an error of judgement on the part of the operatives.

The applications from the proprietors of these trades for their annual licences provide the public health inspectors with a regular opportunity to ensure that satisfactory standards are maintained in respect of the internal structure of the premises, the process plant and methods of operation.

Atmospheric Pollution

Smoke Control Orders

Since the first smoke control order was made, on the 3rd July 1957, a total of 25 orders have been confirmed, and 22 of these orders are now operative. The remaining three orders become operative between 1973 and 1974, and works of conversion are continuing in these areas. The co-operation of residents, with regard to fireplace alterations, has been very encouraging.

Industry and Shipping

Observations continue to be made on industrial premises, also on shipping, and the results show that the amount of unnecessary smoke is still being reduced. The number of complaints shows a drastic reduction.

New Installations

With the continuing construction of new premises in the city as well as renewal of old, worn out plant, new chimney heights and revised levels have received attention in 29 cases. There were seven instances where consultants had to increase the proposed heights before Committee approval could be given. In all cases co-operation on both sides achieved satisfactory levels. Forty-seven notifications were received in respect of new installations, and official approval of the proposals was given in all cases.

Measurement of Pollution

Seven instruments were used to record the amount of smoke and sulphur in the atmosphere in various parts of the city. The results from 5 stations were forwarded to Warren Springs Laboratory in association with the National Survey of Pollution; the remaining two stations were used for specific purposes within the city.

Research Investigation

An investigation was commenced at a particular location where arrangements were available to assess the extent to which motor vehicles contribute to the pollution of the atmosphere. It will be some time before any conclusion can be made on the results of the experiment. Additional atmospheric pollution measurements are still being taken in connection with the Vauxhall Project. A further investigation was carried out in the Brunswick Area, the results of which were included in the special Environmental Report.

Rodent Control

Duties of Local Authorities and Occupiers

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

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

Systematic Survey

The rodent control staff examined 10,759 sites during the year in connection with routine survey and investigation of complaints and a further 72,897 visits were made entailing operational work and re-examination of buildings and lands during or following treatments. The Public Health Inspectors also made, in connection with other matters 147,486 inspections under the Act.

Rodent Infestation

During the year 2,930 sites were found to be infested, 1,147 by rats, 31 by rats and mice, and 1,752 by mice only and the majority were only slightly infested. Details are shown in the statistical appendix.

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

Complaints relating to rats and/or mice to the total of 12,393, an increase of 502 over the previous year, were received and promptly investigated.

Of the 670 dwelling houses affected by rats, 580 infestations were solely confined to the external parts of the premises.

Rodent Disinfestation

During the year 2,609 buildings and lands were disinfested from rats and/or mice. The demand for assistance from occupiers of business premises was reduced and 903 requests were received.

Of the 2,609 infestations and reinfestations remedied during the year, 2,564 were treated by the department's operators and of these, 2,466 were cleared by the use of poisons, 88 by poisoning and trapping, and the remaining 10 were remedied by trapping only. 45 notified infestations were remedied by the occupiers or their contractors under the guidance and supervision of the rodent control inspectors.

It is estimated that at least 13,045 rats in buildings and on lands were destroyed during the year as a result of poisoning treatments. 1,917 dead rats were actually collected during operations and 307 were caught in traps.

The species of rats collected were 1,155 rattus norvegicus ("brown" or "common" rats) and 762 rattus rattus ("black" or "ship" rats).

Of the rodents collected 8 were sent to the Public Health laboratory for examination and the remainder were burnt.

Although there is no reliable formula available for calculating the kill in relation to the poisoning of mice, there can be no doubt that the number destroyed by this method is quite considerable when taking into account the large amount of poison actually consumed by mice, namely 9,002 ounces.

Rat Destruction in Sewers

There are some 26,500 manholes providing access to the whole of the sewerage system in the City and a total of 36,274 poison baits were laid in manholes. 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 but it is essential 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 recorded in 554 out of a total of 14,481 manholes re-tested. A further poison treatment was applied to those areas where positive results had been found.

During the year it was considered necessary to refer to the City Engineer 659 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 332 drain tests were held in connection with infestations, which resulted in 118 premises being found to have defective drainage systems and the necessary action was taken to have the drains repaired. 247 notices were served under the provisions of the Prevention of Damage by Pests Act, 1949, relating to premises for non-structural work.

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

Pigeon Control

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

A total of 29,586 visits were made which resulted in 67,479 pigeons being humanely destroyed and 1,200 eggs were destroyed. The number of birds caught by the department's staff was 62,497 and 4,982 with help from

private firms. Since the inception of the sub-section in January 1966 a total of 400,766 feral pigeons and 32,038 eggs have been destroyed.

Block Control

Following a statement by the Regional Pests Officer of the Ministry of Agriculture, Fisheries and Food that black or ship rats in Liverpool are more resistant to Warfarin poison than previously, as well as more prevalent, a survey of the central area of the city commenced. The survey had not been completed at the end of the year but the results obtained show that the black or ship rat has not increased its area of activity from that which has been known for several years.

The black or ship rat has always been more difficult to eradicate than the brown or common rat and this fact together with its mobility tends to give the layman a false impression as to the degree of infestation in any premises. No major difficulties have been encountered in disinfesting any of the premises dealt with although some of the private contractors appear to take rather more time to carry out the same successful operations.

Staff

February saw the commencement of an incentive bonus scheme for the manual workers, and with the necessary help from the supervisory staff their earnings were increased. This was achieved by a reduction in the number of rodent operatives and the provision of motorised cycles.

Disinfection and Disinfestation

The duties of this section are to provide services for disinfection following infectious disease, disinfestation of verminous premises and articles, and providing transport for these and other services, the collection and delivery of laundry for the chronically sick and incontinent patients nursed at home and the distribution of equipment to dialysis patients being treated at home, also the collection and the safe disposal of used equipment. Transport is provided for the distribution and collection of home nursing equipment, including wheelchairs and the cleaning and reconditioning of this equipment is also dealt with in this section. The section also maintains and staffs the City Mortuary in close liaison with the City Coroner and the Coroner's Officer.

Complaints concerning vermin infestation are received from tenants and the premises are visited by the disinfestation inspectors, when appropriate advice and practical assistance is given. Information is also received concerning premises from which tenants are to be rehoused. Where necessary the effects are disinfested before removal to the new accommodation, to avoid the transfer of vermin. A total of 16,047 inspections were made during the year. The treatments carried out included 276 incidents of wasps nests, the milder weather causing a record number of complaints about wasps.

Advice and practical assistance in the disinfecting or disinfesting of hospitals and other buildings has been provided when necessary.

A bonus scheme for the manual workers is now in operation and this has reduced the changeover of staff and consequently an experienced labour force is now being built up.

Disinfecting Station - Smithdown Road

The Disinfection Station dealt with the following articles:-

14,028 Verminous articles disinfested

7.018 Infectious articles disinfected

8,519 Articles for precautionary treatment

487 tons of goods treated prior to export Bedding from 13 ships treated

139 Male persons used the facilities in the Cleansing Station

Visits by Inspectorial Staff

6,142 Inspections in relation to rehousing

3,313 Vacant Corporation properties inspected

6,592 Complaints from the general public investigated

Treatment of Properties Carried Out

6,225 Dwelling houses

194 Business premises

268 Treatments in Hospitals, Baths, Laundries, Schools etc.

MISCELLANEOUS SERVICES:

Incontinent Laundry Service

A total of 36,062 calls were made during the year for the purpose of collecting or returning laundry from chronically ill persons, in cases where, because of the nature of the illness, no other laundry arrangements could be made.

Home Nursing Equipment

There were 15,050 visits made in connection with the delivery or collection of equipment issued to persons being nursed at home.

City Mortuary

This service works in close liaison with the office of the City Coroner. During the year attendants assisted at 539 post mortems, and 579 bodies were received.

ENVIRONMENTAL HEALTH SUMMARY OF PROSECUTIONS – 1971

Act	Section	No. of Informations or Complaints	Penalties	Costs
			£	£
Food and Drugs Act, 1955	Food not of quality demanded (milk)	10	200	15
Slaughter of Animals Act, 1958	1 and 5	1	20	_
Public Health Act, 1936	94	2	-	-
Public Health Act, 1936	75	1	-	-
Public Health Act, 1936	93, 94 and 268	58	-	-
Public Health Act, 1936	95	4	15	-
		76	235	15

FACTORIES ACT, 1961

Part I of the Act

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

			Number of		
Pren	nises	Number on Register (2)	Inspections (3)	Written notices (4)	Occupiers prosecuted (5)
(i)	Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by local authorities	49	104	_	errent yro
(ii)	Factories not included in (i) in which Section 7 is enforced by the local authority	2,724	3,588	14	-
(iii)	Other premises in which Section 7 is enforced by the local authority (excluding out-workers' premises)	207	303	-	or - mivas
Tota	ıl	2,980	3,995	14	-

2. Cases in which defects were found

	Number	of cases in	which defe	ects were	
	Found	Remedied	Refe	rred	Number of
Particulars (1)	(2)	(3)	To H.M. Inspector (4)	By H.M. Inspector (5)	cases in which prosecutions were instituted (6)
Want of Cleanliness (S.1)	_	-	_	_	-
Overcrowding (S.2)	-	_		-	_
Unreasonable temperature (S.3)	-	_	-	-	-
Inadequate ventilation (S.4)	_	_	_	_	-
Ineffective drainage of floors (S.6)	_	-	_	_	_
Sanitary conveniences (S.7) (a) Insufficient	_	_	_	_	_
(b) Unsuitable or defective (c) Not separate for sexes	51	51	-	14	-
Other offences against the Act (not including offences	-	-	-	-	-
relating to Out-work)	-	-	-	-	-
Total	51	51	-	14	_

FACTORIES ACT

Part VIII of the Act - Outwork

(Sections 133 and 134)

	Section 1	33		Section 1	34	
Nature of Work (1)	No. of out- workers in August list required by Section 133(1) (c (2)	default in sending lists to the	No. of prosecutions for failure to supply lists (4)	of work is unwhole-	Notices	Prosecutions (7)
Wearing apparel-making, etc.	85	_	_	_	_	-
Umbrellas, etc.	1	-	-	-	-	-
Total	86	-	_	_	-	-

CLEARANCE AREAS NOT YET CONFIRMED BY THE MINISTER at 31st December 1971

Area	Houses	Familie
Blenheim Street Nos. 7 & 8 Clearance Areas 1971	15	14
Jupiter Street Clearance Area, 1971	32	36
Derby Grove Clearance Area, 1971	29	28
Tooke Street Clearance Area, 1971	35	35
Wolseley Street Clearance Area, 1971	34	34
Empire Street Nos. 1 & 2 Clearance Areas 1971	585	576
Butler Street Clearance Area, 1971	14	14
Farnworth Street Nos. 1 & 2 Clearance Areas, 1971	11	11
Cottenham Street Clearance Area, 1971	412	407
Spekeland Street Clearance Area, 1971	58	57
Priest Street Clearance Area, 1971	26	27
Grierson Street Nos. 1, 2 & 3 Clearance Areas, 1971	39	38
Fountains Road Nos. 1 & 2 Clearance Areas, 1971	7	4
Sessions Road No. 3 Clearance Area, 1971	3	2
Melrose Road Clearance Area, 1971	75	76
Medlock Street Clearance Area, 1971	477	486
Brunswick Square Clearance Area, 1971	128	126
Sessions Road Nos. 4 & 5 Clearance Areas, 1971	12	8
Fonthill Road Clearance Area, 1971	63	64
North Dingle Clearance Area, 1971	66	71
Hogarth Road Clearance Area, 1971	112	109
Melrose Road No. 2 Clearance Area, 1971	2	2
Memphis Street Clearance Area, 1971	5	5
Totals	2,240	2,230

COMPULSORY PURCHASE ORDERS CONFIRMED DURING 1971

Order	No. of Houses	No. of Familie
Fernie Street/Prophet Street No. 2 Area	56	58
Cardigan Street Area	240	246
Barry Street Area	891	937
Norwood Grove Area No. 4	34	89
Fearnside Street Area	646	643
Lombard Street Area	181	195
Harrowby Street Area	530	635
Totals	2,578	2,803

CLEARANCE ORDERS CONFIRMED DURING 1971 - NIL

CLEAN AIR ACTS, 1956/68

Inspections,	Observations,	etc.
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Particulars of Inspections - 1971

5,980
149
104
3,807
66
6,475
4,683
157
91
1,114
8
63
47
47
47
29
22
7

SUMMARY OF RODENT INFESTATIONS AND DISINFESTATIONS OF BUILDINGS AND LANDS DURING THE YEAR 1971

Premises Rats Rats Alice Premises Rats Alice Mice Major		Infestations	suc			Reinfestations during the Year	e Year			Category		Total	
ities 120 81 2 37 18 14 - 4 - 6 ouses 51 27 1 23 4 3 - 11 - 7 1 1 23 4 3 - 11 - 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Description of Premises	Premises		Rats and Mice	Mice	Premises	Rats	Rats and Mice	Mice	Major	Minor	tions and reinfestations	Total Remedied
ouses 51 27 1 23 4 3 - 4 - 60 colores 1,502 620 2 880 96 48 - 48 - 60 colored in above) (330) (60) (8) (262) (10) (4) (-) (6) (-) (6) (-)	Shops	517	170	9	341	54	22	1	31	1	571	571	426
ouses 51 27 1 23 4 3 - 1 - 1 - 1 - 1 ing houses 1,502 620 2 880 96 48 - 48 - 48 - buildings and lands 740 249 20 471 115 19 - 96 - 96 in above) (330) (60) (8) (262) (10) (4) (-) (6) (-) (-) (147 31 1.752 287 106 1 180 -	Factories	120	81	7	37	18	14	1	4	1	138	138	146
ing houses 1,502 620 2 880 96 48 - 48 - 6 buildings and lands 740 249 20 471 115 19 - 96 - 96 - 96 - 96 - 96 - 96 - 96 -	Varehouses	51	27	1	23	4	ю	1	-	1	55	55	90
buildings and lands 740 249 20 471 115 19 – 96 – premises cluded in above) (330) (60) (8) (262) (10) (4) (–) (6) (–) (6) (–)	Owelling houses	1,502	620	2	880	96	84	1	84	1	1,598	1,598	1,330
premises (330) (60) (8) (262) (10) (4) (-) (6) (-) (6) (-)	Other buildings and lands	740	249	20	471	115	19	1.	96	1	855	855	657
2.930 1.147 31 1.752 287 106 1 180 -	Food premises (included in above)	(330)	(09)	(8)	(262)	(10)	9	<u> </u>	(9)	Ĵ	(340)	(340)	(297)
	Total	2,930	1,147	31	1,752	287	106	1	180	1	3,217	3,217	2,609

ATMOSPHERIC POLLUTION MEASUREMENT – 1971 Smoke and Sulphur Dioxide Volumetric Filter Measurements are in microgrammes per cubic metre

	SMOKE	KE											SOL	SULPHUR	,									
	Jan	Feb	Mar	Apl	May Jun		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apl	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Hatt	Hatton Garden	urden																					
Average Value	169	94	93	95	61	38	39	49	9/	71	90	96	324	225	214	241	157	122	126	102	155	174	164	202
Highest Value	562	569	190	232	120	84	09	102	139	114	234	346	881	422	386	440	337	301	205	257	258	350	009	657
Lowest Value	63	22	37	17	17	ч	20	17	32	27	32	28	122	119	115	109	71	29	71	21	57	79	7	41
	Crox	Croxteth Hall	Hall																					
Average Value	145	145 122	1	50	27	23	11	12	41	40	52	51	206	86	1	114	6	19	62,	. 78	135	173	140	164
Highest Value	578	578 337	1	107	99	54	20	43	81	107	175	222	648	166	1	255	182	166	140	127	223	344	274	514
Lowest Value	18	25	1	12	S	2	-	П	6	6	7	1	65	51	1	114	20	30	S	5	80	64	71	77
	Woolton	Iton																						
Average Value	150	150 100	90	78	61	43	39	42	89	09	64	74	227	199	166	183	143	114	102	94	138	153	145	167
Highest Value	365	318	162	174	114	82	89	91	155	128	245	225	479	320	276	369	234	226	156	155	253	271	301	490
Lowest Value	57	38	31	33	37	59	16	24	21	32	17	25	97	94	106	66	90	35	48	52	32	81	32	100
	Lark	Lark Lane																						
Average Value	34	40	41	72	45	36	26	32	55	46	90	83	250	139	142	185	151	86	80	72	113	132	134	149
Highest Value	105	105 185	81	214	102	87	20	70	148	101	232	272	466	349	304	484	342	233	162	162	260	290	306	646
Lowest Value	6	13	12	19	85	15	13	13	16	13	22	16	115	56	99	09	82	31	22	9	45	40	89	34

Croxteth Hall operated 8 days only February, 10 days July, 11 days August. Did not operate March.

ATMOSPHERIC POLLUTION MEASUREMENT – 1971 Smoke and Sulphur Dioxide Volumetric Filter Measurements are in microgrammes per cubic metre

	SMOKE	KE											SUL	SULPHUR	~									
	Jan	Feb	Mar	Apl	May	Jan Feb Mar Apl May Jun Jul		Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apl	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Bold	Stree	t Proj	ect (S	tation	Bold Street Project (Station One)	_																	
Average Value	161	91	88	75	43	46	29	34	52	1	1	1	241	186	226	212	130	173	174	137	192	1	1	1
Highest Value	572	214	214 254 173	173	81	84	55	19	111	1	1	1	692	384	456	400	241	313	305	245	288	1	1	1
Lowest Value	64	29	39	22	18	28	10	4	20	1	1	L	92	70	113	19	38	74	64	19	74	1	1	1
					(Sta	(Station Two)	Two)																	
Average Value	154	154 100	99	84	55	48	28	35	59	ı	1	ı	190	162	86	184	152	150	168	126	196	1	1	1
Highest Value	704	312	149	169	119	108	58	75	119	1	1	1	833	481	127	321	309	253	280	245	336	1	1	1
Lowest Value	49	14	22	14	14	17	2	00	17	1	1	1	40	54	44	19	53	99	98	58	32	I	1	1
	Brun	swick	Envir	conme	ental 7	Trials	(North	dmur	erland	Stre	et)									-				
Average Value	ı	1	ı	51	42	58	22	35	52	53	83	92	1	ı	1	75	133	150	118	1115	152	216	179	192
Highest Value	1	1	1	51	111	139	62	91	139	152	251	345	1	1	1	75	359	273	261	280	349	408	445	866
Lowest Value	1:	1	ı	51	4	11	51 4 11 1 8 19 14 2	00	19	14	27	18	1	1	1	75	26	28	21	15	47	21	38	41
	Vaux	thall A	Ction	Area	E	tchfie	Vauxhall Action Area (Titchfield Street)	et)																
Average Value	202	151	164	153	93	72	35	48	79		124	100	318	237	240	266	175	1117	90	108	157	195	240	264
Highest Value	819	384	319	285	180	149	74	84	172		338	358	1,006	435	486	452	322	307	189	257	352	369	477	873
Lowest Value	80	89	34	61	30	30 21	11	2	10	37	38	18	152	90	156	112	62	40	33	45	70	90	136	80
					0	Bound	(Boundary Street)	treet	_															
Average Value	1	1	1	1	1	59	33	46	78	85	133	123	1	1	1	1	1	106	93	105	152	184	238	262
Highest Value	1	Ţ	1	1	1	132	59	6	176	166	395	404	!	1	1	1	1	247	143	214	336	301	525	862
Lowest Value	1	1	1	1	1	18	17	7	18	14	23	9	1	1	1	1	1	50	35	34	65	83	09	77

Bold Street Project completed September. Northumberland Street operated one day only April.

CARCASES AND OFFAL INSPECTED AND CONDEMNED IN WHOLE OR IN PART – 1971

2 to 1 to 2	Cattle including Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed 214,462	38,434	_	522	92,802	82,704
Number inspected 214,462	38,434	_	522	92,802	82,704
= = = = = = = = = = = = = = = = = = = =	Cattle (excluding Cows)	Cows	Calves	Sheep and Lambs	Pigs
All disease – except Tuberculosis and Cysticerci					
Whole carcases condemned	3	27	48	466	229
Carcases of which some part or organ was condemned	282	671		1,888	2,090
Percentage of the number inspected affected with diseases other than Tuberculosis and Cysticerci	2.4	_ =	9.2	2.5	2.8
Tuberculosis only					
Whole carcase condemned	-	-		-	-
Carcases of which some part or organ was condemned	5	14	1210	1	250
Percentage of the number inspected affected with Tuberculosis	0.04	_	0.00	0.00	0.03
Cysticerci					
Carcases of which part or organ was condemned	34	_		_	_
Carcases submitted to refrigeration	34	_	-	_	_
Generalised and wholly condemned	-	_	_	_	_

QUANTITY OF FOOD CONDEMNED FOR DISEASE OR FOUND UNFIT FOR HUMAN CONSUMPTION – 1971

Food	Tons	Cwts	Qrs.	Lbs
Beef, Mutton, Lamb, Veal and Pork	88	9	1	25
Offal	114	1	1	22
Fish	15	1	1	20
Poultry, Rabbits and Game	1	_	_	12
Fruit	315	3	-	12
Vegetables	458	8	1	17
Canned Goods	38	11	-	5
Sundries	8	13	2	21
Total	1,039	8	2	22

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