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REPORT  
OF THE  
Medical Officer of Health  
CITY OF DUBLIN  
FOR THE YEAR 1947

BY  
MORGAN P. CROWE, F.R.C.P.I., D.P.H., T.D.D.  
*Acting Medical Officer of Health.*

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DUBLIN :  
PRINTED BY SEALY, BRYERS & WALKER.  
1949





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**MEDICAL OFFICER OF HEALTH**  
**CITY OF DUBLIN**  
**FOR THE YEAR 1947**

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 S. DUNDON, M.D., D.C.H., Senior Medical Officer.  
 W. R. F. COLLIS, M.A., M.D., F.R.C.P.I., D.P.H., Senior Medical Officer (Part-time).  
 J. ST. L. O'DEA, M.B., B.Ch., B.A.O. D.P.H., Junior Medical Officer.

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MISS M. E. CORBETT.	MISS M. D. KEARNEY.
MISS A. M. O'REILLY.	MISS E. O'CONNELL.
MISS W. McKEOWN.	MISS J. LEWIS.
MISS E. BANNAN.	MISS K. WALSH.
MISS M. HICKEY.	

**Clerical Staff**—2 members.

**(c) Assistant Medical Officer and Chief School Medical Officer :**

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**Assistant Medical Officer :**

J. O'DONNELL, M.B., D.P.H.

**Dental Officers :**

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 D. P. P. O'SULLIVAN, B.D.S.

**Nursing Staff :**

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MISS MURPHY.	MISS MCGINLEY.
MISS BLAKE.	MISS FLYNN.
MISS LAVIN.	MISS O'KEEFFE.
MISS WALSH.	

**Clerical Staff**—4 members.

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**Tuberculosis Officers :**

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**Director of Mass Radiography :**

M. G. MAGAN, M.B., B.Ch.

**Nursing Staff :**

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MISS MCCARTHY.	MISS BRANGAN.
MISS DELANEY.	MISS MCGEE.
MISS BOLAND.	MISS CULLEN.
MISS O'SULLIVAN.	

**Clerical Staff**—2 members.

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### Medical Staff :

M. M. PUGH (up to June, 1947), M.B., B.Ch., B.A.O.  
G. M. LEAHY (June-December, 1947), M.B., B.Ch., B.A.O.

### Dermatologist :

DR. O'CONNELL-DONELAN.

### Nurses :

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G. MURRAY.  
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### Assistant Veterinary Inspectors :

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D. REEVES, M.R.C.V.S., D.V.S.M.  
P. M. McMANUS, M.R.C.V.S., D.V.S.M.  
J. A. FALLON, M.R.C.V.S.

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J. SWEENEY.	P. KENNEDY.
M. J. D'ARCY.	

**Clerical Staff**—3 members.

### (f) Supervisory Sanitary Inspectors :

T. S. CUFFE.	P. LEE.
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### Sanitary Inspectors :

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M. McDERMOTT.	E. MARSLAND.
J. DAWSON.	T. O'BRIEN.
P. COEN.	MISS M. COOKE.
J. TRAVERS.	Mrs. E. O'REILLY-MURPHY.
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P. WILLIAMS.	P. J. TOAL.
C. REYNOLDS.	T. FLYNN.
G. BOWLES.	P. CONROY.
J. O'BRIEN.	W. TANNAM.

**Clerical Staff**—2 members.

## (g) Institutions :

Crooksling Sanatorium—R.M.S.—A. J. WALSH, M.B., B.Ch.,  
D.P.H.

Asst. R.M.S.—M. HANRAHAN, M.D., D.P.H.

Rialto and Pigeon House Road Hospitals—

R.M.S.—J. DUFFY, M.D., F.R.C.P.I., D.P.H., T.D.D.

House Physicians—J. CORRIDAN, M.B., B.Ch., D.P.H.; S.  
COX, M.B., B.Ch.; J. K. MOYNIHAN, M.D.; L. B. GOD-  
FREY, M.D.

J. CORRIDAN ... 1.7.'46 to 16.7.'47.

S. COX ... 9.5.'47 to 31.12.'47.

J. K. MOYNIHAN ... 14.1.'47 to 8.5.'47.

L. B. GODFREY ... 17.7.'47 to date.

Vergemount Fever Hospital—

R.M.S.—F. N. ELCOCK, L.R.C.P. & S.I., D.P.H.

House Physicians—P. FITZGERALD, L.R.C.P.S.I., D.P.H.;

P. FITZGERALD ... 1.7.'46 to 30.6.'47.

A. McQUILLAN ... 1.1.'47 to 31.12.'47.

P. POWER ... 1.7.'47 to 30.6.'48.

**Municipal Buildings,  
Dublin.**

P. J. HERNON, ESQ., B.COMM., LL.D.,  
City Manager and Town Clerk.

I have the honour to present to you my Annual Report on the health of the City during the year 1947.

I took up duty as Acting Medical Officer of Health on 1st April, 1947. Much of the work with which the Report deals was done under the direction of Dr. Russell. It has been mainly routine in nature and along the lines evolved by Dr. Russell towards attaining satisfactory public health conditions in the City.

An unusual experience, however, was the occurrence of a case of Smallpox on an American coal-boat. As the disease developed before the vessel reached this country, it was not, of course, a City case. Nevertheless, the subsequent treatment in Vergemount Fever Hospital, and the maintenance of the usual precautions to prevent spread of infection, were the responsibility of the Corporation. There had previously been no case of Smallpox in Dublin for some 50 years, and this occurrence is referred to in more detail later in the Report.

The year was rendered notable by the retirement of two pioneers of the Corporation Public Health Services. I refer, of course, to Dr. Russell, Medical Superintendent Officer of Health, and Dr. Daniel, Chief Tuberculosis Officer.

Dr. Russell, who entered the Corporation in 1912, saw the development of the Public Health Department to its present state. He witnessed, first as Assistant, and later as Medical Superintendent Officer of Health, the birth and growth of the Corporation's programmes for dealing with Tuberculosis, Venereal Disease, and the welfare of mothers, infants and schoolchildren.

It was a matter of disappointment to him that, despite his efforts, facilities offered through these programmes were not extended. He also experienced the elaboration of legislation which has, in practice, resulted in the transfer from the Local to the Central Authority of control over the programmes which the Corporation, under his guidance, had initiated.

Dr. Russell may truly be described as the "father" of the public health movement throughout the country, because the great majority of to-day's County Medical Officers studied under him for the Diploma in Public Health. There are, indeed, many doctors who can to-day reflect with happy memories that it was some action or counsel from him that put them on the road to success.

The Corporation administrators sorely miss his mature advice, never given without shrewd consideration of a problem from every angle.

Dr. Daniel entered the Corporation in 1912, and as Assistant, and later as Chief, Tuberculosis Officer saw the birth and development of the Municipal Tuberculosis Scheme. Dr. Daniel had an arduous task. For many years he had to battle against the ignorance with which the Tuberculosis problem was viewed by the public and the apathy with which it was treated by legislators.

Moreover, when the National Health Insurance

Act, 1911, was introduced into Ireland, for some reason difficult to justify from the community's well-being, the insured people of this country were denied the benefits of general practitioner attention which the Act had made operative in Britain.

During all these years, therefore, Dr. Daniel has had to work his scheme in a city in which there is no system of medical attention provided for those ineligible or unwilling to avail of the Poor Law dispensary system. He had also to contend with the problem of unsuitable and ill-equipped Clinic premises and gross shortage of bed accommodation. It was only in very recent years that he saw Tuberculosis advance from the Cinderella state to one commanding the attention of our native governments.

Both Dr. Russell and Dr. Daniel had to work through the difficulties inherent in our War of Independence and subsequent Civil War. They were also confronted with the problems occasioned by two European conflicts.

I am echoing a very general feeling in wishing these two gentlemen "ad multos annos" in their well-earned retirement.

## SUMMARY OF STATISTICS, 1943/47.

—	1943	1944	1945	1946	1947
Area in Acres	21,824	21,824	21,824	21,824	21,933
Population (Estimated) ...	500,300	505,600	502,600	508,200	513,500
Density of Population (on acreage 18,780) ...	26·6	26·9	26·7	27·1	27·3
Rateable Value	£2,238,300	£2,221,927	£2,239,263	£2,248,079	£2,271,431
Sum represented by Id. Rate	£8,501	£8,799	£8,969	£8,843	£9,315
Births ...	12,372	12,328	12,463	13,190	13,643
Birth-Rate ...	24·73	24·4	24·8	25·9	26·6
Deaths ...	7,206	7,077	6,986	6,621	7,253
Death-Rate ...	14·4	14	13·9	13·2	14·1
Maternal Mortality Rate ...	1·21	1·4	1·3	·91	·87
Infant Mortality Rate ...	126	117	111	96	88
Zymotic Death-Rate ...	1·47	1·3	1·2	1·0	·8
Death-Rate from Tuberculosis (all forms) ...	1·84	1·6	1·6	1·5	1·6
Death-Rate from Tuberculosis (Pulmonary)	1·5	1·2	1·3	1·2	1·2
Death-Rate from Cancer ...	1·3	1·3	1·3	1·2	1·3

**FINANCIAL STATEMENT FOR YEAR ENDED 31st MARCH,  
1947.**

Rate in £1, 1946/7	...	...	23s. 6d.
Proportion of above for Public Health Purposes	...	...	4s. 7d.

<b>Gross Expenditure, 1946/7—Main Items :</b>	<b>£</b>
Infectious Diseases (including hospital accommodation, disinfecting, etc.)	187,000
Tuberculosis (including Sanatorium accommodation, allowances, Mass Radiography, etc.)	159,000
Child Welfare (including free milk, Gastro-Enteritis, etc.)	69,500
School Medical (including School Meals)	89,825
Sanitary Department	26,200
Bacteriological Laboratory	1,600
Venereal Disease Scheme	9,955
Blind Persons Act (1920)	37,250
	£
Total Gross Expenditure	683,694
Less Grants	196,840
<b>NET EXPENDITURE</b>	<b>£486,854</b>

POPULATION CLASSIFIED BY AGE-GROUPS FOR EACH SEX (PER 10,000) AS PER CENSUS RETURN, 1936,  
AND REGISTER OF POPULATION, 1941.

AGE GROUP	M A L E S			F E M A L E S			T O T A L S		
	1936	1941	Change	1936	1941	Change	1936	1941	Change
	0—4 ...	1,103	1,146	+ 43	950	942	— 8	2,053	2,088
5—9 ...	998	1,075	+ 77	885	880	— 5	1,883	1,955	+ 72
10—14 ...	965	972	+ 7	882	833	— 49	1,847	1,805	— 42
15—19 ...	881	933	+ 52	904	941	+ 37	1,785	1,874	+ 89
20—24 ...	940	811	— 129	1,025	960	— 65	1,965	1,771	— 194
25—34 ...	1,564	1,473	— 91	1,617	1,655	+ 38	3,181	3,128	— 53
35—44 ...	1,295	1,262	— 33	1,293	1,303	+ 10	2,588	2,565	— 23
45—54 ...	1,029	1,003	— 26	1,020	993	— 27	2,049	1,996	— 53
55—64 ...	739	741	+ 2	749	765	+ 16	1,488	1,506	+ 18
65—74 ...	376	452	+ 76	476	507	+ 31	852	959	+ 107
75 and over ...	110	132	+ 22	199	221	+ 22	309	353	+ 44

## POPULATION.

The estimated population of the City of Dublin at mid-point 1947 was 513,500. This is an increase of 5,300 on the previous year's estimate, while there has been an increase of 13,200 over the past 5 years. The ratio of females per 1,000 males, as between 1936/46, has increased from 1,129 to 1,192. Figures are not available for analysis to be made of age and sex constitution of population. The latest available figures are those for the year 1941, when a Register of Population was compiled for rationing purposes. These indicate that while a relatively greater increase occurred among females rather than males, quite a considerable reduction occurred in the age-group 20/24 of both sexes, and there was a much heavier decline among males than females in the age-groups 20/40. In view of the past trend of population to infiltrate into urban areas at the expense of rural, it is reasonable to assume that the latter decline in working age-groups has been caused by emigration across the water. The relevant table is set out opposite.

The following Table shews the increase of births over deaths, or what is generally spoken of as the natural increase of the population for the City during the last ten years :—

Year.	Excess of Births over Deaths.
1937	4,629
1938	5,278
1939	5,155
1940	4,211
1941	4,398
1942	5,673
1943	5,445
1944	4,933
1945	5,472
1946	6,469
1947	6,613

Various rates (birth-rates, death-rates, etc.), referred to in this Report are calculated upon the estimated populations.

The rise in the Capital's population in common with other urban areas is one which has been experienced for long, while depopulation of the rural areas throughout the country continues. This flight from the land whether in the nature of cross-channel emigration or to towns within the country has developed into one of the most severe of the nation's problems. That it is noticeable among those in an agricultural community at ages most valuable from a working viewpoint, makes the problem all the greater. Doubtless, the causes of this flight from the land will be critically assessed and counter-measures examined by the Commission recently appointed to study the problem of emigration.

### BIRTHS.

The Notification of Births Acts, 1907-1915, provide for the notification to the Medical Officer of Health of every birth after the 28th week of pregnancy. The onus of notifying the birth is imposed on:—

- (a) the father of the child if he is resident in the house at the time of birth;
- (b) any person in attendance on the mother at the time of birth, or within six hours after birth.

It is to be noted that notification of births is additional to, and not a substitute for, their registration. However, while Registration, in this country only applies to live births, Notification covers live and still births.

During 1947, 13,643 births, 7,032 male, 6,611 female, were registered as occurring in Dublin City, giving a birth-rate of 26·6 per 1,000. Of these, 614 or 3·7% of total were illegitimate. The average birth-rate of the previous five years (1942-46) was 25·1.

There were 16,651 live births and 433 still births notified as occurring within the City during the year. Still births thus formed 2·6% of the total births. Of the total births for the City during the year, approximately 3,000 births notified as occurring within the City were actually in respect of parents who were not resident here, and, therefore, should correctly be excluded.

Calculations in respect of Birth Rate and Maternal and Infant Mortality Rates were, of necessity, at the time of preparation of the report based on the partially corrected figure of 13,643 above. The fully corrected figure is 13,484 births for Dublin City.

### DEATHS.

There were 7,253 deaths recorded in the City during 1947, making a death-rate of 14·1 per 1,000 population. Of these, 1,194, or 16%, occurred in infants under one year (infantile mortality), while 2,945, or 41%, occurred in people over 65 years. 3,947, or 54%, of the total deaths occurred in public institutions.

The Principal Epidemic Disease Group accounted for 430 of the total deaths, making a death-rate of ·8 per 1,000 population; Tuberculosis for 844, or 1·6 per 1,000 population; Cancer, 648, or 1·3 per 1,000 population; and respiratory ailments (excluding Tuberculosis) 884, or 1·7 per 1,000 population.

## PRINCIPAL EPIDEMIC DISEASES.

The principal epidemic diseases are Typhus, Smallpox, Enteric, Dysentery, Diphtheria, Scarlet Fever, Whooping Cough, Measles, and Diarrhoea and Enteritis (in children under two years). Notification of Measles and Whooping Cough was not introduced until 1941, and Diarrhoea and Enteritis until 1943.

Tables A and B on pages 21-22 give a summary of these diseases during the ten year period, 1937/47.

### Typhus.

No case of Typhus was notified during the year. The last case to occur in the City was in 1929.

### Smallpox.

No case of Smallpox was notified during the year. As already stated, the case discovered on an American coal-boat is not reckoned a City case. It is some 50 years since a case of this disease occurred in the City.

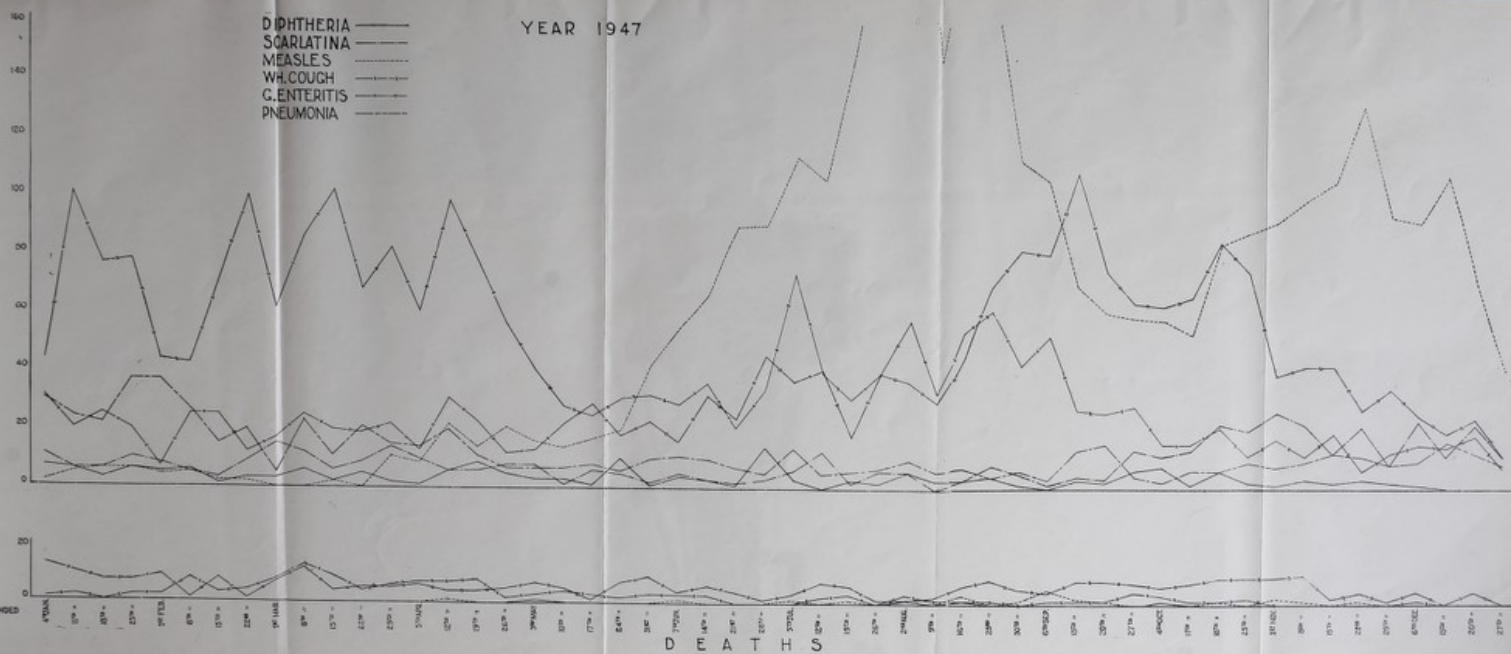
### Enteric.

10 cases (all of Typhoid Fever) were notified during the year, giving an incidence rate of .02 per 1,000 population. There were no deaths.

Doubtless because of improved environmental hygiene, Enteric has decreased to such a remarkable extent in the City that its eradication, rather than control, is the goal to which the efforts of preventive medicine can be directed. Although the sanitation of many City dwellings still cries out for improvement, the measure most likely to attain the goal of eradication is the discovery and control of carriers. The epidemiological investigation of sporadic cases of Enteric, and the methodical scrutiny of recovered patients prior to discharge from hospital, are the most effective methods of discovering carriers.

YEAR 1947

DIPHTHERIA  
SCARLATINA  
MEASLES  
WH. COUGH  
G. ENTERITIS  
PNEUMONIA





A system of serological testing of home contacts of sporadic cases is in operation, those in whom such tests are in any way suggestive being submitted to bacteriological scrutiny. Since field investigation revealed no relationship between any of the 10 cases notified during the year, the possibility of a chance infection from an unrecognised carrier in the home was explored. 24 home contacts to these 10 cases were investigated on these lines, but in no instance was a carrier "unearthed."

During the year, at the instigation of the Department of Health, it was decided to study those persons notified during the previous 15 years as suffering from Enteric, with the object of "unearthing" carriers. The study comprised the bacteriological examination of a sample of faeces and urine, and a serological test for Vi agglutinins, of each such person. In all, 550 persons were notified during this period, but for various reasons, i.e., death, whereabouts unknown, refusal to co-operate, etc., samples of excreta could only be collected from 114. In none were Enteric organisms detected. Only 24 persons co-operated to the extent of allowing blood examination. Of these, 3 showed Vi agglutination in a 1 in 20 dilution. Excreta from each of these persons were examined on three further occasions with negative results.

This survey was not, of course, exhaustive. It was further, open to abuse in that there was always the possibility that the specimens of excreta, though not, of course, of blood, belonged to persons other than the ex-patient from whom they were requested. Even allowing for this, however, the entirely negative bacteriological findings might occasion surprise, especially as it has been stated that some 2% of patients become carriers. However true this may be, it has for long been the custom here to submit the excreta of recovered enteric patients to bacteriological scrutiny before release from hospital (more recently

release tests include the Vi agglutination test), and it is extremely rare that a person has had to be discharged excreting enteric organisms. At the moment, there are but 9 persons on the Register of Carriers maintained in the Public Health Department. Further, since last November weekly samples of sewage, influent and effluent, from the Outfall Works, Pigeon House Road, have been subjected to examination for Enteric organisms. To date, the results have been completely negative.

TABLE A.  
INCIDENCE AND DEATH-RATE (PER 1,000) BASED ON AN ASSUMED POPULATION OF 500,000.

	1937		1938		1939		1940		1941		1942		1943		1944		1945		1946		1947	
	I.	D.R.	I.	D.R.	I.	D.R.	I.	D.R.	I.	D.R.	I.	D.R.	I.	D.R.	I.	D.R.	I.	D.R.	I.	D.R.	I.	D.R.
Enteric Fever ..	.09	.002	.04	.004	.05	.014	.13	.006	.11	.01	.06	.01	.04	.01	.29	.016	.028	.016	.03	.004	.02	—
Typhus ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smallpox ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery ..	.002	—	—	—	.006	—	.002	—	—	.002	—	—	.004	—	.016	.002	.05	.01	.016	—	.016	.002
Scarlet Fever ..	2.15	.05	2.31	.04	1.52	.01	1.25	.014	1.02	.01	1.35	.012	1.316	.014	.71	—	.6	—	.68	—	.91	—
Whooping Cough ..	—	.14	—	.06	—	.05	—	.08	.85	.07	2.84	.14	1.17	.12	2.53	.08	2.55	.06	2.6	.08	5.2	.24
Diphtheria ..	1.62	.17	1.92	.18	1.82	.17	1.44	.11	.9	.11	1.25	.11	2.7	.17	2.66	.15	1.72	0.7	.8	.02	.37	.01
Measles ..	—	.09	—	.07	—	.1	—	.04	1.95	.06	2.85	.03	.83	.01	7.09	.09	4.2	.01	1.6	.02	7.4	.04
Diarrhoea and Enteritis	—	.48	—	.42	—	.41	—	.46	—	1.01	5.31	.93	4.06	1.2	2.56	1.02	3.67	1.11	3.71	.92	3.73	.56

I. = Incidence.  
D.R. = Death-Rate.

TABLE B.  
CASES AND DEATHS OF PRINCIPAL NOTIFIABLE DISEASES.

	1937		1938		1939		1940		1941		1942		1943		1944		1945		1946		1947	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Enteric Fever	44	1	19	2	27	7	65	3	53	4	33	6	23	3	148	8	14	3	15	2	10	—
Typhus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	1	—	—	—	3	—	1	—	—	—	1	—	2	—	8	1	28	5	8	—	8	1
Scarlet Fever	1,075	26	1,154	22	761	5	627	7	511	5	678	6	658	7	355	—	303	—	344	—	454	—
*Whooping Cough	—	73	—	33	—	26	—	43	428	38	1,423	72	586	63	1,267	39	1,275	30	1,288	43	2,612	120
Diphtheria	810	84	958	92	913	84	720	56	451	54	624	56	1,351	84	1,330	74	861	36	403	13	185	5
*Measles	—	46	—	37	—	51	—	23	975	32	1,427	17	419	5	3,548	47	2,112	5	798	13	3,677	22
*Diarrhoea and Enteritis	—	242	—	214	—	209	—	233	—	506	2,657	465	2,031	609	1,279	513	1,837	557	1,853	461	1,868	282

\* Not notified till 1941.  
\* Not notified till 1941.  
\* Not notified till 1942.

C. = Cases. D. = Deaths.

The above data is compiled from figures supplied by the Registrar-General. Actually during the year cases of Whooping Cough Measles and Scarlet Fever notified to the Public Health Department differ somewhat from those obtained from the Department of the Registrar-General.

## PERTUSSIS.

2,612 cases were notified during the year, of whom 120 died making an incidence rate of 5·2, and a death-rate of ·24 per 1,000 population. 348 patients were treated in hospital, of whom 100 died.

The sex and age grouping of the notified cases is as follows :—

Ages	Male	Female	Total	%
0—1 ... ..	337	301	638	25
1—2 ... ..	256	289	545	21
2—3 ... ..	193	236	429	16
3—4 ... ..	163	207	370	14
4—5 ... ..	129	195	324	12
5—9 ... ..	132	148	280	11
10—17 ... ..	8	13	21	1
18 and Over ...	2	3	5	—
TOTALS ...	1,220	1,392	2,612	—

The sex and age grouping of those dying from Pertussis is as follows :—

Ages	Male	Female	Total	%
0—1 ... ..	35	42	77	64
1—2 ... ..	16	17	33	27
2—3 ... ..	3	5	8	7
3—4 ... ..	—	1	1	1
4—5 ... ..	—	—	—	—
5—9 ... ..	—	1	1	1
10—17 ... ..	—	—	—	—
18 and Over ...	—	—	—	—
TOTALS ...	54	66	120	—

## Housing particulars of those dying from Pertussis :

Died at Home		Died in Hospital	
Working Class Houses	Better Class Houses	Working Class Houses	Better Class Houses
13	7	91	9
TOTAL		... 120	

It will be seen from Table B page 22, that Pertussis now exceeds Diphtheria as a cause of sickness and death. Moreover, the baneful effects of Pertussis cannot be estimated from its mortality, because many survivors are left with lungs so damaged as to place them into the sub-standard category.

Unfortunately, the prophylaxis of Pertussis is not established on as sure a basis as is that of Diphtheria. Sera from convalescent and animal sources is employed in America for the protection of contacts, while bacterial vaccines are also employed extensively in that continent to produce immunity. However, similar methods, when tried in other countries, have not earned universal satisfaction.

Pertussis is infinitely more serious when it affects infants, and is relatively less so in older children. Any method of prophylaxis, therefore, which even though not giving a prolonged immunity would ward off an attack for a few years, would be of inestimable value.

Because of the pitiable Dublin housing conditions, with numerous large young families living in tenement houses with their common halls, staircases and passages, many infants cannot be prevented from exposure to Whooping Cough. Because of this, the combined anti-Diphtheria-Whooping-Cough Prophylactic manufactured by Burroughs & Wellcome, Ltd.,

has been employed in the Corporation's immunisation clinics since the beginning of 1948. It is, of course, too soon to express any opinion based on our experience of this combined prophylactic.

### MEASLES.

3,677 cases were notified during the year, of whom 22 died, making an incidence rate of 7·4, and a death-rate of ·04 per 1,000 population. 717 patients were treated in hospitals, of whom 16 died.

The sex and age grouping of the notified cases is as follows :—

Ages	Male	Female	Total	%
0—1 ...	243	197	440	12
1—2 ...	382	367	749	20
2—3 ...	320	262	582	16
3—4 ...	247	277	524	14
4—5 ...	251	284	535	15
5—9 ...	328	292	620	17
10—17 ...	54	52	106	3
18 and Over ...	44	77	121	3
TOTALS ...	1,869	1,808	3,677	—

The sex and age grouping of those dying from Measles is as follows :—

Ages	Male	Female	Total	%
0—1 ...	4	4	8	36
1—2 ...	5	7	12	55
2—3 ...	—	—	—	—
3—4 ...	1	—	1	4½
4—5 ...	—	—	—	—
5—9 ...	1	—	1	4½
10—17 ...	—	—	—	—
18 and Over ...	—	—	—	—
TOTALS ...	11	11	22	—

## Housing particulars of those dying from Measles :—

Died at Home		Died in Hospital	
Working Class Houses	Better Class Houses	Working Class Houses	Better Class Houses
5	1	16	—
TOTAL		... 22	

As with Pertussis, the baneful effects of Measles cannot be estimated from its mortality, because even after recovery many are left with chronically damaged chests.

While there is, as yet, no means of producing artificially a permanent immunity, there is available in Gamma Globulin an effective means of giving temporary protection. Again, as is the case with Pertussis, much is to be gained by postponing an attack of Measles from infancy to later childhood, and the use of Gamma Globulin should provide the means of doing this. Early in 1948, the Corporation put into practice a scheme whereby supplies of Gamma Globulin are provided to medical practitioners free of cost.

## DYSENTERY.

8 cases were notified during the year, of whom one died, making an incidence rate of  $\cdot 016$ , and a death-rate of  $\cdot 02$  per 1,000 population. All were treated in hospital.

Field investigation revealed no relationship between any of these 8 cases. However, of 38 home contacts from whom specimens of faeces were obtained for bacteriological examination, dysentery bacilli were found in 2 contacts. Neither of these contacts gave

a history of illness, and after a few weeks in hospital, both became free of bacilli. They were presumably symptomless cases of this disease. During the year, no case or contact of dysentery was found working with food.

### DIPHTHERIA.

185 cases were notified during the year, of whom 5 died, making an incidence rate of  $\cdot 37$ , and a death-rate of  $\cdot 01$  per 1,000 population. Of these 185 cases, 50, in whom the disease was bacteriologically confirmed, gave a history of previous immunisation. The 185 patients were treated in hospital.

As will be seen from Table B, page 22, the fall in incidence and mortality from Diphtheria during recent years has been one of the brightest features of our communicable disease control efforts.

The sex and age grouping into which these patients fell is as follows :—

Ages	Male	Female	Total	—
0—4 ...	41	25	66	—
5—9 ...	19	20	39	—
10—14 ...	8	8	16	—
15—24 ...	18	20	38	—
25 and Over ...	9	17	26	—
TOTALS ...	95	90	185	—

The Corporation provides facilities for free immunisation against Diphtheria as follows :—

- (a) 11 weekly sessions held in 8 different City areas. These in the main cater for children under two years.

- (b) Schools are visited constantly, during the year 187 visits being made to 86 schools.

Children are brought for immunisation as a result of the Health Visitors' efforts during routine home visiting.

Birthday cards are also sent to the parents of children reaching their first birthday ; 12,741 birthday letters dispatched.

Notices of an explanatory and propagandist nature are also inserted in the daily press every few months.

During the year, 9,751 children were fully immunised either in Clinics or Schools, Of these, 3,820 were under five years. In addition, immunising agents are frequently used by private practitioners, and while the exact number of children protected by them is not known, it is undoubtedly quite considerable.

Diphtheria contacts attending school are excluded for a week, while those working with food are excluded pending the result of swabbing.

Nasal and faucial swabbing are done on home contacts. Among 465, 2 were found with positive and virulent swabs.

The Corporation makes available to practitioners supplies of anti-diphtheritic serum for the protection of contacts.

### SCARLET FEVER.

454 cases were notified during the year, making an incidence rate of .91 per 1,000 population. There were no deaths. Approximately 460 patients were treated in hospital.

The sex and age groups into which the notified cases fell are as follows :—

Ages	Male	Female	Total	%
0—5 ...	81	97	178	39
5—9 ...	67	97	164	36
10—14 ...	25	44	69	15
15—19 ...	9	14	23	5
20—24 ...	3	5	8	2
25—29 ...	4	—	4	1
30—34 ...	—	3	3	1
35—39 ...	—	4	4	1
40—44 ...	—	—	—	—
45 and Over ...	1	—	1	—
TOTALS ...	190	264	454	—

Scarlet Fever, as it affects Dublin, has become increasingly benign and is no longer regarded as a killing disease. Because of its present-day mildness, a problem for careful consideration is whether Scarlet Fever requires the hospitalisation it now receives. This problem must be considered in the knowledge that the same haemolytic streptococcus causing Scarlet Fever in one person may cause puerperal sepsis, erysipelas, or just a sore throat in another. In fact, the main difference between a streptococcal sore throat (made notifiable by the Infectious Diseases Regulations, 1948) and Scarlet Fever is that the patient with the sore throat is immune to the rash-producing streptococcal toxin while the latter is not. It therefore seems inconsistent to have a rigorous procedure, including isolation and quarantine, for dealing with the syndrome of Scarlet Fever and not with other conditions caused by the same organism.

School-going contacts of Scarlet Fever are excluded from school for one week. Contacts of Scarlet Fever working with milk are debarred from work for a stipulated period. During the year, 2 contacts were excluded from work. Remuneration was made by the Corporation to the amount of £11 18s. 8d.

## POLIOMYELITIS.

Although not included among the principal Epidemic Diseases, Poliomyelitis occasioned particular attention during the year. In Britain was raging the largest epidemic ever experienced in that country, and fears were naturally expressed that this country would be similarly attacked.

Actually, the City escaped relatively lightly, there being 29 cases and 7 deaths. The cases fell into age-groups as follows :—

Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
11	2	3	7	2	1	1	2

The cases occurred as follows :—

Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	7	1	—	—	2	—	5	1	4	2	2

The environmental circumstances of each case was the subject of detailed enquiries. The cases were diffusely distributed, showing no tendency to be centred in any one locality. Milk or water could not be incriminated. One patient did give a history of recent sea-bathing in a public baths, but with the number of people using the baths at that particular time of the year, no special significance was attached to one instance. Attempts to establish contact in churches, cinemas, hotels, restaurants, schools, etc., were unsuccessful. This inability to establish a relationship between any of the cases is in accordance with the experience in other countries. It points strongly to the disease being acquired as the result of chance association with a person who has acquired the virus, probably as the result of close contact with a case of Poliomyelitis, and who though showing no manifestations of the disease himself, is still capable of propagating the infection.

Because of this possibility, 35 home contacts of patients were kept from school, work with food, or

from occupations in restaurants, large business premises, cinemas, etc., involving contact with numerous people, for a period of three weeks.

### DIARRHŒA AND ENTERITIS.

1,868 cases were notified, of whom 282 died, making an incidence rate of 3·7, and a death-rate of ·56 per 1,000 population.

It will be seen from Table A, page 21, that, of the Principal Epidemic Diseases, the condition coming under the designation Diarrhœa and Enteritis is responsible for the majority of deaths.

Since the beginning of this century, Gastro-Enteritis has been the chief cause of infantile mortality in the City. In 1900-04 the Gastro-Enteritis death-rate was 28 per 1,000 births; in 1910-14 it was 38 per 1,000 births; in 1940-44 it was 38 per 1,000 births; in 1947 it was 21 per 1,000 births.

In considering the statistics of Gastro-Enteritis it is well to bear in mind that diagnosis of this condition is not based on precise standards. It is usually certified from the presence of diarrhœa or vomiting, symptoms common to many ailments of children. Any study of Gastro-Enteritis should take into consideration that fashions in nomenclature tend to vary and criteria for notification and certification to change.

Much attention has been, and is being, devoted to eliciting a specific cause for this condition—so far with unsuccessful results. During a visit to Dublin in 1946, Dr. Cumming, Director of the Michigan State Laboratory, U.S.A., took great interest in this problem and made close personal study of the little patients in St. Clare's Gastro-Enteritis Hospital. As part of his study, Dr. Cumming had many specimens of faeces transmitted from St. Clare's to the Michigan Laboratory for examination, but this did not throw any fresh light on the matter.

Whether or not a specific agent be at work, there is ample epidemiological evidence that unfavourable living conditions are predominantly to blame for the high incidence of this disease. There is, moreover, little doubt but that improvement in living conditions will be associated with decrease in its incidence.

Special efforts have been taken to cope with the disease, to which further reference is made in the report of the Gastro-Enteritis Section set up at the instigation of the former Department of Local Government and Public Health.

### CEREBRO-SPINAL FEVER.

32 cases were notified, of whom 17 died. 32 were treated in hospital. No association was elicited between any of the cases.

As unrecognised carriers, usually of a temporary nature, must form the main origin of this disease, naso-pharyngeal swabbing was done on contacts of these cases. The swabbing was done by Dr. O'Connell, the Corporation's E.N.T. Surgeon, and the swabs immediately transmitted to the Laboratory. Swabs were taken from 38 contacts. In no instance were meningococci found. Our experience, up to the present at any rate, has not been in accord with the general impression that some 25% of Cerebro-Spinal contacts are temporary carriers of the meningococcus.

91 contacts were excluded from school for three weeks. It was not found necessary to exclude any adult contacts from work.

### SMALLPOX.

One case of Smallpox was encountered during the year. The patient, one of a crew of 38, was found in an American coal boat on July 11th.

The patient had left New York on the 25th June for Baltimore where he joined the boat which left on

the following day. About that time, smallpox was prevalent in New York, being sufficiently widespread to have called for mass vaccination of citizens. It seemed that the illness developed on the 5th July.

The case was discovered before any of the crew had gone ashore, and was removed to Vergemount Hospital where he was accommodated in a detached block. It was considered undesirable to permit shore contact for the purpose of unloading, and consequently the ship was quarantined a few miles out to sea for a period of two weeks. Corporation personnel visited the boat on July 12th to disinfect the patient's apartments, and see to the destruction of garments, bedclothes, etc.

The remaining members of the boat's crew and all personnel having contact with the boat or patient, i.e., doctors, nurses, disinfectors, ambulance drivers, etc., were vaccinated on July 12th. All had very marked "takes."

Every member of the crew had been previously vaccinated, the majority many times. It was, therefore, interesting to observe the surprise of some at the reaction on this occasion. It was mentioned that previous vaccinations had not been attended with such noticeable sequelæ.

The inoculation of protective substances sometimes causes disturbance in the body into which they are introduced. Indeed, the fear has been expressed that the refining processes with which the preparation of vaccines and sera are now attended, with the object of eliminating reactions, and the success attained in this respect, has resulted in the production of less potent substances.

The lymph used on this occasion was prepared in the Vaccine Institute, Sandymount, Dublin, and the experience is recorded because it could be interpreted that vaccine lymph produced in this country ranks high in immunising properties when compared with that produced in other countries.

The ambulance drivers in contact with the patient were quarantined for two weeks, and in order to compensate them for interference with freedom, were remunerated at  $1\frac{1}{2}$  rate during the period. The three nurses in attendance on the patient were similarly quarantined until after the patient's discharge, during this period being remunerated at double rate.

The course of events suggested that the patient had been infected in New York. His illness conformed with the pattern of Variola Minor or Alastrim experienced there. He made a good recovery, and was subsequently discharged from Vergemount restored to health.

#### OUTBREAK OF FOOD POISONING.

An outbreak of suspected food poisoning was notified to the Public Health Department on 2/8/47. Investigation showed it to affect a household occupied by a father, mother and six children.

The previous evening seven members were suddenly attacked by an illness, the nature of which was manifestly similar in each case. The onset was of a typically "explosive" character—vomiting, diarrhoea, headache, and abdominal pains being predominant features. Symptoms varied in intensity, a few of the children having vomited as many as ten times, with a like number of bowel movements, during the first day. Four members, including the mother, were removed to hospital. The father was the only member stated to have suffered no symptoms.

The history suggested food poisoning due to a viand consumed in the house, and enquiries elicited that, among other substances, stuffed sheep's heart had been consumed by all members of the family (except the father—the only unaffected member) during the evening of 1/8/47, i.e., about twenty hours before onset of symptoms. The preparation of the stuffing had necessitated hand manipulation, and

although this foodstuff was stated to have been eaten only after an hour's "roasting," suspicion centred on it.

During the visit on the forenoon of 2/8/47, blood was taken from the seven, and faeces from four, affected members. Samples of foodstuffs eaten during the previous days, including remnants of the stuffed sheep's heart, were also obtained. Blood was collected from the eighth member—the father—on the following day, i.e., 3/8/47.

Bacteriological examination of faeces revealed no organism of food-poisoning, enteric or dysenteric groups. Examination of the stuffed sheep's heart did show staphylococcus albus and streptococcus haemolyticus, but hardly in sufficient numbers to implicate it as the causative factor.

Blood was taken from all members of the family, from some as many as four times, during subsequent weeks. The father permitted it to be taken on only one occasion. The results are as follows:—

		S. Typhimurium (H)	S. Enteritidis (H)
Mother ....	5/8/47	1/20	1/100
	8/8/47	1/125	1/250
	14/8/47	1/125	1/500
	29/8/47	1/125	1/640
Child ....	5/8/47	1/20	1/20
	8/8/47	Neg.	1/25
	14/8/47	—	—
	29/8/47	—	—
Child ....	5/8/47	1/20	1/20
	8/8/47	—	—
	14/8/47	1/50	1/125
	29/8/47	1/50	1/160

		S. Typhimurium	S. Enteritidis
		(H)	(H)
Child ....	5/8/47	1/20	1/100
	8/8/47	1/25	1/50
	14/8/47	1/50	1/125
	29/8/47	1/40	1/80
Child ....	5/8/47	Neg.	Neg.
	8/8/47	—	—
	14/8/47	1/50	1/50
	29/8/47	1/25	1/80
Child ....	5/8/47	Neg.	1/20
	8/8/47	Neg.	1/25
	14/8/47	1/50	1/50
	29/8/47	1/25	1/50
Child ....	5/8/47	Neg.	Neg.
	8/8/47	—	—
	14/8/47	—	—
	29/8/47	1/80	1/160
Father ....	5/8/47	1/20	1/20
	8/8/47	—	—
	14/8/47	—	—
	29/8/47	—	—

“ O ” agglutination was, in all cases, negative.

All specimens were also tested against “ H ” and “ O ” B. Typhosum, B. Paratyphosum A, and B. Paratyphosum B. With all of these they were uniformly negative.

Dr. Meenan, Acting City Bacteriologist, reported on the findings as follows:—

“ These findings are difficult to explain. As will be seen the sera agglutinated S. Typhimurium and S. Enteritidis but in no case except Mrs. X herself could the titre be described as very high.

As far as I am aware no organism with the same antigens as *S. Typhimurium* and *S. Enteritidis* has been described and failure to isolate any food-poisoning organisms would seem to be against any heavy infection with *Salmonella* organisms.

The most likely explanation would seem to be that a carrier is present in the household, but from these findings it is difficult to say what is the organism carried.

There is no evidence for a Staphylococcal origin of the outbreak."

The dramatic onset with familial localisation seemed to afford the opportunities for a satisfactory solution of the outbreak. It is, therefore, disappointing to have to record our inability to do so.

Fortunately all the patients made uneventful recoveries.

### CANCER.

In 1947 there were 648 deaths from Cancer, making a death-rate of 1·3 per 1,000 population. The Cancer mortality rate during preceding years is as follows :—

1935	....	....	1·15
1936	....	....	1·17
1937	....	....	1·23
1938	....	....	1·24
1939	....	....	1·23
1940	....	....	1·22
1941	....	....	1·22
1942	....	....	1·34

It will be noted that the trend indicates increasing deaths from cancer. The question arises as to whether this upward trend—a somewhat general finding—results from a real increase in Cancer or can be explained on the basis of increased longevity bringing more people into the "Cancer" age-group, or simply

by more accurate diagnosis. Opinion, on the whole, tends to view the increase as real rather than apparent.

Although Cancer ranks very high as a killing disease—it accounted for 9% of deaths in the City during the year—nothing in the nature of a comprehensive campaign against it has been initiated throughout the country. Facilities for its treatment are, of course, provided in a few City hospitals, but these are the outcome of voluntary effort and are not organised on a country-wide basis. Presumably because there is no evidence that it is communicable, the local authority public health services do not cater for its control as they do for infectious diseases, tuberculosis, and venereal disease. In Britain, on the other hand, the Cancer Act, 1939, places the onus of providing for the diagnosis and treatment of this disease squarely on the shoulders of Councils of Counties and County Boroughs.

It is obvious that measures to deal with this, one of the oldest and most lethal of mankind's enemies, should not be left entirely to voluntary effort. Instead, such a killing disease merits a programme of control on a national basis.

While our ignorance of the essential cause of cancer remains as yet unrelieved, it is known to follow frequently on chronic and prolonged irritation. There is considerable difference in cancer mortality in different occupations, sweeps, firemen and those working with chemicals, metals and pitch, etc., have been found to suffer mortality above the average, and carcinogenic agents are recognised as occurring in tar, soot, certain oils, etc. In the absence of a method of prophylaxis against this disease, a control programme must be based on early diagnosis and efficient treatment. The basis of such a programme would be the provision of suitably equipped clinics, not confined to the cities

but situated evenly throughout the country, to which those suspected of the disease could be referred for detailed investigation. These clinics would, in turn, feed centres where those found with the disease could receive the benefit of the latest procedures in treatments, i.e., surgery, X-rays, radium, hormones, etc., at the hands of experienced personnel.

### **GENERAL PROVISIONS OF HEALTH SERVICES.**

The first charge upon a Public Health Department is the control of communicable disease, and the Corporation arranges institutional accommodation for fever patients, investigates possible sources of disease, supervises contacts, and provides protection in the form of immunisation, etc., to those likely to benefit. The Corporation also provides facilities for the diagnosis and treatment of tuberculosis and Venereal Disease, and for the welfare of expectant mothers, infants, pre-school and school children.

The Corporation owns and administers :

- (1) Vergemount Fever Hospital, an institution of 200 beds for infectious diseases.
- (2) Crooksling Sanatorium—249 beds ; Rialto Hospital—273 beds ; and the Tuberculosis Hospital, Pigeon House Road—56 beds ;—hospitals for pulmonary tuberculosis in adults.
- (3) Bacteriological Laboratory at 4 Kildare Street.
- (4) An Ambulance Service consisting of 2 ambulances (housed at Vergemount) for the transport of infectious cases, and 4 ambulances (one housed at each of the Fire Stations—Tara Street, Pearse Street, Buckingham Street and Rathmines Road) for the transport of accident cases or use in other emergencies.

(5) Disinfection and Disinfestation Centre at Marrowbone Lane.

It will be noted that, in the main, the Corporation's activities are directed against these diseases capable of transmission from man to man. Its programme is, in fact, more of a public, than a personal, health nature. It does not cover the supervision of those with ailments like cancer, peptic ulcer, nephritis, diabetes, etc., the victims of which require attention none the less because the ailments from which they suffer are of a non-infectious nature.

The health statistics of this City compare unfavourably with other cities outside this country. While this is largely the result of accumulated circumstances aptly described as "unfavourable living conditions," an added factor is the limited scope of health services provided for the people.

There is, first of all, no public scheme to make available to those of low income the very basis on which any efficient programme of preventive or curative medicine should be patterned—the general practitioner. There is, of course, dispensary and domiciliary attention provided by Public Assistance authorities. This, however, is conducted on Poor Law lines, and in any event would not cover those working persons who, while not necessitous or paupers, nevertheless need timely attention for their families without fear of the bills to follow.

Then there is no organised plan of consultant and specialist advice for those of moderate means. Those who can pay for specialist advice are not generally in want of attention. Those who cannot pay, but are fortunate enough to live near a large hospital can receive specialist attention if they are able to journey to the extern department thereof. For those of the poorer strata who would benefit by specialist

advice but are unable to make journeys from home to hospital, there is no such provision.

Moreover, there is no system of domiciliary nursing provided even for those eligible to receive public assistance for those sick at home.

While the Corporation have built or acquired fever and tuberculosis institutions, they have not availed of their powers under the Public Health Act, 1878, to build municipal general and maternity hospitals and convalescent homes. It does subscribe to the cost of the general hospitals, but has undertaken no responsibility for ensuring an adequate hospital service for the City. It is unfortunate that there is not some co-ordinating authority, because in the absence of such, hospital organisation in this City has grown up without plan or policy. There is little cohesion between the different hospitals, almost all of which are under voluntary management, though St. Kevin's is administered by the Board of Assistance; on the contrary, there is much overlapping and unnecessary competition.

This would not be a matter of such moment if a comprehensive hospital programme were available for the people, but such, unfortunately, is not the case, the provision of such specialised services as orthopædic being quite inadequate. But by far the most unsatisfactory aspect of our hospital problem is the difficulty and delay with which many doctors meet before they can get even a suspected emergency case into hospital.

The general practitioner, district nurse, and general hospital are the foundations on which any sort of comprehensive public health programme must be based. These matters are mentioned because it is felt that the various Corporation services, which will be discussed in more detail in subsequent sections, start at an inherent disadvantage because of the limited nature of the foundations on which they are based.

## MATERNITY AND CHILD WELFARE.

It is only within very recent years that the problem of child health has stimulated the official conscience, and what Child Welfare services we do possess are really the outcome of efforts by voluntary workers.

The foundation of our Child Welfare service was laid in 1909 when the Women's National Health Association, concerned at the terribly high death-rate of Dublin children, organised a baby clinic in the City. This was a great success, and 8 further clinics were organised within a few years by this group of voluntary workers.

Through the medium of these clinics, children are kept under medical supervision, simple medicaments distributed, and advice given on the problems of motherhood, etc. The Association also initiated the routine supervision of children, especially the newly-born, in their own homes.

About the same time, another voluntary body, the Infant Aid Society, began the distribution of free milk for children of poor families. In 1924, the St. John Ambulance Brigade opened dining-rooms in which expectant and nursing mothers could obtain meals. A few years ago, the Catholic Social Service Conference also commenced the distribution of meals to needy persons.

It soon became evident, however, that the pioneering efforts of these voluntary workers, handicapped by lack of funds, were hardly adequate to achieve much success in lowering the infantile mortality rate. Their initiative had, nevertheless, the effect of stimulating

the government of the day, and the Notification of Births (Extension) Act, 1915, was passed. This Act empowers the Dublin Corporation, subject to Departmental sanction, to make such arrangements as they think fit for attending to the health of expectant and nursing mothers and children under five years and thus raised the hope that philanthropic efforts were about to be augmented from official sources.

In 1916, the Corporation made a financial contribution to the Women's National Health Association in recognition of the benefits ensuing from their series of baby clinics. Subsequently, the Corporation assumed more direct responsibility, and in 1929 appointed a wholetime Medical Officer to continue the programme of baby clinics.

Since assuming this responsibility, the Corporation have undoubtedly extended the scheme, and during this year an additional Medical Officer, together with an Oto-laryngologist and Orthopædic Surgeon, were appointed. The personnel of the Child Welfare Department now includes three Medical Officers (one part-time), an Orthopædic Surgeon, an Oto-laryngologist, a Dental Surgeon and a staff of 32 Nurses. There are now 17 baby clinics conducted each week (increased from 13 following the appointment of the M.O. in May), together with specialist clinics.

The Corporation have, however, been satisfied to rely on a system of supervision through baby consultations and Nurses' visits, and although allowing for the fact that it has, in the course of years, extended the scope of the service taken over from the W.N.H.A., it has not taken anything like full advantage of the powers conferred by the 1915 Act.

This Act certainly seems to provide scope for the

Corporation to develop an elaborate programme, including :—

Ante-natal, Post-natal, Infant Welfare and special clinics.

Domiciliary medical and nursing attention for sick children with, when required, obstetrical or paediatric advice.

Hospital and convalescent home accommodation for expectant and nursing mothers and sick children.

Special arrangements for unmarried mothers.

The responsibility of the Corporation for the provision of obstetrical arrangements has been lightened by the activities of the three lying-in hospitals, and, indeed, the onus of catering for the expectant mother has been borne by these voluntary institutions. While the quality of the work of these hospitals needs no emphasis, a serious defect is that, because of their limited accommodation, and in the absence of convalescent homes, nursing mothers are sent home undesirably soon. It is unfortunate, therefore, that the Corporation have not exercised their powers to provide maternity convalescent beds of their own, and in this way, and also by the supply of home helps, ensure that nursing mothers will not have to be burdened with household duties prematurely. Particularly is there need for adequate facilities to care for unmarried mothers.

It is calculated that there are, in the City, 9,000 annual births of a type likely to require aid from the Child Welfare Department. There are a further 32,000 children between the ages of 1—5 years falling into the same category.

Experience has shown that 17 weekly sessions cannot cope with the number of infants to be dealt with, and attendances of anything up to 70 at a clinic renders detailed examination and personal attention impossible. Moreover, most of the premises used as clinics are altogether unfit to serve this purpose. Further, the Nurses are too few to allow of systematic home to home visiting at sufficiently frequent intervals. At present, only monthly calls can be made to infants under one year, while those aged 1—5 years are left without proper supervision.

In addition, it is children rather than adults whose health is most severely affected by lack of adequate general practitioner attention. Many doctors, too, experience difficulty in getting children, especially those in the early weeks of life, into hospital. While the Child Welfare Scheme does include payment for hospital and convalescent home care of children certified by the Child Welfare Officers, the Corporation has not provided any accommodation itself for sick children, nor have they ensured that such is always available.

There is little doubt but that the existing arrangements for Child Welfare are inadequate in the City. It was because, in the period 1901—1909, 156 out of every 1,000 babies born died before reaching their first birthday that the W.N.H.A. started their system of child care. Although this system has since been taken over by the Corporation, and even with all the advances in medical science during the intervening years, in the period 1940—1944, 118 out of every 1,000 babies born died before reaching their first birthday.

This very meagre reduction is in sharp contrast to the dramatic improvement effected in other cities, and the trend of our infantile mortality rate is a faithful reflection of the inadequacy of our child health arrangements.

The inadequacy of our arrangements have already been reported on, and concrete proposals for new Welfare Centres and increased medical and nursing staffs submitted without satisfactory results.

The following is the report of Dr. Kerry Reddin on the operation of the Maternity and Child Welfare Service during 1947.

In previous Annual Reports I have stressed the necessity of augmenting all sections of the staff, clerical, nursing and medical to correspond with the growth of the work to be done under the scheme. Attendances at Clinics have become so large that it will be necessary to sub-divide the larger ones in some cases into three and in others into two Clinics. The average number of cases, mothers, infants and children seen at a City Clinic by the Medical Officer works out at about 80 per session. It is obvious that individual medical examination of these cases would be impossible and that the only remedy is to divide such clinics into smaller numbers in order to permit of the necessary medical examination. In the same way the Health Visitors have such numbers to deal with that it is not possible to visit any more than the infant up to a year old with a cursory glance at the child over a year and up to five. It is quite impossible to give anything but very superficial attention to those and then only for grosser deformities. For a City of Dublin's population the English staff standard would allow 65 Health Visitors ; our staff consists of 32, including two Superintendents. Besides Home Visiting, following up cases of measles, pertussis, etc., " Moro " testing and reading, the Health Visitor assists at dental, welfare and ultra Violet light clinics for rickets and general debility and keeps up to date complete family records of the mothers, infants and children in her care. The average number on each Health Visitor's Register consists of :—

Families.	Infants.	Children.	Foster Children.
888.	325.	1,030.	20

Once again this year I would point out that neo-natal deaths are very high being roughly 50% of the infant mortality. This would seem to indicate the necessity for further development of pre-natal work, more particularly in regard to the R.H. factor and allied conditions into which research is urgently needed. It would further indicate the establishment of pre and post-natal clinics in out-lying districts to be staffed by ex-assistant Masters of Maternity Hospitals for the district on a sessional basis. In regard to breast feeding there is a slight improvement, but I consider that there should be intensive work done in the Maternity Hospitals and that the possibility of prolonging the puerperal period up to a month or more should be explored, the mother and baby during this time to be in the charge of the Maternity Hospitals and their staffs. If beds are short in the Maternity Hospitals, convalescent accommodation should be made available for the puerperal and baby. All of this would tend to encourage and stabilise breast feeding. This home could also fulfil the urgent need that exists for placing an infant or very young child while a mother undergoes, surgical, medical or sanatorium treatment.

There should be one medical record for every baby at birth which would be handed over by the Maternity Hospital to the City Child Welfare scheme who in turn would transfer it to the School Medical Service Department when the child would reach five years of age as is done at present between the Maternity and Child Welfare Department and the School Medical Service.

In regard to Dried Milk, I would like to stress once more my opinion that Dried Milk would be a most potent weapon, if universally adopted where breast feeding cannot be established or continued, to lower

infant mortality in the City. I would consider that every such baby should be kept on Dried Milk up to six months and from then on fed on a clean, T.B. tested and pasteurised milk.

There is an urgent need, as I have already stated, for extra clinics, but these could not be opened without additional staff.

### **Dental Services.**

Our Dental Services, while excellent in every way and in the manner in which the work is carried out are grossly inadequate, and I can only say that the dental surgeon is almost submerged by the numbers attending. Additional dental services are urgently needed.

### **Voluntary Helpers.**

It is to be regretted that there is a falling-off in voluntary work done under the scheme due to the fact that young girls now are all going to professions of one or another kind, but I would like to pay a tribute to the work done by the Infant Aid Society and the Babies Clubs' voluntary workers.

In May of this year, Dr. B. Lyons Thornton was seconded here as Assistant Medical Officer and since her advent we have opened four extra Welfare Clinics and eight Ultra Violet Light Clinics.

I must also acknowledge the work done by Mr. O'Connell, our nose and throat consultant, who took up duty on January 8th, 1947, and saw 754 cases, also Mr. Murray, Orthopædic surgeon, who took up duty on the 29th May, 1947, and saw 152 cases.

### **Notification of Births Act.**

Births visited by Health Visitors	....	12,387
Private cases found on visitation	....	984
Percentage of births that had pre-natal care	....	83



### “ MORO ” Testing, etc.

“ Moro ” Tuberculin Testing of children was begun in the Maternity and Child Welfare Department towards the end of July, 1947. This was mainly carried out by the nurses in the homes visited and was limited for a beginning to the under one year age group. The older children up to five years were tested by the Medical Officer in the various Welfare Clinics. All children referred for Ultra Violet Light were tested and treatment withheld until reaction was ascertained.

An effort was made to test or retest all children who were known to be recovering from Measles or Whooping Cough.

A total of 1,249 children were “ Moro ” tested, and 37 positive reactions were obtained, classified according to age group :—

Ages.			Number Positive.
Under one year	....	....	3
One to two years	....	....	6
Two to three years	....	....	11
Three to four years	....	....	9
Four to five years	....	....	8

Contact to open cases of Tuberculosis was traced in 15 cases.

All cases showing any indication of activity were referred to Primary Clinic for further investigation, supervision, extra nourishment and any treatment required.

It is worthy of note that the vast majority of parents displayed a very co-operative attitude and a very intelligent appreciation of the significance of the test, and carried out all our instructions re X-ray, etc.

The Medical Director of Mass Radiography very kindly arranged a special session on the last Tuesday of each month to which all positive cases were referred. A total of 236 mothers were referred for Mass Radiography and of these thirteen were found to have active disease.

### Distribution of Free Milk.

During the year Infant Aid Society distributed 238,584 gallons of milk to children under five years of age, and 2,748 gallons of milk to 487 mothers recommended for same.

### Welfare Clinics.

We have already referred to the increased number of cases seen by the Medical Officers at City Clinics.

#### Medical Consultations—

Mothers	{ Prenatal	....	13,514
	{ Postnatal	....	10,532
Infants and children	....	....	34,115

#### Gross Attendances—

Mothers	....	....	51,130
Infants and children	....	....	50,389

### Re-examination Clinics.

Total number of cases specially examined at the weekly clinic held in the Welfare Centre, Lord Edward Street . .... 1,084

### Dinners.

The Catholic Social Service Conference served 184,179 meals to 2,220 expectant and nursing mothers, and 176,509 pints of milk were given.

The following are the returns from the St. John Ambulance Welfare Dining Rooms for the year :—

DININGROOM	No. of Dinners served	Pints of Soup taken home	Cost of Food	Cost of Administration	Cost of Tram Tickets
			£ s. d.	£ s. d.	£ s. d.
66 Great Strand Street (2) ...	33,246	12,037	858 7 10	646 0 0	95 8 2
Aldboro' House, Killarney St. ...	23,709	8,856	808 1 5	323 0 0	—
TOTALS ...	56,955	20,893	£1,666 9 3	£969 0 0	£95 8 2

Number of confinements during year	....	428
Do. stillbirths during year	....	9
Do. deaths under 14 days	....	8
Do. deaths under 4 months	....	6
Do. twin births	....	7

Two mothers died.

<b>Maternity Grant issued.</b>	£ s. d.
419 3-lb. Bags of Flake Meal	.... 20 19 0
424 Chemises given	.... 193 19 0
415 Double-set Baby Clothing	.... 221 1 3

5,740 Pints of Milk were distributed on behalf of the City of Dublin Child Welfare Committee (cost refunded) .... 103 16 8

748 Mothers helped during 1947.

250 of these mothers received extension dinners as they were breast feeding.

46,218 5-months period dinners served. 10,737 extension period dinners served. Total expenditure—£2,749 17s. 5d. (Two thousand seven hundred and forty-nine pounds seventeen shillings and five pence).

### Pre-natal Cases.

Prenatal cases and attendances at City Hospitals during the year :—

Hospital.	Cases.	Attendances.
Coombe ....	2,716	8,089
Holles Street ....	3,162	9,809
Rotunda ....	3,937	16,518

### Infant Mortality.

Infant Mortality rate for 1947 .... 88

As emphasised in previous annual reports the expansion of the Maternity and Child Welfare service with the appointment of adequate medical, dental, nursing and clerical personnel is long overdue.

### Maternal Mortality.

Intern cases delivered in City Hospitals ....	9,420
Deaths in City Hospitals ....	16
Death rate per 1,000 ....	1.69
Extern cases delivered by staff of City Hospitals ....	3,899
Deaths ....	3
Death rate per 1,000 for extern cases ....	.76

### Rickets and Orthopædic Defects.

The incidence of rickets remains high. Large numbers of these cases attend the Clinics and are referred for treatment to the following Institutions. The following are the figures for the year ended 31st December, 1947.

Orthopædic Hospital ....	408
St. Mary's, Cappagh ....	3
Children's Sunshine Home, Stillorgan ....	43
Sunbeam House, Bray ....	11
Cheeverstown Convalescent Home ....	56
Number of Orthopædic appliances supplied ....	341

### Ultra Violet Light Clinics.

407 Clinics for the treatment of rickets and malnutrition were held during the year with an attendance

of 5,878. It is proposed to extend these clinics to Killarney Street and the Howth area. The results were very satisfactory and the mothers exceptionally good in attending.

### TEST FEED.

Approximately 380 Test Feeds were carried out at the various clinics and in almost all cases breast feeding had to be supplemented.

#### St. Ultan's Hospital.

Cases admitted during year	....	....	456
Attendances at Out-Patient Department	....	....	8,795
Number of cases dealt with in X-ray Dept.	....	....	427
Number of injections for Whooping Cough	....	....	2,182

#### Diphtheria Immunisation Clinics.

Number of children under 5 years old received—			
	First	Second	
	Injection.	Injection.	
	4,260.	3,827.	

#### Jubilee Nurses' Association.

Number of cases referred for treatment (dressings, wash-outs, etc.)	....	....	72
Number of Visits paid	....	....	226

I would like finally to stress the value of pre-natal work carried out in the Howth Clinic by Dr. Chapman. It is hoped during next year to increase the number of clinics in Howth and to provide "Moro" testing, diphtheria immunisation and dental treatment for the mothers and children living there.

My best thanks are due to my medical colleagues, Mr. Casey, our surgeon dentist; the clerical and nursing staff who worked so hard and dealt with such a very large volume of work.

## **Report of Miss Tierney on the Operation of Midwives and Maternity Homes Acts during 1947,**

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### **Midwives (Ireland) Act, 1918.**

During the year 1947, 223 Midwives gave the required notice of their intention to practise within the area of the Local Supervising Authority.

In conformity with the Rules of the Central Midwives Board, the midwives were visited at intervals throughout the year at their own homes. Special attention was given to personal cleanliness of the midwives and the condition of their homes and the necessary appliances, bag, contents, etc. The Registers, containing the entries of births attended by midwives were examined and were, with very few exceptions, found to be correctly kept.

One midwife was reported for breach of the Rules and Regulations in the period.

No unregistered woman was found practising without medical assistance.

### **Inspection of Midwives.**

The total number of visits made during the year 1947 was 702, as compared with 801 in the previous year. In addition, 466 visits (to Maternity Hospitals, homes of patients, etc.), were made during the year.

### **Registration of Maternity Homes Act, 1934.**

The number of homes registered under the above Act in the City on the 31st December, 1945, was 38. Four new applications for registration was received during the period under review. One registration was cancelled, because the keeper of the Nursing Home

desired to give up practice. The nursing homes on the Register at the end of the year numbered 41.

Throughout the year the nursing homes were visited regularly by the Inspector. 255 inspections were made.

### **Report of Dr. O'Callaghan on the Operation of Gastro-Enteritis Control Section 1947.**

In the period 1942—1946 deaths from Gastro-Enteritis showed a notable increase in Dublin City as compared with the years preceding. The average case-fatality rate, 1942—1946, was 28·54, i.e., practically 3/10ths of the infants who suffered from a preventable disease, died from that disease. This disease amongst infants is the most salient single cause of death in the first year of life—a very important age-group from demographic and other viewpoints. The Minister for Health suggested that, with the co-operation of the Corporation of Dublin, a special Section should be set up to investigate the factors contributing to this serious cause of death in our infant population.

In February of 1947 a beginning was made in organising a medical and nursing group, who with training, could collect all relevant data bearing on non-specific influences on this cause of death. It has also been investigated as to the possibility of a specific cause, bacteriological or virus in nature. Furthermore, all material evidence has been assembled and is being analysed by the administrative officers with the voluntary aid of doctors and nurses.

The main activities of the workings of this Section are summarised for the 1947 period to date :

- (a) Domiciliary nursing of cases of Gastro-Enteritis treated at home.
- (b) After-care of infants discharged from St. Clare's Hospital and other Hospitals where cases of Gastro-Enteritis were treated.

- (c) The investigation, for the purpose of analytical study, of all cases of Gastro-Enteritis notified in 1947.
- (d) The provision of a Consultant Service for Dispensary Medical Officers and General Practitioners.
- (e) The holding of Diagnostic Clinics to which Dispensary Medical Officers and General Practitioners could refer cases for diagnosis and recommendation as to treatment.
- (f) The holding of After-Care Clinics for infants discharged from Hospital and for infants treated at home and in the convalescent stage.
- (g) The initiation of a bacteriological study of the problem of Gastro-Enteritis and the approach to the possibility of a virus causation.

In 1947 there were 1,868 cases of Gastro-Enteritis notified, of whom 280 died; this represents a case-fatality rate of 14.90—Cf. with an average case-fatality rate of 28.54 for the preceding 5 years. Here is a clear indication of what concentrated effort may do in the reduction of a most important segment of our total Infant Mortality. The notable decline in our recent Infant Mortality Rate is plainly due to the reduction of death from this particular cause.

At the time of writing it can be fairly stated that deaths from Gastro-Enteritis for 1948 will, if anything, improve on that of 1947.

### SCHOOL MEDICAL SERVICE.

The immediate objective of the Corporation's School Medical Department is supervision of children attending Elementary Schools in the County Borough. The Public Health (Medical Treatment of Children) (Ireland) Order, 1920, specifies, parental consent being forthcoming, the examination of—

- (a) All children admitted to the school within the past six months, or since the date of last inspection, who have not been already duly inspected in another school.
- (b) Any child whose former inspection was not less than three years previously, or who would attain the school-leaving age before the date of the next inspection.
- (c) Any child found defective at the last inspection or who appears in need of examination.

There are some 80,000 children attending City elementary schools of whom 20,000 are examined annually by the three School Medical Officers. The result is that schools can only be reached every four years. Moreover, when it is reckoned that there are but 220 school days per year, and that any one doctor can hardly examine methodically more than 40 children per day, it is difficult to see how the present staff of three School Medical Officers could examine these 80,000 children more frequently. It is thus realised that the scope of the School Medical Service is considerably restricted because of limited staff, and it has been estimated that, to carry through a programme on the lines envisaged in the Order of 1920, about eight doctors would be required.

In one important aspect the approach to the care of school-children in this country differs from that in Britain. In Britain, the Central Education Authority—the Ministry of Education, and the Local Education Authority—the Education Committee of town or County Council, carry responsibility for the mainten-

ance of healthy school conditions, as well as the promotion of learning. The local Education Authority has its own medical staff and medical examinations, school meals, physical training, recreation, etc., are part of the educational programme. The School Medical Officer reports to his local education authority adverse school conditions and the latter bears unequivocal responsibility for dealing with medical recommendations.

In this country the position is not so clear. Here there is no local education authority as such, their role being, apparently, taken by School Managers. School Managers, do not, however, accept the responsibility undertaken by cross-Channel local education authorities for school medical inspection, which is, therefore, carried out by officials of Public Health Departments. However, as Public Health Departments do not accept responsibility for maintenance of school buildings, etc., the reports of their School Medical Officers on such matters as furnishing, equipment, lighting, heating, recreational and sanitary arrangements of schools are not very effective as regards the institution of remedial measures.

The scope of the School Medical Service was extended during the year by the appointment of an Ear, Nose and Throat and an Orthopædic Surgeon, who visit the School Clinic in Lord Edward Street to see children referred by the School Medical Officers. Although the work of these specialists is hampered because the Corporation has no institutional accommodation, their appointment marks an important extension of the scheme in initiating a more uniform approach to the treatment of oto-laryngological and orthopædic defects.

It is well recognised that subnormal hearing interferes with a child's normal progress and sometimes exacts a high toll in terms of inadequate or unsatisfactory social behaviour. Moreover, hearing disability is commoner than is generally recognised, and it

is probable that even minor degrees of such disability demonstrates itself in behaviour problems, school failures, speech defects, etc. It is the experience of other countries that the majority of children with impaired hearing can be improved if unearthed and treated sufficiently early in life.

It is hoped to follow the appointment of the Oto-laryngologist with that of properly-trained personnel in the field of speech correction and lip-reading. With such a team, routine audiometric testing of groups of children could be started and the recommendations of the Oto-laryngologist as to speech and hearing therapy for those found with communicative defects carried out.

It is also hoped that the appointment of the Orthopaedic Surgeon is but the first step in the setting up by the Corporation of a Rehabilitation Centre where children could receive attention from a Physiotherapist and an Occupational Therapist. There is certainly need for a comprehensive care scheme for those afflicted with bodily deformity. The care of those afflicted with cerebral palsy requires an educational and rehabilitative, as well as a medical, approach, and all these facilities should, on humanitarian grounds, be provided for these unfortunate sufferers.

The School Scheme includes arrangements with hospitals for the treatment of children. It does not provide for the domiciliary treatment of children with ailments not requiring hospital attendance. Proposals have been made for the appointment of an Ophthalmic Surgeon and a Dermatologist to visit the School Clinic at intervals, but have not, as yet, materialised.

School meals are also provided by the Public Health Department. The meal consists of milk with a cheese or meat sandwich. This is an appreciable contribution and has been calculated to supply 400 of the 2,000 calories which the average child requires daily. It is a pity, however, that the meal could not be further

elaborated to provide a hot midday lunch which could easily be constructed to furnish 1,000 calories, and the provision of which would yield ample dividends by diminishing the sickness rate among the under-nourished.

The following is the report of Dr. O'Brien, Chief School Medical Officer, on the working of the Scheme during 1947:—

The improvement in the general condition of the children in the new schools on the outskirts of the City must be witnessed in order to realise what the thousands of others have missed all these years. Yet the problem of finding sufficient school accommodation for children moved to the new housing estates is still perplexing teachers and parents. The new schools are already filled to capacity, while the estates for which they cater are still being developed and extended—new houses, new roads. The delay in gaining admission to school is detrimental to the children, yet teachers must refuse them if there is no room in the school. An improvised scheme of holding classes in semi-partitioned assembly halls, cloak rooms, etc., to cater for some of the continually increasing number of school children belonging to the housing estates is being tried, yet there is still a waiting list for admission to the school. Mothers are anxious to have their children safe in school out of the way of traffic, they want to attend to their household tasks and to see to the younger children. The milk and sandwich provided by the School Meals Department of the Local Authority are appreciated, and altogether there is genuine disappointment at failure to have their children taken into school early.

Re-housed families are usually those with the greatest number of children. Ample school provision in the new areas is an obvious requirement. Time, bus fares and shoe leather are wasted if such children are compelled to return to their old schools in the centre of the city. It is a hardship which should not be necessary

to impose on children. The journey home to mid-day dinner is too long and too costly, traffic risks, weather conditions, buses are not always feasible, a sandwich and milk is substituted for the child's dinner at the normal dinner hour. The midday interval is spent perhaps in the old haunts, the younger children must remain in School until their older brothers and sisters are free to take them home, returning to the housing estate long after 4 p.m., tired, hungry, and even, perhaps, hankering for the strange camaraderie and good fellowship and hazards and excitements of communal living in the congested city areas. These re-housing schemes have been in existence now for so many years; they are such an excellent, well-established feature of municipal administration, that School building might well precede, or even synchronise with, rather than lag behind home building. Many of the older City schools premises fall short of modern requirements. They have little to offer children coming from new housing estates. Besides, the vacant places in their class-rooms, if any, will be required for the children of those families who drift back to the slum areas, unable to cope, for one reason or another, with living in a separate house. The reconditioned dwellings in the city cater for this type of family. The schools which their children attend, may require to be reconditioned too. Houses listed for clearance schemes could include the older dilapidated type of school premises in the areas. These might well be closed, and modern school accommodation provided instead near the block of flats and Improvement Schemes. The amazing delay in providing adequate schools in the new housing extates is a serious loss to parents and children. The older type school in dusty, noisy, congested, busy thoroughfare, is a poor substitute. It is only a movement away from the old associations and surroundings, home and school, that will benefit those families compelled for centuries to live under adverse conditions. It may be distasteful and lonely at first, but young children soon adapt themselves; they make

new friends and the bad old days are mercifully forgotten by a young generation growing up in their own homes, with a closed front door, toilet accommodation, a kitchen, scullery and bedrooms, a garden—the amenities of normal existence. The general condition of the children in the new housing estate in Crumlin is much improved since the previous School Medical Inspection four years ago. They are better physically, their appearance and attitude is better. There is less dental caries, skin affections and pediculosis—a welcome change which we gladly record.

It is curious to see numbers of children out of school on week days, heedless of the ordinary convention of school-going, their parents apparently indifferent to Compulsory School Attendance regulations. The six months' interruption of school going ended in October, 1946, and schools were in working order during 1947.

The severe weather which set in towards the end of January and continued through February and March was very trying for children, and they merited the greatest admiration for the cheery stoicism with which they endured the extreme cold. The lack of adequate heating in the schools imposed a great hardship on teachers and pupils, and burst pipes in some districts necessitated school closure. Furthermore the shortage of fuel in the homes and the curtailed gas hours made life difficult for parents. All these socio-economic conditions are reflected in the condition of the children.

**Clothing and Footgear.**—The long rubber boots are again being worn by school children—with or without stockings—of various kinds. They had not been available for some time during the war years. They are a poor substitute for the laced leather boots supplied under the Free Boots Scheme. This latter was a boon to children, many of whom were barefoot in school during the first war winters. The children give an impression now in school of being neater and cleaner than heretofore, clothing is less torn and ragged, but there are still too many wearing overcoats

in the classrooms, and the underclothing of the girls in many instances is not of a standard calculated to raise their self-respect and self-esteem.

**Health Films in Schools.**—The National Film Institute continues to help by showing health films in those City National Schools where conditions permitted such displays. The teachers assisted greatly by their preparation of dark room, and marshalling the children, and displayed the keenest interest in the cinema shows. These sound films have been made in England and America. They are simple, instructive, lucid and not at all dull. The older boys and girls watched and listened with obvious attention, and one wished there were more facilities in all the schools for the showing of Health Films and that parents could attend. Our best thanks are due to the School Managers and Teachers who so generously lent us their support and help, and to the Medical Officer of Health and City Manager who made the Scheme possible.

**Miniature Mass Radiography.** (Table included with other data).—This provision is now an accepted feature of modern life, and there are frequent enquiries as to how it may be obtained. Early in 1947, the Orphanages in the City were approached with a view to having the children examined by this method, especially the older groups. Some of the Orphanages responded at once, others accepted with less alacrity, but there were Orphanages which disregarded the facility offered even when invited more than once. These are children who attended our City National Schools. They are the children of parents who have died young; Tuberculosis is not an infrequent cause of death in young men and women. It was considered that many of the orphans might perhaps be contacts. The orphanages were circulated by letter, they were visited by the staff. The Mass Radiography Department very kindly set aside a period of time for this particular work. The response was disappointing.

A trial Scheme for Mass Radiography of School Leavers was prepared at the end of the Summer Term, 1947, with a view to detecting if children passing out of the City National Schools were free from Tuberculosis. Schools were visited and consent forms sent to parents. Some incomprehensible factor, however, militated against a good response. Either the children or their parents were indifferent. Small numbers attending does not justify the reserving in advance of special sessions for miniature mass radiography. Once again we thank the teachers of the City National Schools for their whole-hearted co-operation in this and other matters concerning the welfare of their pupils. We trust they will continue to support the scheme for allowing a sufficient mid-day interval to enable the children to go home to dinner and return to afternoon school.

**School Meals.**—The difficulty of supplying milk in sealed bottles with drinking straws continued during the year under review. Loose milk in churns was delivered to the schools and distributed there to children who provided their own drinking utensils of the most varied and ill-assorted types, sometimes not over clean. The children like milk obviously, they consume it with gusto. They are less unanimous about the sandwich fillings; some discard the cheese, others the meat product, jam seems popular. Children will benefit when plentiful butter supplies are available both for their school sandwiches and for their meals at home. Sandwiches in greaseproof paper, the standard milk in sealed bottles with a drinking straw, a seat at a table or desk where the child may consume this repast quietly and with both hands disengaged, a paper napkin to wipe its mouth and hands afterwards, a few seconds rest, and the repast to be arranged before leaving school in the afternoon—this must surely come one day.

### LIGHTING IN CITY NATIONAL SCHOOLS.

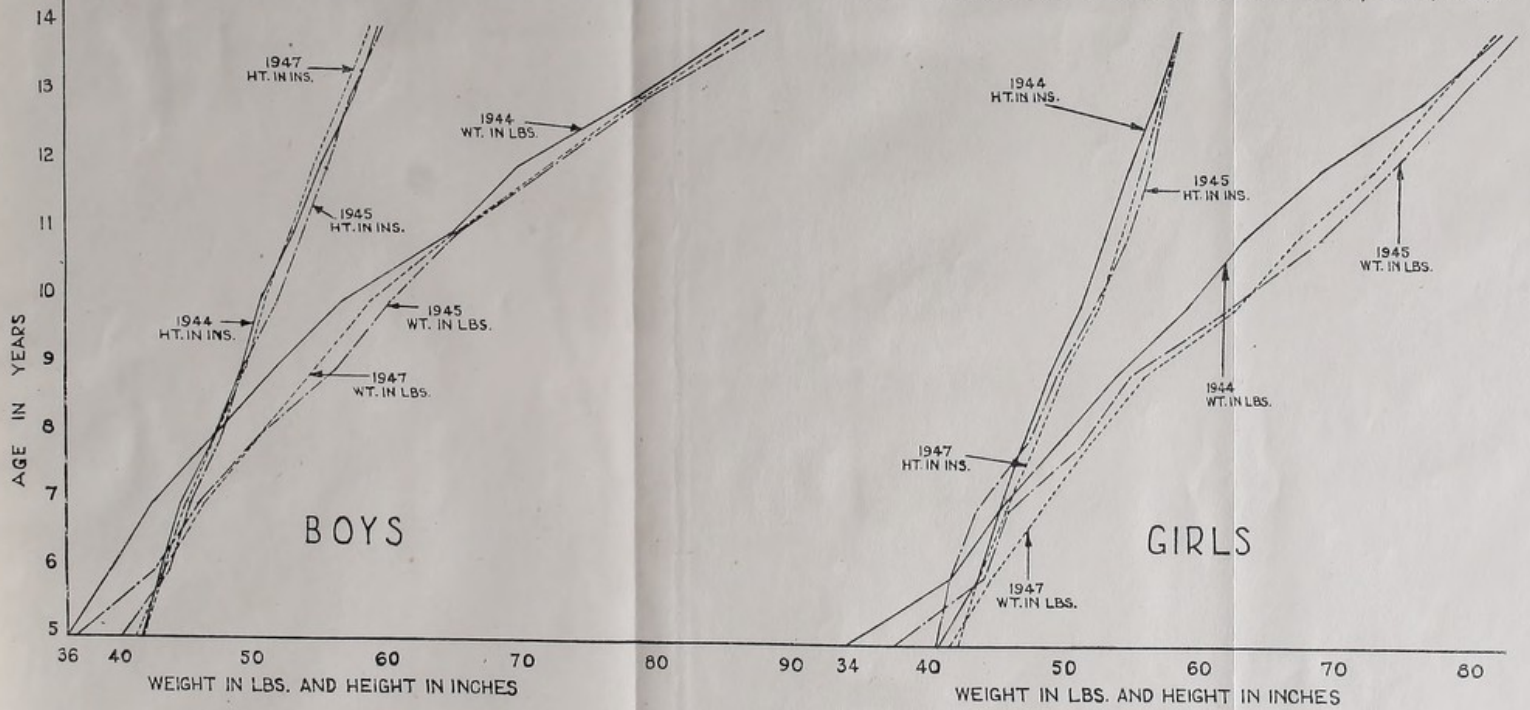
Some of the older school buildings are very dark during the Winter months. The class-room windows are dimmed with City dust, especially those protected with wire netting where accumulation of grit and debris has been enmeshed. This shuts out the available daylight. In the congested areas adjacent buildings too have an adverse effect on school lighting. Badly lighted staircases, unexpected steps not properly illuminated, these are physical hazards, but the special effect of badly-lighted class-rooms on teachers and children is so grave that there should be delay in installing artificial light is incomprehensible. Afternoon school and the abolition of daylight saving, these are factors which now must be considered in school lighting. Routine Medical Inspection in a school had to be suspended last December owing to the difficulty of seeing the children properly. Asking a child to read the Snellen Test Type under such conditions is futile. Photometer readings were taken in some schools. In foggy weather conditions would be still worse.

### NUTRITION SURVEY.

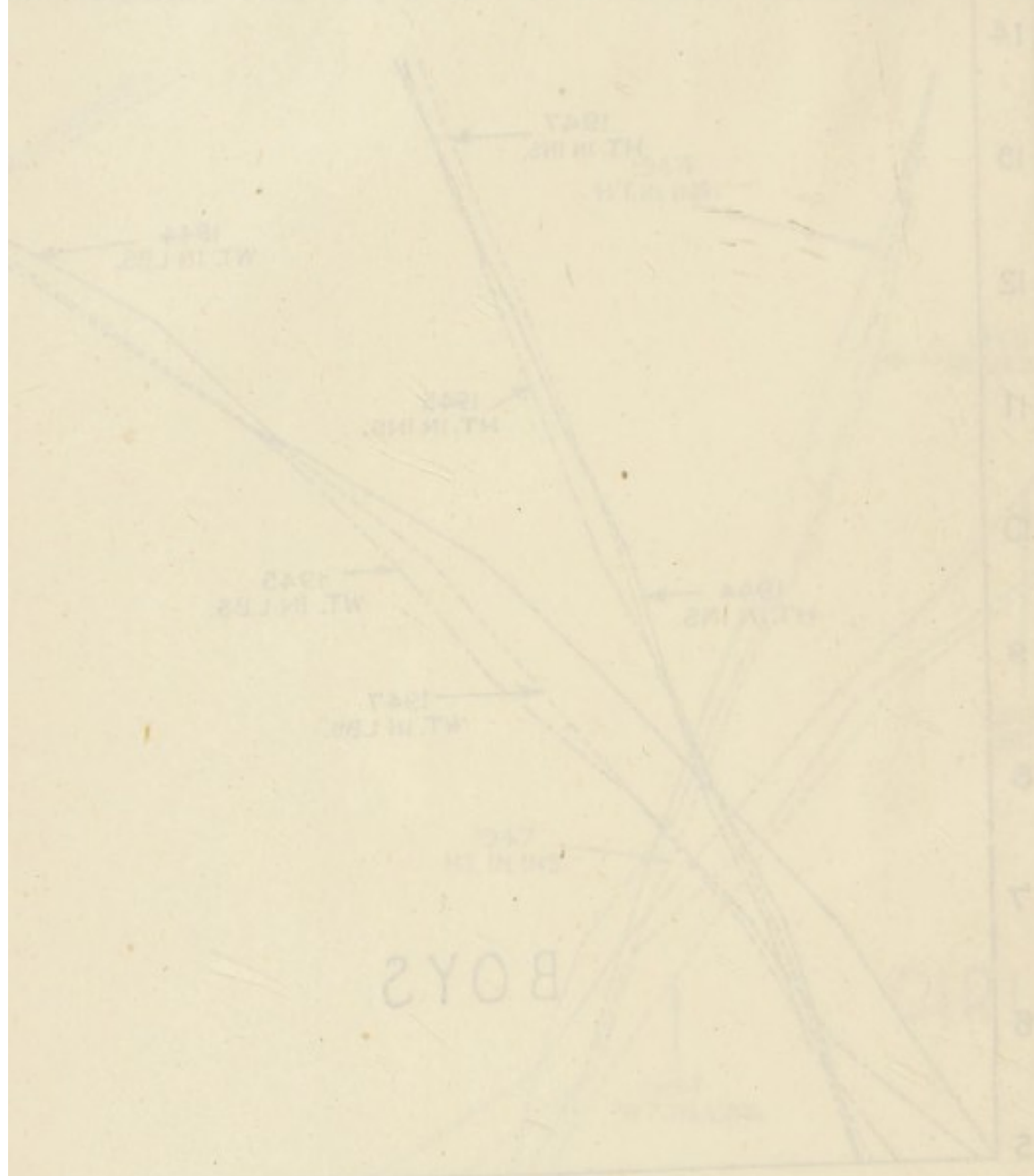
This was begun in the Dublin City National Schools early in 1947 by arrangement between the Medical Research Council of Eire, the Department of Health and the Dublin Corporation. The services of a member of our School Nursing Staff were made available temporarily to assist with the work, and the Medical Officer carrying out the survey was designated Assistant Medical Officer of Health for the County Borough. We await eagerly the results of this survey, the first of its kind to be carried out on the School Children here, and an event which makes the year 1947 noteworthy.

Included in our Annual Report is a table showing the average height and weight for age and sex of children examined at routine School Medical In-

GRAPHS SHOWING RELATIONSHIP BETWEEN HT. AND WT. DUBLIN CO. BOROUGH NATIONAL SCHOOL CHILDREN 1944, 1945, 1947.



GRAPH SHOWING RELATIONSHIP BETWEEN



WEIGHT IN LBS. AND HEIGHT IN INCHES

spection during the past four years. The findings for 1946 were not averaged owing to the interruption of our routine work by the School strike.

#### TREATMENT OF SPECIAL DEFECTS.

The **Ear, Nose and Throat Clinic** established in the Carnegie Building during 1946, continued to be so well attended that it was soon evident that more frequent sessions were absolutely essential. The single Session each week became so overcrowded as to be almost impossible for Doctor and patient. The appointment of a Speech Therapist has not been ratified, nor is there available a Teacher for the Deaf Children. Defects of speech handicap a child as do other disabilities. They impede educational progress. They are a drawback to the child's social activities, its self-confidence, security and happiness, and their treatment deserves consideration as do other conditions affecting children's development, mental and physical.

The lot of the Deaf Child is peculiarly lonely. There is no day school for the deaf or partially deaf. It is difficult for it to compete with its hearing companions in school or at home. Intelligent, eager, observant, it may gradually learn to interpret its parents' speech by self-taught lip-reading, so that the parent cannot understand why it is not progressing in school, and is aghast at the suggestion that the child should be sent to the Residential School for Deaf Mutes.

Teachers for the Deaf are as essential as Teachers for children with specific Speech Defects. Blind or partially sighted children are taught Braille. Deaf or partially deaf children deserve teaching by special methods too. The number of children with Earache and discharging ears has increased last year, while the number suffering from Phlyctenular Disease and Trachoma has fallen.

The **Orthopædic Clinic** established in the Carnegie Building, has been very well attended, and mothers

take their children for examination and advice. The Consultant holds one session each week. X-Ray and Physiotherapy are available by arrangement with hospitals. We record here our debt of gratitude to Cappagh and the Orthopædic Hospitals for the inestimable work being done in the in-patient and out-patient departments, all these years, for children suffering from crippling defect. Words are quite inadequate to describe the excellence of this work, or to express our deep thanks to these hospitals.

**Squint-Orthoptics.**—The Remedial Exercises Clinic for correction of Strabismus is sought after by parents who take their children for training to the centre opened in the Royal Victoria Eye and Ear Hospital. Parents have become more squint-conscious than heretofore. They co-operate better in many instances as regards the occlusion of the sound eye, and appear to understand the importance of obtaining treatment early. The Eye Specialists in our City Hospitals have been so assiduous in their attention to school children suffering from Eye Defects that to them must go much of the credit for this more enlightened attitude on the part of parents.

**Tuberculosis.**—The Primary Clinic in Carnegie Building is of far-reaching importance in dealing with the problem of Tuberculosis. The effect of the extended benefits under the T.B. Scheme is reflected in the improvement generally of the children, less T.B. glands and bones and joints, and fewer allergic manifestations of infection by the Tubercle bacillus.

**Convalescence.**—The opening of St. Anthony's Convalescent Home for girls was one of the outstanding features of 1947. Cheeverstown continues to cater for those boys and girls under 10 years who have been immunised against Diphtheria and who are in need of treatment under the Convalescence Scheme. St. Anthony's admits girls up to the age of 14 years and thus caters for a large group of children for whom there

was formerly no provision. Both these convalescent homes have benefited children greatly. The peace and quiet and regularity, the nourishing food and fresh air, these conditions are such a contrast for many City children, that they improve rapidly in their new environment. Neither of these homes, however, is as yet an open-air school. Delicate children in particular need special education to make up for time lost through illness and to avoid invalidism. We hope that both these Convalescent Homes will, like Linden, Cappagh and Clontarf, provide for the schooling of their little guests, and in particular, that they will teach them how to read.

**Dental Caries, Visual Defects, Crippling Deformities.**—The Tables included in this report show the numbers of children found at routine School Medical Inspection to be suffering from Defects and the degree of Defect, also the numbers of children treated during 1947.

**Teeth.**—The condition of the Children's Teeth in the new housing estates is better, less gross dental caries, but it is disheartening to find quite obvious holes in the front teeth which could so easily have been filled if the children were taken to the Clinics in Lord Edward Street. Perhaps the distance and the bus fares act as a deterrent, that, and the children's dislike of the dentist's drill. Dental and other Clinics situated near the peoples' homes would be such an advantage. We thank in particular the Dean and Staff of the Dental Hospital for their treatment of School Children.

**General.**—Faulty posture, flat feet, mouth breathing, indifference to nasal hygiene, these continue to detract from the children's well-being. Cleanliness is feasible in houses provided with running water and drainage, and there is a marked improvement in these matters in some districts.

**Mental Defectives.**—Dull children continue to attend ordinary National Schools equipped and staffed

for those of normal intelligence. The Mental Defectives, the feeble-minded must go to a Residential School if they are to receive special teaching or training by a qualified staff—this is arranged through the Commissioners administering the affairs of the South Dublin Union. Parents are reluctant to send their handicapped children away from home. There is a long waiting-list for admission to these Residential Schools. Mental Defect is saddening for parents and relatives. The problem of the provision for Mental Defective children is also distressing. The School Medical Service provides for Physical Defectives, their admission to special schools, etc., yet this Service has not been permitted to arrange for the treatment of Mental Defectives or Epileptics.

**Follow up.**—The Nurses visited the homes of special cases during the year and have helped parents and guardians to understand the significance of their children's defects and the need for treatment, and where this can be obtained. This encouragement and sympathy is often the deciding factor in the case, and I have to thank the Nursing Staff for the real interest they take in the children's well-being. Their experience and tact and kindly approach are invaluable.

**Public Health.**—Doctor M. J. Russell, Medical Officer of Health for the County Borough, retired on 31st March, 1947. He had inaugurated the School Medical Service for the Borough 19 years ago, had seen the extensions of the city boundaries and presided over the expansion of the health services during the years when he was M.O.H. He was always available for consultation and advice, was most courteous and helpful. Fully aware of the needs and conditions of the city population, he listened to one's plans and hopes for the betterment of the school children and was never discouraging or disheartening. I wish to place on record my deep thanks to Dr. Russell for his unfailing help and guidance.

**General.**—Our best thanks are due to the School Managers and Teachers and to all the various voluntary organisations which have assisted us during the year. Our own Office staff has again been helpful, kindly and cheerful.

**SCHOOLS INSPECTED DURING THE YEAR 1947.**

Warrenmount Convent	...	...	Girls and Infants.
High Street	...	...	Boys, Girls and Infants.
Rutland Street	...	...	Boys, Girls and Infants.
Grangegorman	...	...	Boys, Girls and Infants.
Inchicore Central Methodist	...	...	Boys, Girls and Infants.
St. Mary's, Mountjoy Street	...	...	Boys, Girls and Infants.
Botanic Avenue	...	...	Boys, Girls and Infants.
Kildare Place	...	...	Boys, Girls and Infants.
Church Avenue	...	...	Boys, Girls and Infants.
St. Mary's, East Wall	...	...	Girls and Infants.
St. Joseph's, East Wall	...	...	Boys.
Pearse Street	...	...	Boys and Infant Boys.
Grantham Street	...	...	Girls and Infants.
Ringsend	...	...	Boys, Girls and Infants.
Our Lady's Mount Convent, Harold's Cross	...	...	Girls and Infants.
John Street, West	...	...	Boys, Girls and Infants.
Gardiner Street	...	...	Girls and Infants.
School Street	...	...	Boys, Girls and Infants.
Crumlin C.B.	...	...	Boys.
Strand Street Convent	...	...	Girls and Infants.
Liffey Street	...	...	Girls and Infants.
St. Agnes Convent, Crumlin	...	...	Girls and Infants.
Donore Avenue C.B.	...	...	Boys.
St. Mary's C.B., Marino	...	...	Boys.
Fishamble Street	...	...	Boys, Girls and Infants.
St. Joseph's, Dorset Street	...	...	Boys.
King's Inns' Street	...	...	Girls and Infants.
Earlsfort Terrace	...	...	Girls and Infants.
St. Joseph's, Mountjoy Street	...	...	Girls and Infants.
New Bride Street	...	...	Boys, Girls and Infants.
New Street	...	...	Boys, Girls and Infants.
Halston Street	...	...	Boys and Infant Boys.
Larkhill	...	...	Boys, Girls and Infants.
North King Street	...	...	Girls and Infants.
St. Mary's Place C.B.	...	...	Boys.
City Quay	...	...	Boys.
Coombe Convent	...	...	Girls and Infants.
Wellington Street	...	...	Girls and Infants.
Townsend Street	...	...	Girls and Infants.

**DEFECTS FOUND DURING THE YEAR ENDED 31st DECEMBER, 1947.**  
**TOTAL NUMBER EXAMINED—15,982.**

DEFECTS	Defects requiring treatment	Defects requiring observation
Speech ... ..	126	665
Mental Condition ... ..	26	458
Hearing ... ..	33	135
Vision (including squint) ... ..	3,069	3,511
Clothing ... ..	1,329	3,628
Footgear ... ..	950	3,467
Hair and Scalp ... ..	1,307	2,747
Body ... ..	449	2,811
Vaccination Nil ... ..	9,416	—
Inoculation Nil ... ..	3,514	—
Nutrition ... ..	1,121	2,181
Teeth ... ..	9,557	504
Glands, Enlarged ... ..	350	1,955
<b>EAR :—</b>		
Otitis Media ... ..	53	124
Other Diseases ... ..	281	18
<b>NOSE AND THROAT :—</b>		
Enlarged Tonsils ... ..	2,233	2,289
Adenoids ... ..	184	201
Tonsils and Adenoids ... ..	526	62
Other Defects ... ..	85	176
<b>EYE :—</b>		
Trachoma ... ..	5	1
Blepharitis ... ..	467	154
Conjunctivitis ... ..	103	53
Keratitis ... ..	10	7
Corneal Opacity ... ..	13	5
Squint ... ..	521	80
Other Diseases ... ..	105	31
<b>SKIN :—</b>		
Ringworm, Head ... ..	22	2
Ringworm Body ... ..	18	6
Scabies ... ..	189	19
Impetigo ... ..	178	44
Other Diseases ... ..	346	374
<b>HEART AND CIRCULATION :—</b>		
Organic Heart Disease ... ..	123	277
Functional Heart Disease ... ..	8	145
Anæmia ... ..	345	2,512
<b>LUNGS :—</b>		
Bronchitis ... ..	150	170
Other ... ..	22	40
<b>T.B. :—</b>		
Definite Pulmonary ... ..	17	27
Suspected Pulmonary ... ..	876	1,709
Definite Non-Pulmonary ... ..	29	20
Suspected Non-Pulmonary ... ..	60	39

## Defects found during the Year ended 31st December, 1947—(contd).

DEFECTS	Defects requiring treatment	Defects requiring observation
<b>NERVOUS SYSTEM :—</b>		
Epilepsy ... ..	3	—
Chorea ... ..	13	5
Other ... ..	10	12
<b>DEFORMITIES :—</b>		
Rach. ... ..	51	959
Spinal Curvature ... ..	20	5
Other ... ..	532	325
<b>POSTURAL DEFECTS :—</b>		
Round Shoulders ... ..	198	2,412
Scoliosis ... ..	35	44
Flat Foot ... ..	333	896
<b>OTHER CONDITIONS :—</b>		
Infectious Diseases ... ..	2	2
Rheumatism ... ..	171	2
Rickets ... ..	97	1,136
Hernia ... ..	2	21
Other Diseases ... ..	166	1,518

**TREATMENT OF ABNORMAL CHILDREN, 1947.**

Physical Defectives :	Admitted during 1947.
<b>RESIDENTIAL SCHOOLS :</b>	
St. Mary's Blind School, Merrion ... ..	1
St. Joseph' School for Deaf Mutes, Cabra (Boys) ... ..	2
St. Mary's School for Deaf Mutes, Cabra (Girls) ... ..	2
<b>HOSPITAL SCHOOLS :</b>	
Linden ... ..	480
Orthopædic Hospital, Clontarf ... ..	49
St. Mary's Open Air Hospital, Cappagh ... ..	23
Auxiliary Orthopædic Hospital, Baldoyle ... ..	53
<b>CONVALESCENT HOMES :</b>	
Cheeverstown ... ..	510
St. Anthony's, Merrion ... ..	40
<b>Mental Defectives and Epileptics :</b>	
(Admission arranged by Commissioners Administering Affairs of Dublin Board of Assistance)	
St. Vincent's Home, Cabra ... ..	6
St. Augustine's Colony, Blackrock ... ..	5

**Epileptics :**

Bl. Oliver Plunket Colony, Mulhuddart ... ..	4
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**Dental Treatment, 1947 :****DENTAL HOSPITAL :**

(A) Extractions, Local Anaesthetic ... ..	2,718
(B) Extractions, General Anaesthetic ... ..	7,001
(C) Fillings ... ..	2,384
(D) Scalings and Dressings ... ..	1,724
(E) X-Rays Examination ... ..	50

**DENTAL CLINICS :**

(A) Extractions, Local Anaesthetic ... ..	9,463
Fillings ... ..	1,258
Dressings and Scalings ... ..	3,195

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CLINICS.—E.N.T. attendances ... ..	1,646
,, Orthopædic attendances ... ..	71

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Phlyctenular Disease.—New cases ... ..	96
Artificial Eyes.—Number of Children ... ..	32
Trachoma.—Number of Cases on List ... ..	51

**DEFECTS TREATED—SCHOOL CHILDREN, 1947.**

<b>Teeth</b>	Dental Hospital ... ..	7,328
	Dental Clinics, Lord Edward Street ... ..	12,756
<b>Skin</b>	Ringworm, Scalp ... ..	48
	Ringworm, Body ... ..	28
	Impetigo ... ..	186
	Alopecia ... ..	20
	Other Skin Conditions ... ..	86
	Light Therapy ... ..	2
	Visits to Out Patients' Department ... ..	887
<b>Eye</b>	Defective Vision (including Squint) ... ..	2,289
	Blepharitis ... ..	275
	Conjunctivitis ... ..	256
	Trachoma ... ..	32

**Eye—continued.**

	Interstitial Keratitis	...	...	5
	Phlyctenular Disease	...	...	75
	Corneal Opacity	...	...	4
	Chalazion	...	...	9
	Ulcer	...	...	9
	Miscellaneous Defects	...	...	125
	Visits to Out Patients' Department	...	...	2,713

## INTERN CASES :

	Squint	...	...	41
	Cataract	...	...	3
	Trachoma	...	...	3
	Phlyctenular Disease	...	...	5
	Interstitial Keratitis	...	...	1
	Cyst	...	...	2
	Prolapsed Iris	...	...	1
	Dacryocystitis	...	...	1
	Eye removed	...	...	1
	Miscellaneous Defects	...	...	5

**Ear**

	Defective Hearing	...	...	35
	Antral Infection	...	...	50
	Otorrhœa	...	...	110
	Miscellaneous Defects	...	...	145
	Visits to Out Patients' Department	...	...	1,531

## INTERN CASES :

	Otitis Media	...	...	12
	Discharging Ear	...	...	2
	Mastoid	...	...	9
	Furunculosis	...	...	3
	Antral Infection	...	...	11
	Polypus	...	...	2
	Other Diseases	...	...	2

**Nose and Throat**

	Rhinitis	...	...	3
	Nasal Discharge	...	...	20
	Miscellaneous Defects	...	...	16
	Visits to Out Patients' Department	...	...	149

## INTERN CASES :

	Tonsils and Adenoids Operations	...	...	1,285
	Nasal Obstruction Osteoma	...	...	1

**Orthopædic**

## EXERN CASES :

	Congenital Dislocation of Hip	...	...	3
	Perthes Disease	...	...	5

## Orthopædic—continued.

Drop Foot...	...	...	...	2
Infantile Paralysis	...	...	...	50
Pes Planus	...	...	...	237
EXTERN CASES (contd.):				
Round Shoulders	...	...	...	55
Rickets	...	...	...	28
Genu Varum	...	...	...	8
Genu Valgum	...	...	...	36
Talipes	...	...	...	52
Club Fingers	...	...	...	3
Hip Trouble	...	...	...	6
Osteomyelitis	...	...	...	4
Deformity of Hand	...	...	...	3
Deformity of Fingers	...	...	...	1
Deformity of Feet	...	...	...	2
Torticollis	...	...	...	5
Scoliosis	...	...	...	20
Kyphosis	...	...	...	3
Paralysis	...	...	...	8
Coxa Vara	...	...	...	1
Fragilitas Ossium	...	...	...	1
INTERN CASES:				
Infantile Paralysis	...	...	...	17
Rickets	...	...	...	8
Perthes Disease	...	...	...	3
Pes Cavus	...	...	...	2
Osteomyelitis	...	...	...	3
Osteochondritis	...	...	...	1
Club Foot	...	...	...	8
Hallux Rigidus	...	...	...	1
Hammer Toe	...	...	...	1
Torticollis	...	...	...	4
Genu Valgum	...	...	...	3
Genu Varum	...	...	...	1
Deformed Ankle	...	...	...	1
Scoliosis	...	...	...	1
Pes Planus	...	...	...	6
Hip Defect	...	...	...	2
Congenital Dislocation of Hip	...	...	...	1
Drop Foot	...	...	...	1
Spina Bifida	...	...	...	1
Miscellaneous Defects	...	...	...	5
Gymnasium Treatments	...	...	...	4,554

## Orthopædic—continued.

Orthopædic Appliances (including re-  
newals and repairs) ... .. 707

## SPECTACLES, ETC.

Spectacles supplied ... .. 2,275  
Spectacles repaired ... .. 573  
Occluders supplied ... .. 81  
Artificial Eyes supplied ... .. 13

**RESULTS OF INVESTIGATION BY MASS RADIOGRAPHY OF ORPHAN-  
AGES WITHIN THE COUNTY BOROUGH OF DUBLIN AND  
OF TWO BOYS' NATIONAL SCHOOLS.**

	Number who attended for Miniature Film	Number recalled for Large Film	Significant Cases needing immediate Clinical Investigation
Boy's Orphanage A	52	10	3
Girl's do. X	44	6	1 (4 showed evidence of healed primary com- plexes, 2 of these to have follow-up X-ray in 3 months' time). Nil (no cases suggested activity).
Do. do. Y	76	6	
Do. do. Z	73	5	
Boy's School I	42	1	1—(active primary T.B. found). Parents no- tified and case re- ported to T.B. Dept.). Nil—(healed primary complex 2).
Do. do. II	28	2	



TABLE SHOWING AVERAGE HEIGHT AND WEIGHT FOR AGE AND SEX OF THOSE CHILDREN EXAMINED AT ROUTINE S.M.I. DURING THE PAST 4 YEARS. THE FINDINGS FOR 1946 ARE NOT INCLUDED; THE SAMPLE WAS TOO SMALL OWING TO SCHOOL STRIKE INTERRUPTION.

Age in Years	G I R L S				Age in Years	B O Y S			
	Height in Inches.		Weight in Lbs.			Height in Inches.		Weight in Lbs.	
	1944	1945	1947	1944		1945	1947	1944	1945
5	41½	40	41½	36	40¾	42	34	37¾	41½
6	43	43½	43¼	39¼	43½	43¾	41½	41¾	44½
7	44¾	45¼	45	42½	45	45¾	45	45¾	48
8	47	47¼	47	47	46¾	47¾	49¼	51	51¾
9	49	49	49	51½	48¼	49½	53¼	54½	55½
10	50½	51¾	50¾	56¼	50¾	52	58¾	61¼	62
11	53	53½	52¾	64¼	52¼	53½	62¼	68½	66¼
12	55	55½	54¾	69¼	54	55	68	73	71¾
13	57¼	57¼	56¾	78	56	56¼	75¼	77½	76
14	59	59¼	58½	85¾	57½	57¾	81	82¼	80½

## List of Schools.

- St. Agne's, Armagh Road.  
 All Saints', Grangegorman.  
 St. Andrew's, Pearse Street.  
 St. Andrew's, Rialto.  
 St. Andrew's, Townsend Street.  
 St. Audeon's, High Street.  
 Augustinian, John Street, W.  
 St. Barnabas's, Sheriff Street.  
 St. Brigid's, Clarendon Street.  
 St. Brigid's, Coombe.  
 St. Brigid's, Little Strand Street.  
 St. Catherine's, Baggot Street.  
 St. Catherine's N.S., Cabra.  
 St. Catherine's, Donore Avenue.  
 St. Catherine's, Meath Street.  
 St. Joseph's, School Street.  
 Christ the King, Cabra.  
 Christ Church, Ranelagh.  
 City Quay N.S.  
 Scoil Colmcille, Marlboro' Street.  
 St. Columba's, Armagh Road.  
 St. Columba's, Gt. Strand Street.  
 St. Columba's, North Strand.  
 Damer Schools, Stephen's Green.  
 Drumcondra National.  
 SS. Enda's and Dympna's,  
 Whitefriar Street.  
 St. Finbar's N.S., Cabra West.  
 St. Francis Xavier's, Dorset  
 Street, Lower.  
 Gardiner Street C.N.S.  
 St. George's, Lower Sherrard  
 Street.  
 Harold's Cross N.S., Clareville  
 Road.  
 Holy Child, Larkhill (Girls').  
 Holy Child, Larkhill (Boys').  
 St. Fintan's N.S., Howth  
 St. Columbanus N.S., Howth.  
 Inchicore Central P.E.S.  
 Irishtown (Boys').  
 St. Matthew's (Girls).  
 St. James's C.N.S., Basin Lane.  
 St. James's C.B.S., James's St.  
 St. John the Baptist, Seafield  
 Road.  
 St. John's United, Fishamble  
 Street.  
 St. Joseph's, Dorset Street, Upr.  
 St. Joseph's C.N.S., East Wall  
 Road.  
 St. Joseph's, W., Liffey Street.  
 St. Joseph's, St. Mary's Road.  
 St. Joseph's, Terenure Road.  
 St. Joseph's C.N.S., Kimmage  
 Road East.  
 St. Joseph's, Weaver Square.  
 St. Joseph's, Wellington Street.  
 St. Kevin's, Blackpitts.  
 St. Kevin's, Grantham Street.  
 St. Laurence O'Toole's C.B.S.  
 St. Laurence O'Toole's N.S.  
 Loreto C.N.S., Hill Street.  
 St. Louis, Ardee Road.  
 St. Luke's, New Street.  
 St. Mary's, King's Inn Street.  
 St. Mary's, Rathmines.  
 St. Michael's, Keogh Square.  
 SS. Michael's and John's.  
 St. Michan's, North Anne Street.  
 Modh Sgoileanna, Lair.  
 Model Schools, Inchicore.  
 Mount Jerome.  
 St. Nicholas's, Francis Street.  
 Our Lady's Mount N.S., Harold's  
 Cross.  
 Our Lady of Good Counsel  
 (Boys').  
 Our Lady of Good Counsel  
 (Girls').  
 St. Patrick's, Cambridge Road.  
 St. Patrick's, North King Street.  
 St. Patrick's, Lower Rutland  
 Street.  
 St. Patrick's, Thorncastle Street.  
 St. Paul's, Blackhall Parade.  
 St. Paul's, Queen Street.  
 St. Peter's, Camden Row.  
 St. Peter's, Phibsboro.  
 St. Philomena's, Chapelizod.  
 St. Philomena's, George's Hill.  
 St. Philomena's, Phoenix Park.

**List of Schools**—continued.

Rathmines Township N.S.  
 Rialto Boys' N.S.  
 St. Daviour's, Denmark Street.  
 Stanhope Street C.N.S.  
 St. Stephen's, Northumberland  
 Road.

Tranquilla N.S., Rathmines.  
 St. Vincent's, Golden Bridge.  
 St. Vincent's, North William  
 Street.  
 Warrenmount C.N.S.  
 Westland Row C.B.S.

## TUBERCULOSIS.

The facilities provided under the relevant Tuberculosis legislation include clinical sessions in Charles Street, the Meath Hospital, Crumlin and Lord Edward Street. The latter is reserved for the supervision of children with primary tuberculosis. Nightly sessions are also held in Charles Street and the Meath. The Oto-Laryngologist and the Orthopædic Surgeon also attend weekly in Charles Street to see those referred by the Area T.O.

The accepted methods are employed in the investigation of those coming to the Clinic. Tuberculin-testing, carried to 1 in 100 (Mantoux), is extensively employed. Sputum testing, with culture when indicated, is done in the City Laboratory. Latterly, gastric lavage has been employed and lipiodol and bronchoscopic examinations can now be done.

In addition to the investigation of persons and contacts who attend the Clinic, mass radiography, and tuberculin-testing of infants, are used as a means of case finding.

In addition to the usual surveys, expectant mothers attending the ante-natal clinics in the Maternity hospitals are referred from there to the Mass Radiography Centre. This routine should be of especial value having regard to the extension of the B.C.G. programme in the City. Tuberculin-testing is now carried out by Health Visitors on infants either when attending Child Welfare Clinics or when visited in their homes. A positive reaction in infants provides a sensitive index as to the presence of infection in the home, and when such occurs the household occupants are invited so be X-Rayed.

The disposal of new cases, and the pros and cons of doubtful ones, are considered at the team meeting of Tuberculosis and Institutional Officers held weekly in Charles Street. Relevant information of cases is communicated to doctors referring them for investi-

gation. It is proposed to include in such reports a small print of X-Ray film when the Reduction Camera, now on order, is procured.

Institutional accommodation is provided under the Tuberculosis Scheme in the Corporation hospitals, i.e., Crooksling, Rialto, and Pigeon House, or in a general hospital or private sanatorium. During the year 1,336 patients were accommodated in institutions other than Corporation. There is no need to stress anew the hopeless position in regard to the intern treatment of tuberculous patients. This is illustrated by the fact that during the year the waiting list averaged 163 with the result that months elapsed before a bed could be obtained. Despite the long wait, and having regard to the general experience that disease is far advanced when diagnosed, it is somewhat surprising to see that up to 41% of those admitted to Crooksling during the year were classified as "Tub. Minus."

When reviewing the service as it operates to-day, its considerable expansion during recent years must be borne in mind. Much of the present routine is only possible because of additional personnel recently appointed. These include a Clinic clerical staff of 5, where previously there was none at all, 2 Tuberculosis Officers, a Visiting Laryngologist, a Visiting Orthopædic Surgeon, and X-Ray-cum-Mass-Radiography Centre, and a Domiciliary Welfare Department.

Despite its expansion, however, there are certain handicaps under which the service labours.

It is, to my mind, unfortunate that our clinical Tuberculosis Officers are more or less divorced from institutional work, while on the other hand our institutional Medical Officers have little contact with patients after discharge from hospital. This dissociation of intern and extern attention militates against comprehensive and continuing care so necessary in tuberculosis, the outlook for which is coloured much by living conditions and factors other than the actual state of the disease. It would seem an improvement,

therefore, if the pattern of the Tuberculosis Scheme was such that the Tuberculosis Officer, like specialists in other branches of medicine, had beds under his control and thus permit the stages of treatment, i.e., pre-institutional, institutional, and post-institutional, to be much more unified than is possible now.

A most serious handicap is the inadequate provision of general practitioner attention to those who cannot afford to pay for it. Even the Public Assistance Dispensary Service, which is supposed to provide general practitioner attention to the less affluent does not do so satisfactorily in the case of poor tuberculous persons. The result is that the T.O. must see daily processions of people who have travelled from anywhere in the County Borough to obtain simple medicaments, etc., which they should be able to get from the local dispensary doctor. It has been stressed time and again that a specialised service—and that is what the tuberculosis service is meant to be—cannot be successful unless based on a system of adequate general practitioner care.

There is also the question of accommodation to which reference has already been made. That existing clinic accommodation is hopelessly inadequate is also, I think, generally conceded. Indeed, it is no exaggeration to state that the expanding City scheme is being throttled by lack of quarters. It is, therefore, most unsatisfactory to see that, despite the submission of plans, round table conferences, etc., over past years, no practical result has been forthcoming.

## Tuberculosis Dispensaries.

(Charles Street West, Meath Hospital Clinic, Crumlin Clinic and Primary Clinic, Lord Edward Street).

The following are the reports of Dr. Sheehan, Acting Chief Tuberculosis Officer, on the work of the Dispensary Service; and of Doctors Walsh and Duffy, Medical Superintendents of Crooksling, Rialto and Pigeon House Hospitals, respectively; and Dr. Magan, Medical Director, Mass Radiography Service:

During the year under review, 4,078 Primary attendances were recorded at the Clinics of which 1,146, or 28.10% were found to be suffering from Tuberculosis.

**Table A** shows the number of new cases examined at the Clinics each month during the year.

**TABLE A.**

Month	Charles Street Clinic	Meath Hospital and Crumlin Clinics	Primary Clinic	Total
January ...	112	86	21	219
February ...	83	111	7	201
March ...	123	145	8	276
April ...	126	159	15	300
May ...	218	202	19	439
June ...	215	181	12	408
July ...	241	195	26	462
August ...	215	152	14	381
September ...	173	135	13	321
October ...	214	152	23	389
November ...	234	108	22	364
December ...	207	99	12	318
<b>TOTAL ...</b>	<b>2,159</b>	<b>1,725</b>	<b>192</b>	<b>4,078</b>

**Table B** shows classification of 1,146 Tuberculosis Patients who attended each month during 1947.

**TABLE B.**

Month	Pulmonary Cases	Sputum Positive	Sputum Negative	Non-Pulmonary Cases	Active Primary Complex
January ...	53	22	31	9	11
February ...	47	23	24	7	17
March ...	71	37	34	7	21
April ...	74	45	29	16	22
May ...	75	44	31	14	34
June ...	86	50	36	16	26
July ...	80	41	39	11	32
August ...	51	32	19	7	15
September ...	56	28	28	10	20
October ...	60	37	23	10	15
November ...	54	21	33	13	9
December ...	71	41	30	14	12
<b>TOTAL ...</b>	<b>778</b>	<b>421</b>	<b>357</b>	<b>134</b>	<b>234</b>

**Table C** shows attendance at Clinic each month during 1947.

**TABLE C.**

Month	Charles Street Clinic	Meath Hospital Clinic	Lord Edward Street Clinic	Crumlin Clinic	Total
January ...	1,428	1,115	398	127	3,068
February ...	1,275	1,057	245	78	2,655
March ...	1,353	1,225	226	127	2,931
April ...	1,325	1,174	330	146	2,975
May ...	1,642	1,413	378	14	3,575
June ...	1,637	1,325	289	152	3,403
July ...	1,755	1,464	322	190	3,731
August ...	1,233	1,287	314	149	2,983
September ...	1,380	1,902	338	169	3,789
October ...	1,553	2,225	380	285	4,443
November ...	1,557	1,825	687	241	4,310
December ...	1,511	1,655	503	200	3,869
<b>TOTAL ...</b>	<b>17,649</b>	<b>17,667</b>	<b>4,410</b>	<b>2,006</b>	<b>41,732</b>

**Table D** shows the number of domiciliary visits paid by Nurses during the year 1947.

**TABLE D.**

Month	Charles Street Clinic	Meath Hospital Clinic	Total
January ...	450	546	996
February ...	375	529	904
March ...	394	557	951
April ...	359	529	888
May ...	355	535	890
June ...	419	560	979
July ...	453	564	1,017
August ...	385	536	921
September ...	334	524	858
October ...	341	569	910
November ...	378	542	920
December ...	331	516	847
<b>TOTAL ...</b>	<b>4,574</b>	<b>6,507</b>	<b>11,081</b>

Number of domiciliary visits paid by Medical Officers during the year .. ..	1,140
Number of persons under domiciliary treatment during the year .. ..	300
Number of Dwellings notified for disinfection ..	833
Number of A.P.T. and P.P. refills administered during the year .. ..	3,421
Number of exposures of artificial sun-light treatment administered during the year ..	427
Number of X-rays done during the year ..	4,335
Number of screenings done during the year	3,056
Number of Sputa examined .. ..	1,417
Number of Blood Sedimentation Rates done ..	725
Number of Lipiodol Examinations ..	6
Number of Contacts examined during the year ..	6,325
Number of cases written off Tub. Register because of Death .. ..	456

School Medical Officers during the year submitted 408 children to Charles Street, and 361 to Meath Hospital Clinic. A report was sent from Charles Street and Meath Hospital Clinic in each case.

MR. O'CONNELL, our Throat Specialist, started his weekly sessions on the 18th October, 1946.

From 18th October to 31st December, 1947, he saw 30 new patients and had 61 attendances.

From 1st January, 1947, to 31st December, 1947, he examined and treated 108 new patients and had a total of 308 attendances.

Our Orthopædic Surgeon, MR. DESMOND P. MURRAY, F.R.C.S.I., took up duty in December, 1947, and his activities will come into next year's report.

Our Dentist, MR. CASEY, who holds weekly sessions, had a total of 109 attendances during the year, and in future the dentures will be supplied under the County Tuberculosis Scheme.

## OCCUPATIONS OF NEW PATIENTS—

CHARLES STREET, W.

Hairdresser ..	1	Operator ..	1
Typists ..	5	Checker ..	1
Shop Assistants ..	17	Garda Siochana ..	1
Laundry Workers	4	Attendant ..	2
Paper Baler ..	1	Foreman ..	1
Journalist ..	1	Housewives ..	85
Postman ..	1	Cashier ..	1
Painters ..	4	No Occupation ..	54
Salesman ..	1	Baker ..	1
Tailoresses ..	4	Printers ..	2
Docker ..	1	Mechanics ..	4
Army ..	4	Shopkeepers ..	2
Messengers ..	4	Dealer ..	1
Steeplejack ..	1	Labourers ..	63
Waitresses ..	3	Ex B. Army ..	9
Caretaker ..	1	Machinists ..	2
Bootmaker ..	1	Custom's Officer	1
Butchers ..	2	Dressmakers ..	4
Children (Male) ..	72	Nurses ..	3
Children (Female)	68	Factory Workers	45
Sawer ..	1	Tailors ..	2
Porters ..	4	Book-keepers ..	2
Drivers ..	10	Municipal Worker	1
Livestock Agent	1	Milliner ..	1
Trimmer ..	1	Metal Polishers ..	4
Civil Servants ..	6	Clerks ..	28
Carters ..	2	Domestics ..	29
C.I.E. Employees	3	Plumbers ..	2
Bus Conductors	3	Carpenters ..	6
Farmer ..	1	Apprentices ..	2
Plasterer ..	1	Page ..	1
Cooper ..	1	Fitter ..	1
Fireman ..	1	Storemen ..	3
Electricians ..	2	Drovers ..	2
Student ..	1	Vanboys ..	2

OCCUPATIONS OF NEW PATIENTS—MEATH HOSPITAL  
CLINIC.

Packer .. ..	1	Storeman ..	1
Chef .. ..	1	Domestics ..	30
Teachers ..	2	Packers ..	3
Factory Workers	51	Cooks .. ..	3
Machinists ..	7	Book-keeper ..	1
Housewives ..	69	Fitters .. ..	4
No Occupation ..	54	Plumber .. ..	1
Labourers ..	51	Furniture Remover	1
Operators ..	2	Boxmaker ..	1
Clerks .. ..	20	Carpenter ..	1
Fishermen ..	3	Dressmakers ..	5
Laundry Workers	27	Students ..	2
Fuel Workers ..	2	C.I.E. Employees	2
Porters .. ..	1	Ex-Army ..	17
Secretary ..	2	Dancer .. ..	1
Dairyman ..	1	Buyer .. ..	1
Bootmakers ..	2	Drivers .. ..	3
Typists .. ..	3	Electricians ..	2
Mechanics ..	2	E.S.B. Employee	1
Joiner .. ..	1	Porters .. ..	6
Painters .. ..	3	Plasterer ..	1
Pedlar .. ..	1	Wardsmaid ..	1
Apprentices ..	8	Attendant ..	1
Children (Male) ..	69	Tailors .. ..	2
Children (Female)	62	Messengers ..	4
Tailoresses ..	11	Waitresses ..	4
Army .. ..	1	Receptionists ..	2
Bus Conductors ..	3	Nurse .. ..	1
Pressers .. ..	4	Cleaners .. ..	2
Telephonists ..	2	Hairdressers ..	3
Sweep .. ..	1	Dyer .. ..	1
Shop Assistants ..	13	Presser .. ..	1
Civil Servants ..	7		

## Primary Tuberculosis Clinic.

The Dublin Corporation Primary Tuberculosis Clinic was established in 1945. This was the first attempt by any Local Authority in these islands to set up a Medical Centre for the special study of Primary Tuberculosis in children. The Clinic is separate from the Tuberculosis Dispensary and is held in the Child Welfare Department. This arrangement was made to encourage the mothers who held a prejudice against their children attending the Tuberculosis Dispensary. In 1945 the Clinic was held once weekly. The number of sessions allotted to the work gradually increased, and at present, three sessions are held weekly. The attendance has so increased at the time of this report that the establishment of a full-time Clinic is now under consideration.

The necessity for the establishment of the Primary Clinic can be assessed when we study our childhood tuberculosis mortality. Children under 14 years of age contribute 14.8% of our city's tuberculosis death-rate. According to the Registrar-General's figures, approximately one-fourth of tuberculosis deaths of children in Ireland occur in Dublin, yet Dublin only represents one-sixth of our population. The deaths from Tuberculosis of Dublin children under 14 years of age in 1947 were :

Primary Tuberculosis	.....	.....	27
Tubercular Meningitis	.....	.....	81
Other forms of Tuberculosis	.....	.....	29
			<hr/>
Total	.....	.....	137

Tuberculosis now approaches third as a cause of death in children up to the age of 14 years.

The routine of the Clinic is to :—

- (i) Tuberculin Test.
- (ii) X-Ray.
- (iii) Blood Sedimentation estimation.
- (iv) Gastric Lavage.
- (v) Supervision of Cases.
- (vi) Arrangement of hospitalisation.

Social conditions of the children attending the Primary Clinic have been investigated. Summary shows :—

472 came from families whose total income was less than 10s. a head weekly.

182 of these children came from families living in one room.

The housing conditions were :—

Good	Fair	Bad	Corporation House	Corporation Flat
124	233	432	356	119

Investigation of the source of infection showed that a high percentage of children were infected from tuberculous mother. The number of cases attending the Primary Clinic during 1947 was 968.

At present 150 beds are used for Primary Tuberculosis in the City, and, as that number is not nearly sufficient, the hospitalisation periods have had to be curtailed and the waiting list is much too long. Arrangements are being made at present to open a hospital for these cases, and we hope to have better facilities for the treatment of Primary Tuberculosis at an early date.

During 1947, intensive search for tubercle bacilli

was carried out by the introduction of gastric lavage examination. We are indebted to Dr. J. H. Stritch for the careful bacteriological examinations which were positive in 18% cases.

During the last few months of 1947, the Child Welfare Department have greatly assisted us in tracing primary tuberculosis cases in small children, by systematic tuberculin testing in their department.

As the Corporation X-Ray department is overworked, children have to attend St. Kevin's Hospital for X-Ray examination. This is not very satisfactory, as it entails long journeys for the mothers. Thanks are due to Dr. R. A. Reynolds for his help and co-operation throughout the year. It is hoped that the more convenient arrangement of X-Ray examination at Lord Edward Street will soon be available.

A full report of the working of the Corporation Primary Clinic since its establishment has been published already in the Irish Medical Association Journal of August, 1948.

G. P. SHEEHAN,  
(Act.) Chief Tuberculosis Officer.

### **Crooksling Sanatorium.**

Throughout the year 1947 the work carried out in the Sanatorium followed the lines adopted in former years. The new ward extension on the female side was occupied towards the end of the year and accommodation was thus provided for thirty additional female patients. The new Nurses' Home was also occupied and the nursing staff numbers were increased

by the addition of six Staff Nurses. There is accommodation also for nine additional Probationers, but certain rooms allotted to Probationers had to be given to the Domestic Staff as eight of the latter were displaced as a result of a fire which destroyed their chalet. The Probationer staff is, therefore, not yet up to full strength.

I myself was afforded the opportunity of visiting the Scandinavian countries for a period of six weeks. This visit was arranged by the Department of Health and proved invaluable. Contact with other points of view proved most stimulating, and much was to be learnt from the machine-like efficiency of the Scandinavian Tuberculosis Services. My chief interest was naturally with the Sanatoria, from the point of view both of organization and treatment. In the coming twelve months it is my intention to introduce to Crooksling a number of matters of routine which I saw in use there and which can be adopted here with advantage.

In October the Annual General Meeting of the Irish Tuberculosis Society was held at Crooksling. There was a very good attendance of doctors from different parts of the country. The Society was particularly fortunate in having as the principal speaker at the meeting so distinguished a person as Dr. Peter Edwards of the Cheshire Joint Sanatorium, Market Drayton. Dr. Edwards gave a most instructive account of the problems concerning tuberculosis. Dr. M. M. Dunlevy and myself read papers on the methods used in Scandinavia to combat tuberculosis.

During 1947, 551 patients were treated. Of these, 360 were admitted, 321 were discharged (30 transferred to other hospitals and 8 deaths), and 230 remained in residence on December 31st.

## CLASSIFICATION OF PATIENTS ADMITTED.

—		Males	Females	Total
T.B. Minus	...	68	80	148
T.B. Plus 1	...	14	11	25
T.B. Plus 2	...	118	59	177
T.B. Plus 3	...	5	4	9
Observation	...	1	0	1
TOTAL	...	206	154	360

## AGE PERIODS.

—	15-24	25-34	35-44	45-54	55-64	65-	Total
Males ...	106	40	35	18	6	1	206
Females	85	52	13	3	1	0	154
TOTAL	191	92	48	21	7	1	360

This year, as in previous years, the great majority of the patients admitted were under 35 years of age, representing 78.61% of all admissions, 53.05% were under 25 years. Among the men 70.87% were under 35 years, and 51.40% under 25 years. The corresponding figures for the women were 88.96% and 55.13%. These figures continue to emphasize the extent to which pulmonary tuberculosis is a disease of young adults.

## CLASSIFICATION OF PATIENTS DISCHARGED.

	Quiescent	improved	No Material Improve- ment	Worse	Died	Total
T.B. Minus	44	37	34	4	0	119
T.B. Plus 1	18	8	0	1	0	27
T.B. Plus 2	28	69	46	8	1	152
T.B. Plus 3	0	1	2	12	7	22
Non-T.B.	0	0	0	1	0	1
TOTAL	90	115	82	26	8	321

“ Quiescent ” is applied to a person with no symptoms of tuberculous disease, except such as are compatible with a completely healed lesion, and in whom the sputum, if present, is free from tubercle bacilli. From the above table it will be seen that only 90 patients (28·03%) went home with a completely healed lesion. This is disappointing but compares with other years. Time and again the economic factor or domestic worries made it necessary for the patient to leave before he or she should have done so.

Here I would like to refer to Denmark where the family, not the patient, is taken as the unit to be looked after by the Tuberculosis Authority. The diminution in the financial resources of the family consequent upon the illness of the breadwinner is regarded as a fruitful cause of tuberculosis due to under-nourishment with resultant lowering of the body-resistance to disease. Public Health measures are, therefore, directed to preserving the health of the family while the patient is unfit to work. This is attained by adequate financial assistance and by grants of extra nourishment to the whole family as distinct from the patient alone. The Danish tuberculous patient therefore has no financial worries and

knows that his family is being well looked after during his enforced idleness. Where the mother is the patient she has no worries about the way things are being managed at home. The Tuberculosis Authority has a panel of Daily Helps. These women, paid by the Authority, work daily in the home, get the children ready for school, cook the meals, and keep the house clean. If the mother is not fit for household duties when she returns from the sanatorium, these Daily Helps continue to attend and give her assistance. Let us hope that the day will come when the Irish patients will have the same opportunities to relax and concentrate on the all-important business of regaining their health.

**CONDITION ON DISCHARGE AND LENGTH OF STAY.**

—	Quiescent	Improved	No Material Improvement	Worse	Died	Total
Over 12 months	12	19	10	6	1	48
9—12 months ...	17	18	2	3	2	42
6—9 months ...	31	23	4	2	2	62
3—6 months ...	16	34	9	9	3	71
2—3 months ...	8	10	5	0	0	23
1—2 months ...	3	9	12	3	0	27
7—30 days ...	3	2	26	3	0	34
0—7 days ...	0	0	14	0	0	14
TOTAL ...	90	115	82	26	8	321

Considering the 90 patients discharged “quiescent,” the following table gives the relationship between condition on discharge, duration of treatment, and classification on admission.

Class on Admission	Over 12 Months	9-12 Months	6-9 Months	3-6 Months	Under 3 Months	Total
T.B. Minus ...	4	6	15	10	11	46
T.B. Plus 1 ...	0	5	7	3	3	18
T.B. Plus 2 ...	8	6	9	3	0	26
T.B. Plus 3 ...	0	0	0	0	0	0
TOTAL ...	12	17	31	16	14	90

The following table gives the same relationship for the 115 patients discharged "Improved" :—

Class on Admission	Over 12 months	9-12 months	6-9 months	3-6 months	Under 3 months	Total
T.B. Minus ...	2	6	10	9	11	38
T.B. Plus 1 ...	1	1	2	5	2	11
T.B. Plus 2 ...	15	11	11	20	8	65
T.B. Plus 3 ...	1	0	0	0	0	1
TOTAL ...	19	18	23	34	21	115

The following gives the same relationship for the 108 patients "Not Improved" and "Worse" :—

Class on Admission	Over 12 months	9-12 months	6-9 months	3-6 months	Under 3 months	Total
T.B. Minus ...	4	1	3	3	31	42
T.B. Plus 1 ...	1	0	0	0	1	2
T.B. Plus 2 ...	11	4	3	12	28	58
T.B. Plus 3 ...	0	0	0	3	3	6
TOTAL ...	16	5	6	18	63	108

The following table gives the same relationship for the 8 patients who died :—

Class on Admission	Over 12 months	9-12 months	6-9 months	3-6 months	Under 3 months	Total
T.B. Minus ...	0	0	1	0	0	1
T.B. Plus 1 ...	0	0	0	0	0	0
T.B. Plus 2 ...	1	1	1	2	0	5
T.B. Plus 3 ...	0	1	0	1	0	2
TOTAL ...	1	2	2	3	0	8

The following table gives the same relationship for the 79 who left prematurely of their own accord :—

Class on Admission	Over 12 months	9-12 months	6-9 months	3-6 months	Under 3 months	Total
T.B. Minus ...	0	2	4	4	28	38
T.B. Plus 1 ...	0	0	0	1	2	3
T.B. Plus 2 ...	1	0	2	8	26	37
T.B. Plus 3 ...	0	0	0	0	1	1
TOTAL ...	1	2	6	13	57	79

The following table gives the relationship for the 4 patients who were discharged prematurely for disciplinary reasons :—

Class on Admission	Over 12 months	9-12 months	6-9 months	3-6 months	Under 3 months	Total
T.B. Minus ...	0	1	0	0	0	1
T.B. Plus 1 ...	0	0	0	0	0	0
T.B. Plus 2 ...	0	2	1	0	0	3
T.B. Plus 3 ...	0	0	0	0	0	0
TOTAL ...	0	3	1	0	0	4

119 patients were discharged "T.B. Minus." Patients classified thus are those in whom tubercle bacil have never at any time been demonstrated in the sputum, pleural fluid, faeces, etc. The following shows the basis on which these 119 patients were classified :—

No sputum	.....	.....	.....	48
Sputum negative to direct microscopy				51
Sputum negative to culture			.....	8
Gastric Lavage negative	.....		.....	12

### Sputum of Discharged Patients.

The following table shows the result of sputum examinations made at the time of admission and again at the time of discharge :—

ADMISSION	DISCHARGE		
Positive	Positive	.....	52
Negative	Positive	.....	10
Negative	Negative	.....	135
Positive	Negative	.....	34
Nil	Nil	.....	90
	Total	.....	321

### Family History.

The 551 patients treated during the year gave the following family history as regards tuberculosis :—

Negative	.....	362	(65·69%)
Positive	.....	163	(29·58%)
Indefinite	.....	26	(4·73%)

—  
551

The percentage figures correspond with similar figures recorded in previous years. "Indefinite" histories are those in which a member of the family has died from an unknown cause or has a chest disease that might possibly be of a tuberculous nature although described otherwise by the patient.

## Gain and Loss of Weight.

Excluding patients on "absolute rest" and patients who stayed for less than one month, there were 260 discharged patients for consideration:—

Gained weight	.....	.....	206
Lost weight	.....	.....	36
Remaining Stationary	.....	.....	18
Greatest gain	.....	.....	44 lbs.
Greatest loss	.....	.....	16 lbs.

## Complications and Other Diseases.

Complications, tuberculous or non-tuberculous were present in a number of the patients discharged. The following were the principal ones:—

Tuberculous Pleurisy	.....	.....	24
„ Empyema	.....	.....	5
„ Laryngitis	.....	.....	12
„ Dactylitis	.....	.....	1
„ Wrist Joint	.....	.....	1
„ Knee Joint	.....	.....	1
„ Peritonitis	.....	.....	1
„ Enteritis	.....	.....	3
„ Epididymo-Orchitis	.....	.....	2
„ Meningitis	.....	.....	2
Pulmonary Neoplasm	.....	.....	1
Diabetes Mellitus	.....	.....	3
Arterio-sclerosis	.....	.....	4
Peptic Ulcer	.....	.....	1
Varicose Veins	.....	.....	1
Hæmorrhoids	.....	.....	1
Osteo-myelitis (Non T.B.)	.....	.....	1
Impacted Colles fracture	.....	.....	2
Impacted fracture of humerus	.....	.....	1

## Treatment.

### General Treatment :—

#### (a) REST AND EXERCISE.

The basic routine treatment consisted of graded exercise balanced by periods of rest. The grades of exercise ranged from "bed rest" at one extreme to heavy gardening at the other.

#### (b) OCCUPATIONAL THERAPY.

Instruction in handicrafts and design was given to all patients and claimed the interest of the majority. The subjects selected were varied to suit the requirements and capabilities of the individual patient, but attention was directed chiefly to leather-work, glove-making, doll-making, drawing, hand-painting on silk, toy-making, etc. The results were a credit to the patients themselves and to their Instructress, Miss Nora McCartan. My sole criticism of the arrangements is that instruction on only three days per week is quite inadequate. There is ample work for a full-time Occupational Therapist.

## Special Treatment.

The following are the details of special treatment carried out during the year :—

### ARTIFICIAL PNEUMOTHORAX

Number of patients treated	.....	175
Inductions	.....	91
Refills	.....	3,088
Aspirations	.....	86
Attempted Inductions	.....	25

Of the patients discharged, 98 were treated by

artificial pneumothorax. The results of treatment are given in the following table :—

	Quiescent	Improved	No Material Improve- ment	Worse	Died	Total
T.B. Minus	10	14	3	1	0	28
T.B. Plus 1	3	4	0	0	0	6
T.B. Plus 2	14	27	11	8	2	62
T.B. Plus 3	0	1	0	0	0	1
TOTAL	27	46	14	9	2	98

A case was considered quiescent when the criteria for quiescence, already mentioned, were present and when there was a good collapse over a period of at least 6 months.

The effect of treatment on the sputum of the 98 patients is given below :—

ADMISSION	DISCHARGE	
Positive	Positive	..... 18
Negative	Positive	..... 6
Negative	Negative	..... 44
Positive	Negative	..... 16
Nil	Nil	..... 14
		—
		98

In 34 other cases treatment was terminated for the following reasons :—

Inadequate Collapse	.....	27
Contralateral Spread	.....	2
Obliterative Pleurisy	.....	4
Complications	.....	1
		—
		34

### Phrenic Paralysis.

Phrenic Paralysis was carried out in 38 cases, a crush being performed in each instance. There were accessory branches in about 25%. In each instance the paralysis was supplemented by pneumoperitoneum.

During the year 16 patients were discharged. The results of treatment are shown in the following table :—

	Quiescent	Improved	No Material Improve- ment	Worse	Died	Total
T.B. Minus	2	0	0	0	0	2
T.B. Plus 1	0	1	0	1	0	2
T.B. Plus 2	0	9	2	0	0	11
T.B. Plus 3	0	0	0	0	1	1
TOTAL	2	10	2	1	1	16

The effect of the treatment on the sputum is given below :—

ADMISSION	DISCHARGE		
Positive	Positive	.....	2
Negative	Positive	.....	3
Negative	Negative	.....	7
Positive	Negative	.....	3
Nil	Nil	.....	1
			16

### Pneumoperitoneum.

This form of treatment was used in each instance to supplement phrenic paralysis. The following are the details :—

Number of patients treated	65
Inductions	48
Refills	1,335

In two instances pneumoperitoneum had to be terminated because of digestive disturbances resulting in progressive loss of weight. In one instance it was terminated because of fluid-formation in the peritoneal cavity.

As mentioned above pneumoperitoneum was used solely as a supplement to phrenic paralysis. The results of treatment and effect on the sputum therefore are to be found under that heading.

### Thoracoscopy.

Thoracoscopy with adhesion section was performed in 27 instances, thoracoscopy alone in 12 instances.

### Thoracoplasty.

The absence of facilities in the Corporation Institutions still greatly handicaps the application of major thoracic surgery. Only 6 patients received this treatment. Of the patients discharged seven had thoracoplasty and of these four were quiescent and one improved.

### X-Ray Department.

The year's work in this Department is set out below :—

Number of Films	.....	1,131
Screen Examinations	.....	2,234

The following shows the extent of disease in the 551 patients treated—

—	Unilateral	Bilateral	Total
Minimal ...	103	20	123
Moderately Advanced ...	134	197	331
Far Advanced ...	29	68	97
TOTAL ...	266	285	551

“ Minimal :—Slight lesions, without demonstrable cavitation, confined to a small part of one or both lungs. The total extent of the lesions, regardless of distribution, shall not exceed the equivalent of the volume of lung tissue which lies above the second chondro-sternal junction and the spine of the fourth or body of the fifth thoracic vertebra on one side.”

“ Moderately advanced :—One or both lungs may be involved, but the total extent of the lesions shall not exceed the following limits : Slight disseminated lesions which may extend through not more than the volume of one lung, or the equivalent of this in both lungs.

Dense and confluent lesions which may extend through not more than the equivalent of one-third the volume of one lung.

Any gradation within the above limits. Total diameter of cavities, if present, estimated not to exceed 4 cm.”

“ Far advanced :—Lesions more extensive than moderately advanced.”

The above are the definitions used for the purposes of classification in the United States.

Cavities were present in 62 of the unilateral cases and in 109 of the bilateral.

Turning to the 321 patients discharged and applying the United States classification, which is based on the X-ray appearances, the following shows the results of treatment :—

Class on Admission	Quiescent	Im- proved	No Material Improve- ment	Worse	Died	Total
Minimal ...	47	23	11	*2	1	84
Moderately advanced	43	67	55	15	5	185
Far advanced	0	25	16	9	2	52
TOTAL ...	90	115	82	26	8	321

\* Includes one case of pulmonary neoplasm.

N.B.—The X-ray appearances are those existing at the time of admission, and the table serves to illustrate the progress made from that time up to the time of discharge.

Cavities were present in 89 of the above cases on admission, but only 11 of these became “quiescent.”

It is of interest to note that of the 551 patients treated 41 had no symptoms and their lesions were discovered as a result of mass radiography. In 14 the lesions were “minimal,” in 24 “moderately advanced,” and in 13 “far advanced.”

### Ear, Nose and Throat Department.

The work of this Department was carried out by Dr. C. D. O’Connell, Visiting Laryngologist, who visited the Sanatorium at fortnightly intervals. He saw 299 patients and made 490 examinations. In addition to patients with symptoms, all new patients are sent to this Department for routine examination.

The following shows the results of examinations :—

E.N.T. Normal	.....	.....	256
Tuberculous Laryngitis	.....	.....	14
Chronic simple Laryngitis	.....	.....	9
Acute Catarrhal Laryngitis	.....	.....	8
Functional Larynx	.....	.....	1
Deflected Nasal Septum	.....	.....	3
Chronic Rhinitis	.....	.....	1
Catarrhal sinusitis	.....	.....	3
Chronic Pharyngitis	.....	.....	1
Obstruction of Eustachian Tube	.....	.....	1
Chronic Otitis Media	.....	.....	3
Catarrhal Otitis Media	.....	.....	1
Inflamed Tympanic Membrane	.....	.....	1

In addition Dr. O’Connell performed bronchoscopy on two occasions.

**Laboratory.**

Sputum is examined only by direct microscopy and 1,073 examinations were made. Culture examinations of sputum and gastric lavage are made in the city Bacteriological Department.

The number of examinations of the Blood Sedimentation rate was 785.

**Recreation.**

Cinema performances are given weekly and in addition there were a number of visits by Concert Parties which were very much appreciated. In particular I wish to record our indebtedness and thanks to the Entertainments Corps of the Irish Red Cross Society and to the talented team of artistes whom they brought on two occasions. I wish to record our thanks also to the Hospitals Library Council for the provision of new books for the library and for repair and replacement of old ones.

The usual home and away billiard matches were played with the patients of Peamount Sanatorium.

**Patients' Retreat.**

The annual week-end Retreat was held in October. The Spiritual Director was Rev. Fr. W. Maguire, S.J.

**Staff.**

During my absence in Scandinavia my duties as Resident Medical Superintendent were taken over by Dr. M. Hanrahan, Assistant Medical Officer, and he carried out these duties in a thoroughly competent manner. The House Physicians for the year were Dr. J. Carey (January—June), and Dr. B. O'Gorman (July—December). I wish to thank all the Medical

Officers for their invaluable assistance. I wish to thank Miss E. Hogan, Matron for her loyal co-operation, also the Nursing and Office Staffs for their unfailing attention to duty. Lastly I wish to thank all those other employees without whom the smooth running of the Sanatorium would have been an impossibility.

ARTHUR J. WALSH,

R.M.S.

**Rialto Hospital**  
and  
**Tuberculosis Hospital, Pigeon House Rd.**

RIALTO HOSPITAL.

The two new ward extensions and kitchen department started in September, 1944, were completed during the year, and were opened for the acceptance of patients in December. They will provide extra accommodation for 48 male and 48 female patients. On account of the large waiting list for city patients to tuberculosis institutions, it was decided to retain for the present the original number of beds in the old wards, and not to reduce this number, as was intended so as to provide a total bed accommodation of two hundred and forty. The present bed capacity is thus two hundred and seventy-three.

Work on the new administration and medical block has not started yet, but it is understood that everything is ready to proceed immediately in the new year. This, when finished will complete the present building programme, but, as I have already reported, the hospital cannot be regarded as self-sufficient without the addition of accommodation for nursing and domestic staffs, a laundry, a mortuary and post-mortem room.

The offer last year of surgical facilities by the authorities of Peamount Sanatorium has not worked

out satisfactorily in practice, in that the number of patients which could be admitted for thoracoplasty operations was very small—in fact only two patients were operated on early in the year, whilst for some six months past it has not been possible to get any cases admitted for major surgery. The voluntary hospitals in the city are virtually closed to us in this respect, and thus the position regarding facilities for thoracic surgery continues to constitute an unsolved problem so far as this hospital is concerned. With the building not yet started, it cannot be hoped that theatre facilities will be available in the hospital for at least eighteen months.

Treatment, as in previous years, has continued along conventional lines, and has consisted mainly in the application of minor collapse therapy in the relatively few suitable cases admitted to this hospital. An extended trial was given during the year to treatment of pulmonary tuberculosis with calciferol, but without any evidence of its value as a therapeutic agent. Treatment of tuberculous empyema by instillation of sterile cod-liver oil continues to give satisfactory results in a majority of cases. Sanocrysin has been losing favour and was given in only a few cases. Streptomycin has so far been tried only in two cases, so that it is not yet possible to assess its value.

Recreation for the patients consisted as in previous years of concert parties by voluntary groups, fortnightly cinema shows, whist drives and other competitions amongst the patients, in addition to the usual indoor and outdoor games—billiards, clock-golf, etc.

Library facilities are supplied by the Hospital Library Council and administered by the nursing staff.

Instruction in occupational therapy is still avail-

able on only two days a week in Rialto Hospital, and on half a day in the Tuberculosis Hospital, Pigeon House Road.

During the year a Catering Superintendent and a Storekeeper have been added to the Staff. House Physicians holding office during the year were Drs. John Corridan, J. K. Moynihan, Stephen Cox, and L. B. Godfrey.

### 1.

Total Number of Patients treated in 1947 .....	434
Total number of admissions .....	318
Total number of patients admitted .....	261
Discharges .....	186
Patients discharged .....	168
Deaths .....	107
In hospital on 31st December, 1946 .....	173
In hospital on 31st December, 1947 .....	195
Daily percentage bed occupancy .....	98%
Cost per patient per day .....	9/4d.

### 2. Classification on admission.

	T.B.—	T.B.+1	T.B.+2	T.B.+3	No T.B.	Not classified
Male ...	22	2	63	44	0	0
Female ...	41	4	43	42	0	0

### 3. Classification following institutional investigation.

	T.B.—	T.B.+1	T.B.+2	T.B.+3	No T.B.	Investigation not completed
Male ...	6	2	69	48	1	5
Female ...	7	5	51	56	0	11

### 4. Age Groups on Admission.

	Under 15	15/24	25/34	35/44	45/54	55/64	65 and over
Male ...	0	35	39	27	16	10	4
Female ...	0	56	40	25	6	1	2

### 5. Family History.

	Positive	Negative	Doubtful
Male .....	34	70	27
Female .....	33	80	17

## 6. Length of Time in Hospital.

	0/7 days	7/30 days	1/2 mths.	2/3 mths.	3/6 mths.	6/9 mths.	9/12 mths.	Over 1 year
Male ...	14	22	8	24	33	13	14	27
Female ...	11	18	14	12	21	11	7	26

## 7. Classification on Discharge.

	T.B.—	T.B.+1	T.B.+2	T.B.+3	Non- Pul.	No T.B.	Not classified
Male ...	8	5	42	38	0	1	0
Female ...	11	5	36	22	0	0	0

## 8. Sputum on Discharge.

	Nil	Pos. to Neg.	Pos. to Pos.	Neg. to Neg.	Neg. to Pos.
Male ...	3	8	75	7	1
Female ...	1	11	51	9	2

## 9. Reason for Discharge.

	Own Accord	Dismissed	Trans- ferred	Recom- mended	Died
Male ...	71	9	8	6	61
Female ...	53	1	11	9	46

## 10. Results on Discharge.

	Quiescent	Improved	No Change	Worse	Non- T.B.	Not classified
Male ...	7	32	41	13	1	0
Female ...	10	19	36	9	0	0

Sputum investigation of patients with disease quiescent on discharge :—

- (a) No sputum ..... 1
- (b) Sputum Negative on direct micro-  
copy only ..... 7
- (c) Sputum negative on culture ..... 5
- (d) Negative on gastric lavage culture 4

“ Quiescent ” is applied to a person with no symptoms of Tuberculous disease, except such as are compatible with a completely healed lesion, and in whom the sputum, if present, is free from tubercle bacilli.

### 11. Number discharged with disease quiescent—Duration of treatment.

Class. for Inst. Inves.	No. admitted	Under 3 mths.	3/6 mths.	6/9 mths.	9/12 mths.	Over 12 mths.
Tub. Minus ...	13	3	4	1	2	2
Tub. Group 1	7	0	0	0	0	4
Tub. Group 2	108	0	0	0	0	1
Tub. Group 3	116	0	0	0	0	0

### 12. Number discharged—Condition improved—Duration of Treatment.

	Under 3 mths.	3/6 mths.	6/9 mths.	9/12 mths.	Over 12 mths.
Tub. Minus ...	1	1	1	1	0
Tub. Group 1	0	1	0	0	3
Tub. Group 2	5	4	4	2	11
Tub. Group 3	2	3	2	1	1

### 13. Number discharged—Condition not improved—Duration of Treatment.

	Under 3 mths.	3/6 mths.	6/9 mths.	9/12 mths.	Over 12 mths.
Tub. Minus ...	2	1	0	0	0
Tub. Group 1	3	0	0	0	0
Tub. Group 2	32	6	3	0	8
Tub. Group 3	19	10	6	6	3

14. Number who left prematurely of their own accord—  
Duration of Treatment.

	Under 3 mths.	3/6 mths.	6/9 mths.	9/12 mths.	Over 12 mths.
Tub. Minus ...	4	1	0	1	1
Tub. Group 1	1	1	0	0	4
Tub. Group 2	28	16	6	2	17
Tub. Group 3	15	12	6	5	4

15. Number discharged prematurely for disciplinary  
reasons etc.—Duration of Treatment.

	Under 3 mths.	3/6 mths.	6/9 mths.	9/12 mths.	Over 12 mths.
Tub. Minus ...	0	0	0	0	1
Tub. Group 1	0	0	0	0	1
Tub. Group 2	0	2	0	0	2
Tub. Group 3	1	1	2	0	0

16. Number who died—Duration of Treatment.

	Under 3 mths.	3/6 mths.	6/9 mths.	9/12 mths.	Over 12 mths.
Tub. Minus ...	0	0	0	0	0
Tub. Group 1	1	0	0	0	0
Tub. Group 2	3	3	0	0	0
Tub. Group 3	50	19	6	7	19

17. Patients admitted with unconfirmed diagnosis of  
tuberculosis.

Male	.....	.....	22
Female	.....	.....	41

Classification following institutional investigation.

	T.B.—	T.B.+1	T.B.+2	T.B.+3	Non- Tub.	Investigation not completed on 31/12/47
Male ...	6	0	6	4	1	5
Female ...	7	1	8	14	0	11

## —Basis of classification of T.B. Minus Group

(a) No sputum	.....	.....	.....	2
(b) Sp. Negative on direct microscopy only	.....	.....	.....	0
(c) Sp. Negative on culture	.....	.....	.....	9
(d) Sp. Negative on gastric lavage culture				2

**18. Treatment.**

## (a) Artificial Pneumothorax—

Cases treated	.....	.....	.....	54
Attempted inductions	.....	.....	.....	29
Abandoned	.....	.....	.....	3
Effusions	.....	.....	.....	10
Refills	.....	.....	.....	665

## (b) Artificial Pneumoperitoneum.

Cases treated	.....	.....	.....	63
Abandoned	.....	.....	.....	19
Refills	.....	.....	.....	1,857

## (d) Gold therapy—

Number of cases treated	.....	.....	.....	3
Number of injections	.....	.....	.....	36

## (d) Phrenic N. Paralysis—

Cases treated	.....	.....	.....	37
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## (e) Adhesion section—

Cases treated	.....	.....	.....	6
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(f) Thoracoplasty—			
Cases treated .....	.....	.....	2
(g) Aspiration of Pleural Effusions—			
Number of aspirations .....	.....	.....	109
(h) Penicillin therapy—			
Number of cases treated .....	.....	.....	14
(i) Streptomycin therapy—			
Number of cases treated .....	.....	.....	2

## 19. Investigations.

(a) X-ray examinations .....	.....	.....	573
(b) Fluoroscopy .....	.....	.....	371
(c) Sputum examinations .....	.....	.....	552
(d) B.S.R. ....	.....	.....	606
(e) Mantoux tests .....	.....	.....	17
(f) Gastric lavage .....	.....	.....	32

## 20. Complications.

Laryngitis .....	29	T.B. Meningitis .....	3
Enteritis .....	46	Pleural effusions .....	2
Ischio-rectal		T.B. Empyema .....	10
abscess .....	2	Diabetes .....	2
T.B. Spine .....	2	T.B. Cervical	
T.B. Wrist .....	1	Adenitis .....	1
T.B. Kidney .....	3	Amyloid Disease .....	1
T.B. Epididymitis .....	0	Spontaneous	
T.B. Knee .....	1	Pneumothorax .....	2

**Complications—continued.**

T.B. Hip	.....	1	T.B. Sacro-iliac		
Syphilis	.....	2	disease	.....	2
Rheumatoid			T.B. Ulcer of		
Arthritis	.....	1	tongue	.....	1
Schizophrenia	.....	1	Psoriasis	.....	1
			Measles	.....	1

**21. Diseases other than Tuberculosis.**

Bronchiectasis	.....	.....	.....	.....	1
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**TUBERCULOSIS HOSPITAL, PIGEON HOUSE, ROAD.**

Total number of admissions	.....	.....	129
Total number of discharges	.....	.....	87
Total number of deaths	.....	.....	45

**Classification on Admission.**

T.B.—	T.B.+1	T.B.+2	T.B.+3	Not classified
23	2	37	66	1

**Classification following Investigation.**

T.B.—	T.B.+1	T.B.+2	T.B.+3	Non-Tub.
13	2	41	71	1

**Length of time in Hospital.**

0/7 days	7/30 days	1/3 mths.	3/6 mths.	6/9 mths.	9/12 mths.	Over 1 year
13	16	16	46	21	10	10

**Classification on Discharge.**

T.B.—	T.B.+1	T.B.+2	T.B.+3	Non-Tub.
10	1	44	31	1

### Number Discharged with Disease Quiescent.

#### Duration of Treatment.

Classification following Institutional Investigation.	Number Admitted	Under 3 months	3-6 months	6-9 months	9-12 months	Over 12 months
Tub. Minus ...	13	3	4	1	2	2
Tub. Group 1 ...	7	—	—	—	—	4
Tub. Group 2 ...	108	—	—	—	—	1
Tub. Group 3 ...	116	—	—	—	—	—

NOTE.—“ Quiescent ” is applied to a person with no symptoms of tuberculous disease, except such as are compatible with a completely healed lesion, and in whom the sputum, if present, is free from tubercle bacilli.

### Number Discharged—Condition Improved.

#### Duration of Treatment.

Classification following Institutional Investigation	Number Admitted	Under 3 months	3-6 months	6-9 months	9-12 months	Over 12 months
Tub. Minus ...	—	1	1	1	1	0
Tub. Group 1 ...	—	0	1	0	0	3
Tub. Group 2 ...	—	5	4	4	2	11
Tub. Group 3 ...	—	2	3	2	1	1

**Number Discharged—Condition no tImproved.**

**Duration of Treatment.**

Classification following Institutional Investigation	Number Admitted	Under 3 months	4-6 months	7-9 months	10-12 months	Over 12 months
Tub. Minus ...	—	2	1	—	—	—
Tub. Group 1 ...	—	3	6	3	—	—
Tub. Group 2 ...	—	32	10	6	—	8
Tub. Group 3 ...	—	19	—	—	6	3

**Number who left prematurely of their own accord.**

**Duration of Treatment.**

Classification following Institutional Investigation	Number Admitted	Under 3 months	4-6 months	7-9 months	10-12 months	Over 12 months
Tub. Minus ...	—	4	1	0	1	1
Tub. Group 1 ...	—	1	1	0	0	4
Tub. Group 2 ...	—	28	16	6	2	17
Tub. Group 3 ...	—	15	12	6	5	4

### Number Discharged prematurely for Disciplinary Reasons, etc.

#### Duration of Treatment.

Classification following Institutional Investigation	Number Admitted	Under 3 months	4-6 months	7-9 months	10-12 months	Over 12 months
Tub. Minus ...	—	—	—	—	—	1
Tub. Group 1 ...	—	—	—	—	—	1
Tub. Group 2 ...	—	—	2	—	—	2
Tub. Group 3 ...	—	1	1	2	—	—

### Number who Died.

#### Duration of Treatment.

Classification following Institutional Investigation	Number Admitted	Under 3 months	4-6 months	7-9 months	10-12 months	Over 12 months
Tub. Minus ...	—	1	—	—	—	—
Tub. Group 1 ...	—	1	—	—	—	—
Tub. Group 2 ...	—	3	3	—	—	—
Tub. Group 3 ...	—	50	19	6	7	19

J. DUFFY, Medical Superintendent.

## Mass Radiography Centre.

The Corporation Mass Radiography Centre continued to function throughout the year. The apparatus was used part-time for mass radiography and part-time for taking routine full-size radiographs for the Corporation Clinics.

Miniature surveys were carried out on workers from Tobacco, Match, Soap, Brewing and other works, also on sections of the Civil Service and Insurance Company employees, and in addition Clerical Students, Technical School Students and Boys Club members were examined. Sessions open to all and duly advertised in the public Press were held for the general public, to further facilitate them some of these sessions were held at night.

A fresh feature was the setting aside of special days each month for the mass radiography of Mothers attending the ante-natal clinics and Child Welfare Centres.

The total number examined by miniature radiography was 8,925 amongst whom there were found 164 cases of active pulmonary tuberculosis and 296 observation cases. Of the cases of active pulmonary tuberculosis it can be estimated that approximately 45% of them were either (a) already diagnosed on a former occasion at a tuberculosis dispensary or hospital, or (b) cases referred for X-ray by their own Doctor, these therefore could not be regarded as cases of hitherto unsuspected pulmonary tuberculosis. Therefore, only taking into consideration the remaining 55%, it would

seem that in the aggregate of the groups of people examined by mass radiography during the year, there were approximately ten cases per thousand of active pulmonary tuberculosis not otherwise diagnosed. Comparison of this figure with the 3·5 cases per thousand people examined with active pulmonary tuberculosis which is the figure for Britain, or the one to three cases per thousand, which is the average finding in Sweden, indicates the urgency and value of Mass Radiography in Dublin.

Two days each week were devoted to the taking of large X-ray films of chest and orthopædic cases for the Corporation Clinics, total number examined during the year was 3,658.

M. G. MAGAN,  
*Medical Director.*

### Domiciliary Welfare Branch.

The Domiciliary Welfare Scheme commenced in December, 1943. During the year under review the following assistance was rendered by this Branch:—

	Male	Female	Total
Vouchers issued .....	44,634	48,810	93,444
Weekly average .....	858	938	1,797

**Bed and Bedding**—Applications completed during year ..... 287

**Clothing**—Applications completed during year 868

## Report of Dr. Donelan on the Operation of the Scabies Clinic during 1947.

During the year 1947, 25,609 treatments for scabies were given as compared with 32,622 in 1946. 14,848 persons were treated of whom 10,761 completed their second treatment. These figures do not reveal the true position, as it frequently happens that members of a family suffering from scabies are treated but those not apparently affected do not attend until itching begins, despite advice that they should be treated. If itching begins soon after the others have attended the Clinic, those who have already been treated are advised to have one treatment on the day that the others are having their second treatment and they are registered as having a first treatment of a second course. When allowance is made for the fact the numbers who do not complete treatment is probably about 15% instead of 28%.

The routine of treatment was the same as in previous years during the first quarter of the year, but the strike of the Wholesale Chemists necessitated a change as benzoyl benzoate emulsion was unavailable.

Tethosol-Tetraethyl thiauram monosulphide (I.C.I.) was used and the results were as satisfactory as with benzoyl benzoate emulsion. It was found to have the following advantages (1) caused less irritation on application when there was associated gross septic infection, (2) caused less burning sensation on the more tender skin of children and (3) may be used in cases in which benzoyl benzoate has previously caused a dermatitis. No cases of Tetrosol dermatitis were seen in approximately 3,500 cases treated. The disadvantages were (1) requires to be diluted 1 : 2 immediately before use, (2) more difficult to apply as it does not

spread as easily as the benzoyl benzoate emulsion (3) costs about 25% more than benzoyl benzoate emulsion. As a result of this experience, benzoyl benzoate emulsion is used as the routine treatment for all cases above 12 years, and Tetrosol for all cases below 12 years and for all cases with secondary infection of incidental eczema or dermatitis.

With the reduction of numbers of cases of scabies the proportion of persons who present themselves for treatment who are suffering from the condition has increased, and it is difficult to persuade many of them that "all that itches is not scabies."

Almost every condition seen in a Dermatological Department has been seen during the year. An enormous reduction in the number of cases of pediculosis corporis has been noted for which the new parasiticides deserve great credit.

Urticaria appears to be the most difficult condition to differentiate from scabies and a few notes on the differential diagnosis may be of value.

Cases may be divided into those with more or less than three weeks of itching.

History less than three weeks:—

Urticaria	Scabies.
(1) Sudden onset.	(1) Gradual onset but constant increase.
(2) May have been freedom from symptoms for one or more nights.	(2) No nights of complete freedom from scratching.
(3) Different parts of the body affected on different nights.	(3) Parts affected tend to remain affected although there may be extension to other parts.

The hands may be affected and the itch is worst at

night, in both conditions. Burrows may be impossible to find in cases of less than three weeks' history of itching.

More than three weeks history :—

As above, but burrows should be visible in cases of scabies, and the longer the history the less the excuse for failing to make a correct diagnosis.

In infants and small children, burrows are more frequently found on the feet than on the hands.

### **VENEREAL DISEASE.**

The Venereal Disease Service provided by the Corporation under the Public Health (Venereal Diseases) Regulations, 1917, includes arrangements with Sir Patrick Dun's and Dr. Steeven's Hospitals for the holding of sessions in these hospitals for the investigation of persons attending there, and the treatment—as intern or extern patients—of those found with venereal disease. During the course of the year similar arrangements were made by the Corporation with the Mater Hospital and St. Margaret of Cortona Hospital—the latter an institution devoting itself entirely to the treatment of venereal disease in women and children. In addition, practitioners are provided with laboratory facilities and are issued with anti-venereal drugs.

However, it is becoming increasingly clear that the proper control of venereal disease requires more than the setting up of clinics for examination and treatment. In addition, methodical efforts should be made to trace all persons whom the patient may have infected. In the case of venereal disease, spread almost entirely in one way, this should be ever so much easier for trained workers to accomplish than in the case of, say air-

borne infections. Efforts should also be made to persuade those who have defaulted to continue treatment until satisfactory test of cure has been established.

Every Centre undertaking the investigation and treatment of venereal disease should, therefore, include among its personnel trained visitors who would persuade contacts to attend for examination, and defaulters to return to treatment. In this respect, an interesting innovation has been the appointment to the St. Margaret Hospital of an Almoner with special experience of this work to my knowledge the first of its type in the City.

A feature of the Venereal Disease Scheme is that the clinics are under the direction of the hospitals in which they are located, and have little connection with each other. This makes it very difficult to achieve the standardisation of many aspects of an anti-venereal disease drive, i.e., education, propaganda, case-finding, tests for cure, etc. Indeed in present circumstances, patients may wander from one hospital to another unknown to the medical personnel concerned, and other forms of overlapping may also occur.

In these circumstances, it would seem an improvement if the activities of these clinics were co-ordinated by the appointment of a Venereologist, under whose direction all aspects of the approach to the anti-venereal disease problem could be unified.

Included is data received from the Dr. Steeven's Hospital centre. No data was received from Sir Patrick Dun's Hospital, while the agreements with the Mater and St. Margaret Hospitals were concluded too late in the year to permit of a report for 1947.

### Return from Dr. Steeven's Hospital.

1. Number of persons attending Out-patients Department for the first time during 1947	802
2. Number of these persons found to have—	
(a) Syphilis	384
(b) Gonorrhoea	404
	— 788
3. Number of old and new patients attending Out-Patients Department during 1947	2,587

Other information requested, covering family contacts examination together with details of attendances of old and new patients for treatment, were not available.

# VERGEMOUNT FEVER HOSPITAL CLONSKEAGH

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## ANNUAL REPORT

FOR THE YEAR ENDED 31ST DECEMBER, 1947.

BY

F. N. ELCOCK, L.R.C.P.S.I., D.P.H.,  
Resident Medical Superintendent.

During the year ended 31st December, 1947, one thousand, four hundred and seven cases were admitted to Vergemount Fever Hospital. 116 cases remained in hospital at the close of the year 1946, and the total number under treatment was 1,523. There were 128 deaths and 1,395 were discharged cured.

The mortality rate for all cases under treatment was 8·4 per cent as compared with 6·9 per cent in 1946, and 6·6 per cent in 1945.

The number of admissions for the year showed an increase of three hundred and one cases from the previous year.

Diphtheria admissions again showed a decrease as compared with preceding years. This disease caused two deaths.

Measles, Whooping Cough and Scarlet Fever accounted for approximately 45% of the total admissions.

One case of Smallpox was admitted from a boat plying between America and Dublin—a sailor whose infection was modified by vaccination.

The health of both the Nursing and Domestic Staffs (working daily in a Fever Hospital) was satisfactory.

One Doctor contacted Influenza ; two nurses developed Tonsillitis ; one nurse Influenza ; one nurse Laryngitis ; one nurse Jaundice ; one nurse Bronchitis ; and one nurse Choleystitis. Thirty members of the Domestic Staff were treated for such complaints as Influenza, Laryngitis, Quinsy, Enteritis, Gastritis, Mumps and Whitlows.

Dr. Fitzgerald, Senior House Physician, left the staff on the 30th June, 1947, having completed his period of office. Dr. McQuillan was promoted to Senior House Physician, and Dr. Power was appointed Junior House Physician.

Miss Ryan was appointed Catering Superintendent and took up duty on the 1st July.

Numerous repairs and improvements were carried out both in the Hospital and Nurses' Home during the year.

A supply of turf, approximately 1,500 tons, was clamped in the grounds for an emergency.

Clinical instruction in Infectious Diseases was given to final year students of National University, Trinity College and the Royal College of Surgeons. A course in Fevers was also given to candidates seeking the Diploma in Child Health. For the first time a Post-graduate course was given to Public Health Nurses during the latter part of the year.

Cases of Gastro-Enteritis were admitted when beds were not available in St. Clare's Hospital, Glasnevin. the ambulance service for St. Clare's Hospital was continued throughout the year.

I would like to thank Doctors Fitzgerald, McQuillan and Power for their loyal co-operation during a busy year ; also the nursing staff under the capable supervision of the Matron, Miss Cusack. To Mr. Bouchier Hayes (Consulting Surgeon), to Mr. Alan Mooney (Ophthalmic Surgeon), and to Doctors O'Callaghan

and Meenan (Bacteriologists), my best thanks are due for their advice during the year.

I wish to make special mention in recording my indebtedness and thanks to Dr. Russell, Medical Officer of Health, who resigned during the year, for his guidance and help during the past ten years.

TABLE I.

SHOWING THE NUMBER OF ADMISSIONS AND THE NUMBER OF DEATHS FOR THE YEAR ENDING 31ST DECEMBER, 1947.

Disease	Number of Cases Admitted	Number Died	Case Mortality
Measles ... ..	250	7	2·80
Pertussis ... ..	208	46	22·11
Scarlet Fever ... ..	171	—	—
Tonsillitis ... ..	122	—	—
Diarrhoea and Enteritis (under 2 years) ... ..	93	27	29·03
Lobar Pneumonia ... ..	58	1	1·72
Rubella ... ..	35	—	—
Diphtheria ... ..	30	2	6·66
Varicella ... ..	25	—	—
Bronchopneumonia ... ..	24	12	50·00
Enteritis (Adult) ... ..	16	—	—
Erysipelas ... ..	15	—	—
Tuberculous Meningitis ... ..	15	15	100·00
Meningococcal Meningitis ... ..	13	2	15·38
Epidemic Parotitis ... ..	13	—	—
Poliomyelitis ... ..	9	3	33·33
Quinsy ... ..	9	—	—
Vincent's Angina ... ..	6	—	—
Rheumatic Fever ... ..	5	—	—
Pneumococcal Meningitis ... ..	2	1	50·00
Influenzal Meningitis ... ..	1	—	—
Enteric Fever ... ..	1	—	—
Variola ... ..	1	—	—
Miscellaneous ... ..	285	12	4·21
	1,407	128	9·09

## DIPHThERIA.

Thirty cases were admitted which shows a decrease of 29 from the previous year, as compared with a decrease of 204 for the year 1945. There were two deaths, giving a mortality rate of 6.66 per cent. as compared with 3.39 per cent. for the year 1946, and 6 per cent. in 1945. Of the two deaths, one, a baby of two years, was admitted in the last stages of Laryngeal Diphtheria following Measles and was beyond medical aid; the other, a woman of thirty-six years suffering from Rectal Carcinoma, died on the tenth week from Respiratory Paralysis. Both these cases had not been immunised.

A perusal of Table III shows the number of admissions and deaths for the past nine years.

TABLE II.

SHOWING DIPHTHERIA CASES CLASSIFIED IN AGE AND SEX GROUPS FOR THE YEAR 1947.

—	0-4	5-9	10-14	15-24	25+>	Total
Male ...	9	1	1	2	—	13
Female	6	3	—	3	5	17
						—
						30
						—
<i>Died.</i>						
Male ...	—	—	—	—	—	—
Female	1	—	—	—	1	2
	—	—	—	—	—	2

TABLE III.

SHOWING THE NUMBER OF DIPHTHERIA ADMISSIONS, THE NUMBER OF DEATHS AND THE CASE MORTALITY FOR THE YEARS 1939-47.

Year	Number of Cases Admitted	Number Died	Case Mortality
1939 ...	214	32	14.95
1940 ...	155	19	12.25
1941 ...	118	15	12.62
1942 ...	309	25	8.09
1943 ...	671	37	5.51
1944 ...	569	37	6.50
1945 ...	234	14	6.00
1946 ...	59	2	3.40
1947 ...	30	2	6.33

### SCARLET FEVER.

One hundred and seventy-one cases were admitted for the year, which shows an increase of 68 from the previous year as compared with a decrease of 48 for the year 1945. There were no deaths. The type in general was mild. Scarlet Fever Antitoxin gave best results, shortening hospital isolation to approximately three weeks. No evidence of return cases was noted. The following complications were met with, viz. :—

ADENITIS.

OTORRHOEA.

RHINORRHOEA.

ABSCESSSES.

WHITLOWS.

SEPTIC SKIN

INFECTIONS.

ARTHRITIS.

ALBUMINURIA.

CARDITIS.

ENDOCARDITIS.

### CONCURRENT INFECTIONS.

Three cases on admission suffered concurrently with Scarlet Fever and Varicella; one with Scarlet Fever

and Pertussis; and one with Scarlet Fever and Diphtheria. All made good recoveries.

Table V shows the number of Scarlet Fever admissions for the past nine years.

TABLE IV.

SHOWING THE NUMBER OF SCARLET FEVER CASES CLASSIFIED IN AGE AND SEX GROUPS FOR THE YEAR 1947.

	0-4	5-9	10-14	15-24	25+>	Total
Male ...	25	29	9	4	4	71
Female	27	42	19	8	4	100
	52	71	28	12	8	171

TABLE V.

SHOWING THE NUMBER OF SCARLET FEVER ADMISSIONS, THE NUMBER OF DEATHS AND THE CASE MORTALITY FOR THE YEARS 1939-1947.

Year	Number of Cases Admitted	Number Died	Case Mortality
1939 ...	193	—	—
1940 ...	172	2	1.16
1941 ...	167	—	—
1942 ...	291	—	—
1943 ...	129	—	—
1944 ...	129	—	—
1945 ...	123	—	—
1946 ...	103	—	—
1947 ...	171	—	—

## MEASLES.

Two hundred and fifty cases were treated in the wards during the year, which shows an increase of 180 from the previous year. There were seven deaths, giving a mortality rate of 2.8 per cent, as compared with 10 per cent. in 1946. An analysis of these deaths is shown in Table VII. The complications noted in the recovered cases were as follows :—

BRONCHO-  
PNEUMONIA.  
LARYNGITIS.  
OTITIS MEDIA.

RHINORRHOEA.  
CONJUNCTIVITIS.  
ENTERITIS.

Placental extract (Immune globulin) was again administered for attenuation in weakly babies. Gamma Globulin replaced Immune Globulin during the latter part of the year.

TABLE VI.

SHOWING THE NUMBER OF MEASLES ADMISSIONS, THE NUMBER OF DEATHS AND THE CASE MORTALITY FOR THE YEARS 1939-47.

Year	Number of Cases	Number Died	Case Mortality
1940 ...	46	4	8.70
1941 ...	108	7	6.48
1942 ...	43	3	6.97
1943 ...	13	—	—
1944 ...	45	—	—
1945 ...	81	2	2.47
1946 ...	70	7	10.00
1947 ...	250	7	2.80
	656	30	4.57

TABLE VII.

SHOWING AN ANALYSIS OF DEATHS FROM MEASLES FOR THE YEAR 1947.

Ref. No.	Age and Sex.	Days ill before Admission.	Observations.
694	1 4/12 yrs. Female.	7	Moribund on admission—lived 3 hours—Suffocative Measles.
765	1 1/12 yrs. Female.	14	Weakly Baby. Complicated by Tuberculous Bronchopneumonia and Enteritis. Died 6 weeks after admission.
819	5 weeks Female.	1	Prior to admission under treatment for Gastro-Enteritis, Otitis Media, Thrush and Rhinitis. Did not respond to treatment. Died on 9th day from Enteritis.
821	10 weeks Male.	3	Too young to overcome disease. Died from Enteritis in fourth week. Mother had recent attack of Measles.
925	2½ months Female.	6	Condition very low on admission. Severe Gastro-Enteritis. Died 15th day.
1052	1 4/12 yrs. Male.	5	Laryngitis (Diphtheritic) on admission. Tracheotomy. Dies 2 days later.
1374	6 months Female.	4	Poorly on admission. Developed Bronchopneumonia. Died 17th day.

### PERTUSSIS.

Two hundred and eight cases were admitted, showing an increase of 99 from the previous year, as compared with an increase of 167 for 1945. There were forty-six deaths, giving a mortality of 22.11 per cent. as compared with 20 per cent. in 1946.

The cause of death in these cases was as follows:—  
19 from Bronchopneumonia; 9 from Enteritis; 7 from Pulmonary Tuberculosis; 6 from Concurrent Bronchopneumonia and Gastro-Enteritis; 2 from In-

tracranial Haemorrhage; 2 from Marasmus and 1 from acute Cardiac failure and Emphysema. All these babies were under two years.

Many of these cases were sent to Hospital too late to benefit by treatment.

TABLE VIII.

SHOWING THE NUMBER OF PERTUSSIS ADMISSIONS, THE NUMBER OF DEATHS AND THE CASE MORTALITY FOR THE YEARS 1940—1947.

Year	Number of Cases Admitted	Number Died	Case Mortality
1940	25	5	20·00
1941	69	11	15·95
1942	64	16	25·00
1943	10	1	10·00
1944	12	2	16·66
1945	42	6	14·28
1946	110	22	20·00
1947	208	46	22·48
	540	109	20·18

### DIARRHOEA AND ENTERITIS (UNDER TWO YEARS).

Ninety-three babies were admitted for treatment, showing an increase of 32 from the previous year, as compared with 41 for the year 1945. There were twenty-seven deaths, giving a case mortality rate of 29 per cent. In the year 1946, the case mortality rate was 29·5 per cent. and in 1945, 30 per cent.

TABLE IX.

SHOWING THE NUMBER OF DIARRHŒA AND ENTERITIS (UNDER TWO YEARS) ADMISSIONS THE NUMBER OF DEATHS, AND THE CASE MORTALITY FOR THE YEARS 1941—1947.

Year	Number of Cases Admitted	Number Died	Case Mortality
1941 ...	115	70	60·87
1924 ...	70	42	60·00
1943 ...	70	43	61·42
1944 ...	45	9	20·00
1945 ...	52	16	30·77
1946 ...	61	18	29·50
1947 ...	93	27	29·03
	506	225	44·46

TABLE X.

SHOWING AT VARIOUS AGES THE NUMBER OF DEATHS OF CHILDREN UNDER TWO YEARS OF AGE FROM DIARRHŒA AND ENTERITIS FOR THE YEAR 1947.

Ref. No.	Age and Sex.	Days ill before Admission.	Observations.
468	2 months Female.	? 3	Marasmus. No response to treatment. Died in 3rd week.
642	5 weeks Male.	7	Slight improvement for first three weeks. Afterwards lost weight. Green motions persisted during illness. Died 8 weeks after admission.
647	2 months Male.	? 4	Dehydrated on admission. Gradually lost weight. Motions never normal. Died 7 weeks after admission.
825	9 days Female.	2	Baby's condition poor after 48 hours. Lost 12 ozs. since birth. Became dehydrated. Died one week after admission.
863	13 days Male.	13	History of vomiting since birth. Child moribund on admission. Lived 3 hours.

TABLE X—*continued.*

Ref. No.	Age and Sex.	Days ill before Admission.	Observations.
967	5 weeks Female.	4	Treated for Gastro-Enteritis 3 weeks before admission. Collapsed condition. Died in 36 hours.
973	6 weeks Male.	2	Treated for Gastro-Enteritis 3 weeks ago. Relapse. Dehydrated on admission. Weight increased from 7 lbs. 10 ozs—8 lbs. 2 ozs. (3 weeks). Started to lose weight. Well marked marasmus. Weight fell to 6 lbs. 12 ozs. Motions persistently green. Died 8th week.
976	4 months Male.	5	Marked dehydration on admission. Heart sounds rapid, shallow respirations. Died in 36 hours.
977	6 weeks Male.	6	Dying on admission. Lived 15 hours.
992	7 weeks Male.	4	Premature baby. Marked dehydration on admission. Lived 3 days.
994	7 months Female.	3 weeks	Pertussis and Bronchopneumonia 3 months ago. Dehydrated on admission. Died in 3rd week.
1002	5 months Male.	2	Gastro-Enteritis 2 weeks ago. Moribund on admission. Died in 24 hours.
1004	7 months Male.	8	Pertussis prior to admission. Marked dehydration. Severe Conjunctivitis. Died 3rd week.
1005	3 months Female.	3	Dehydrated on admission. Weight 6 lbs. No response to treatment. Died 9 days after admission.
1006	9 months Female.	5	Measles and Bronchopneumonia one month before admission. Dehydrated. No response to treatment. Died 8 days after admission.
1020	1 month Male.	4	Dehydrated on admission. No response to treatment. Motions persistently green. Died 4th week.
1023	7 weeks Male.	2	Toxic on admission. Heart condition poor. Buttocks excoriated. No response to treatment. Died 3rd week.
1036	4 months Male.	7 weeks	Treated for Gastro-Enteritis some weeks ago. Dying on admission. Lived 6 hours.

TABLE X—Continued.

Ref. No.	Age and Sex.	Days ill before Admission.	Observations.
1038	7 weeks Female.	6 weeks	Condition very low on admission. Dehydrated. Died after 3 days. No response to treatment.
1048	4 months Female.	2	Had treatment for Gastro-Enteritis and Pneumonia 4 weeks prior to admission. On admission very Toxic. Enteritis and Bronchitis. Developed Bronchopneumonia. Died on 5th week.
1077	2 weeks Male.	4	Dehydrated on admission. Marked excoriation of buttocks. No response to treatment. Died 9 days after admission.
1116	6 weeks Male.	6	Marked dehydration on admission. Heart sounds very weak. Died 8 days after admission.
1162	3½ months Female.	4	Poor condition on admission. Motions persistently green. Lost weight each week. Died on 5th week from acute cardiac failure.
1166	6½ months Male.	3	Dehydrated on admission. Motions persistently green. Feeding poorly. Died 9 days after admission.
1201	3 weeks Female.	4	Moribund on admission. Died after 3 hours.
1209	9 months Female.	5 weeks	Marked dehydration on admission. Died within 2 days.
1344	2½ months Male.	3 weeks	Poor condition on admission. Marked dehydration. Tachycardia. Persistent green motions. Died 3 weeks after admission.

## PNEUMONIA.

Eighty-two cases of Pneumonia were admitted for treatment for the year and were classified as follows :—

Type	Number	Deaths	Case Mortality
Lobar Pneumonia	58	1	1·72
Bronchopneumonia	24	12	50·00

Fifty-eight cases of Lobar Pneumonia were treated. There was one death, a boy of sixteen years, who developed a Pulmonary embolism and died immediately.

TABLE XI.

SHOWING THE NUMBER OF LOBAR PNEUMONIA ADMISSIONS, THE NUMBER OF DEATHS AND THE CASE MORTALITY FOR THE YEARS 1940—1947.

Year	Number of Cases admitted	Number Died	Case Mortality
1940 ...	18	—	—
1941 ...	27	1	3·70
1942 ...	31	—	—
1943 ...	14	1	7·14
1944 ...	14	—	—
1945 ...	45	8	17·77
1946 ...	68	—	—
1947 ...	58	1	1·72
	275	11	4·00

PNEUMONIA—*continued.*

Of the twenty-four cases of Bronchopneumonia admitted, there were twelve deaths, giving a mortality rate of 50 per cent.

Table XII shows an analysis of these deaths, many being admitted to hospital beyond medical aid.

TABLE XII.

SHOWING AN ANALYSIS OF DEATHS FROM BRONCHOPNEUMONIA FOR THE YEAR 1947.

Ref. No.	Age and Sex.	Days ill before Admission.	Observations.
29	2 months Male.	7	Extremely distressed. Ashen grey on admission. Died on 3rd day after admission.
101	10 months Male.	5	Condition very low, very restless. Cyanosed on admission. Died 48 hours after admission.
182	1 8/12 yrs. Male.	2 weeks	Pertussis for the past 6 weeks. Cyanosed on admission. Heart sounds poor. No response to treatment. Died 10 days from acute cardiac failure.
297	3 months Female.	?	Cyanosed on admission. Moribund. Died 2 hours after admission.
444	17 years Female.	2 weeks	Cyanosed. Moribund. P.150, R.80. Died 9 hours after admission.
460	1 3/12 yrs. Female.	?	Convalescing from Bronchopneumonia, Measles and Pertussis before admission. Marked cyanosis. P.160, R.72. Died from intracranial haemorrhage 2 days after admission.
762	4 months Male.	? 3	Condition practically hopeless on admission. P.156, R.60. Died after 24 hours.
809	1 2/12 yrs. Male.	3	Convulsions 3 months prior to admission. Two convulsions shortly after admission. P.160, R.60. Death from intracranial haemorrhage 24 hours after admission.

TABLE XII—*continued.*

Ref. No.	Age and Sex.	Days ill before Admission.	Observations.
836	3 weeks Male.	2 weeks	Emaciated on admission. Congenital lues. Died 24 hours after admission.
851	1 10/12 yrs. Male.	3 weeks	Pneumonia 2 months ago. Pertussis 3 weeks before admission. P.160, R.60-80. Died 9 days after admission.
1282	2 7/12 yrs. Male.	3 weeks	Tuberculous Bronchopneumonia. Died 4 weeks after admission.
1334	2 years Male.	?	History of previous attack of Bronchopneumonia following Measles. Dying condition on admission. Lived 15 hours.

### MENINGITIS.

Thirty-one cases of Meningitis were treated in the Wards and were classified as follows:—

Type	Number	Deaths	Case Mortality
Tuberculous ...	15	15	100·00
Meningococcal ...	13	2	15·38
Pneumococcal ...	2	1	50·00
Influenzal ...	1	—	—

Tuberculous Meningitis shows an increase of three from the previous year. Fifteen deaths, ranging in ages from five months to twenty-three years. These cases were admitted between the 7th and 14th day of the illness, and the majority of them died shortly after admission.

Thirteen cases of Meningococcal Meningitis were treated. There were two deaths, giving a mortality rate of 15 per cent. Of the two deaths, one a baby of one year died 9 hours after admission; the other, a

baby of one year and six months, died after 7 days—no response to a combination of Sulphonamide and Penicillin therapy.

Two cases of Pneumococcal Meningitis were admitted, one death occurred in a woman of 73 years.

One case of Influenzal Meningitis—a baby of 2 years, who recovered after intensive treatment with Sulfamerazine and Penicillin.

### POLIOMYELITIS.

Nine cases were admitted for treatment. There were three deaths. The first, a man of 35 years (6 days ill before admission) with paralysis of all limbs, developed Respiratory Paralysis; the second, a man of 35 years (10 days ill before admission, treated for Influenza) with all limbs affected, developed bulbar paralysis, and died shortly after admission; and the third, a baby of 5 months (? 2 days ill before admission) with flaccid paralysis of neck, back muscles and upper limbs, developed respiratory paralysis—no response in Bragg-Paul Pulsator.

### ERYSIPELAS.

Fifteen cases were admitted. All made excellent recoveries. Twelve were of the Facial type and the remaining three were Crural in origin.

### RUBELLA, VARICELLA AND EPIDEMIC PAROTITIS.

Thirty-five cases of Rubella, twenty-five of Varicella

and thirteen of Epidemic Parotitis were treated. No complications were noted in either cases of Rubella or Varicella, but 3 cases of Epidemic Parotitis, developed Orchitis.

### ENTERIC FEVER.

One case for treatment (B. Typhosus infection) a woman of thirty-five years, no complications were noted.

From 1944-1947, ninety-seven cases of Enteric Fever were treated in the Wards of Clonskeagh Hospital. There were two deaths, giving a mortality rate of 2 per cent.

### VARIOLA.

One case of modified smallpox was admitted during the Summer. The patient was a sailor on a boat arriving from the U.S.A. He made a rapid convalescence, but on discharge pitting of the face was well marked.

### MISCELLANEOUS CASES.

Two hundred and eighty-five cases were admitted as suffering from infectious ailments. There were twelve deaths.

Table XIII shows an analysis of these cases admitted beyond medical aid.

TABLE XIII.

Ref. No.	Age and Sex.	Notified as	Observations.
100	2½ months Female.	Meningitis ...	Well marked Purpura Haemorrhagica. Died 1 hour after admission.
109	66 years Male.	Erysipelas ... (Facial).	A severe case of Herpes Ophthalmicus—died from Myocarditis and auricular fibrillation.
217	20 years Male.	Poliomyelitis	Admitted in the last stages of Tetanus—no response to A.T.S.
427	48 years Male.	Meningitis ...	Last stages of acute cardiac failure.
442	56 years Female.	Lobar Pneumonia.	Advanced Phthisis.
628	51 years Male.	Lobar Pneumonia.	A case of Asthma, Emphysema and Myocarditis.
1009	52 years Female.	Food Poisoning.	A case of acute Pancreatitis—lived 6 hours.
1069	59 years Female.	Lobar Pneumonia.	A case of Uraemia and Myocarditis.
1245	17 years Female.	Observation	A case of Diabetic Coma—died shortly after admission.
1249	57 years Female.	Erysipelas ...	A case of Coronary Thrombosis.
1377	34 years Male.	Lobar Pneumonia.	Acute Pneumonic Phthisis.
1378	65 years Male.	Lobar Pneumonia.	Myocardial degeneration.

## SANITARY DEPARTMENT.

	1947
Inspections of Tenement Houses ... ..	25,834
Re-inspections of Tenement Houses ... ..	13,630
Inspections of other Houses, Cottages, etc. ... ..	15,575
Other Inspections, including Schools, Stables, Fish and Chip Shops, Outworkers' Premises, etc. ... ..	14,437
Rooms Inspected ... ..	127,584
Rooms Re-inspected ... ..	22,452
Inspections of Offensive Trade Premises ... ..	207
Inspections of Workshops ... ..	2,233
Inspections of Piggeries ... ..	872
Inspections of Bakeries ... ..	175
Inspections of Common Lodging Houses ... ..	60
Nightly Inspections of Common Lodging Houses ... ..	9
Inspections of Weekly Lodging Houses ... ..	99
Number of Written Notices served ... ..	10,116
Number of Verbal Notices given ... ..	5,787
Number of Notices served re Bye-Law 34 (Limewashing) ... ..	9,665
Number of Nuisances found due to complaints ... ..	6,454
Defects Discovered ... ..	22,063
Defects Remedied ... ..	13,408
Tests applied to House Drains ... ..	265
Choked Drains Freed ... ..	1,751
Accumulation of Manure Removed ... ..	1,584
Interviews with Property Owners as to Sanitary Re- quirements ... ..	2,000
Nuisances from Smoke Abated ... ..	11
Inspections of Ice Cream Shops ... ..	166
Inspections of Burial Grounds ... ..	290
Lanes and Alleys Cleansed by Private Parties ... ..	24
Piggeries Closed ... ..	2
Cellars Closed ... ..	28

## STATISTICS.

	1947
No. of "Fit" Houses	4,612
No. of "Unfit" Houses	5,282
No. of Families living in "Unfit" Houses	13,625
No. of Tenements	5,777
No. of "Fit" Tenements	3,413
No. of "Unfit" Tenements	2,364
No. of Cottages	3,789
No. of "Fit" Cottages	1,137
No. of "Unfit" Cottages	2,652
No. of Stable Dwellings, and others	328
No. of "Fit" Stable Dwellings, and others	62
No. of "Unfit" Stable Dwellings, and others	266
No. of Families living in 1-room dwellings	18,936
No. of Families living in 2-room dwellings	8,389
No. of Families living in 3-room dwellings	3,492

## RETURN OF PROSECUTIONS.

	1947
Summonses (Ordinary)	557
" (Disobedience)	83
" (Bye-Laws)	162
" (Sections 83 and 84)	3
" (Section 56)	1
Adjourned cases brought forward	289
Orders obtained	411
Owners fined	187
Owners cases adjourned	272
Summonses marked abated	204
Summonses marked "Probation Act"	6
Summonses struck out	8
Summonses dismissed	8
Summonses proved—dismissed	1
Summonses adjourned generally	10
Penalties imposed, absolute	£453 18s. 6d.

## LIMEWASHING OF TENEMENT HOUSES.

With the exception of 29 tenements, in respect of which 29 prosecutions were instituted against the Owners, all tenements were limewashed twice in the year, in compliance with Tenement Bye-Law 34, which is as follows :—

“ The landlord of a tenement house shall, in the months of April and October in every year, cause every part of the premises to be cleansed. He shall, at the same time, except in such cases as hereinafter specified, cause the walls of every yard and area, the interior surface of every ceiling and wall of every closet or privy belonging to the premises, and the interior surface of every ceiling and wall of every room, staircase, and passage in the house to be thoroughly washed with hot limewash in April and October of each year, provided that the foregoing requirements shall not apply to such premises, walls of yards, areas, water closets, privies, ceilings, walls of rooms, staircases, or passages into or to which the landlord has no right of access to do such work, and with respect to the limewashing of the internal surface of the walls of room, staircases, and passages shall not apply in any case where the internal surface is thoroughly cleansed, or where the material of, or with which such surface is constructed or covered is such as to render the limewashing thereof unsuitable or inexpedient, and the paint, paper, or other covering is renewed, if the renewal thereof be necessary for the purpose of keeping the premises in a cleanly and wholesome condition.”

## VERBAL NOTICES.

Where feasible, Sanitary Inspectors give verbal notices to Owners and Agents, consequently much time and expenditure are saved. Practically all of the 5,787 notices in 1947 received the necessary attention.

## REBATE OF RATES.

Under Section 72 of the Local Government (Dublin) Act, 1930, owners of houses of not more than £8 valuation get a rebate of 20% on their taxes, provided these dwellings are in good repair. The purport of this Section is to encourage the owners of this class of property to mainsain the houses in a habitable condition throughout the year. In 1947 there were 291 applications made covering 6.630 valuations, of which 131 were rejected.

The following conditions must be fulfilled before a house is deemed fit to warrant a rebate :—

1. Valuation of premises must not exceed £8.
2. Premises must be occupied only by artisans or labourers.
3. Premises must front to streets or place in charge of the Corporation.
4. "Suitability" of premises, as required by the Medical Officer of Health.
  - (a) Premises must have yards (either in common or self-contained) at rere or "side."
  - (b) Entire surface of yard (where there is no garden) to be concreted or tiled. The size of the yard to be as determined in the Building Bye-Laws.
  - (c) Drains must be intercepted, ventilated and provided with proper deep seal surface water traps.
  - (d) There shall be no Ashpits—Dustbins only must be provided.
  - (e) Proper and sufficient W.C. accommodation must be provided.
  - (f) The entire house must be kept clean, white-washed, and in good general repair, with unbroken windows, staircases, balustrades, lobbies and fireplaces.

### ABANDONED HOUSES.

There were 16 abandoned tenement houses dealt with in 1947. These premises generally, were in a state of advanced decay, and abandoned by their owners because of their inability to maintain them in a satisfactory state. The labouring staff of this Department regularly cleanse the yards, sanitary accommodation, etc., of these houses.

### COMMON LODGING HOUSES.

Total—1947.

Number on Register at 1st January, 1947	.....	10
New Registrations effected during the year	.....	—
Removals from Register during the year	.....	—
Number of visits during the year	.....	69

The accommodation varies from 8 to 508 persons to a house.

On visiting the Lodging Houses, special attention was directed to the general condition of the premises, including cleanliness, lighting and ventilation, as well as the beds and bedding. The prevention of overcrowding was rigidly enforced and immediate measures adopted for the abatement of any nuisance or the repairs of structural defects.

A Common Lodging House is defined as “a house in which or in any part of which persons are harboured or lodged for hire for a single night, or for less than a week at a time.”

### SMOKE NUISANCES.

During the year 11 complaints were received in respect of smoke nuisances from factory chimneys. These complaints received prompt attention, and the nuisances were abated by increasing the chimney's height, or by structural alterations to the boiler plant. A change of fuel was made in a few instances with satisfactory results.

## WORKSHOPS.

Number of Workshops—424.

The establishment and subsequent workings of these workshops engage the attention of Sanitary Inspectors. Some occupiers, through no fault of their own, are generally not very conversant with the regulations from a sanitary standpoint, and this branch of the service is in constant co-operation with the Department of Industry and Commerce, in securing observance of requirements.

Re SECTION 9 OF THE FACTORY AND WORKSHOPS ACT,  
1901.

The Notices served under this Act were as follows :

	1947.
1. No sanitary accommodation provided .....	5
2. Sufficient sanitary accommodation not provided .....	14
3. Sanitary accommodation opening directly into Factory .....	12
4. Separate approaches not provided for male and female sanitary accommodation .....	1
5. Sanitary accommodation not sufficiently lighted .....	1
6. Workshops not kept in a cleanly state .....	14
7. Other defects .....	8

FACTORY AND WORKSHOPS ACT, 1901.

Section 107 deals with "Home Work," and its purport is as follows :—

"The occupier of every Factory and Workshop and every Contractor employed by any such Occupier in the business of the factory or workshop shall :—

- (a) Keep in the prescribed form and manner, and with the prescribed particulars, lists showing names and addresses of all persons directly employed by him, either as workmen or as contractors, in the business of the Factory or Workshop, outside the Factory or Workshop, and the places where they are employed ; and
- (b) Send to an Inspector such copies of, or extracts from these lists as the Inspector may from time to time require ; and
- (c) Send on or before the first day of February and the first day of August in each year copies of those lists to the District Council of the District in which the Factory or Workshop is situated.

In the event of a contravention of this Section by the Occupier of a Factory, Workshop or place, or by a Contractor, the Occupier or Contractor shall be liable to a fine not exceeding Forty Shillings and in the case of a second or subsequent offence, not exceeding Five Pounds.

#### OUTWORKERS.

Thirty-eight Firms sent in their lists in the prescribed Form, twice in the year. The number of Outworkers in the February list was 228, and the number in the August list was 221. The institution of legal proceedings was not necessary, but 4 firms were cautioned for delay in furnishing their returns.

The Outworkers were engaged at the following trades :—Wearing Apparel (Making, etc.), Household Linen, Lace, Curtains, and Furniture, Hangings, Upholstery, Filemaking, Brass, Locks, Umbrellas, Artificial Flowers, Paper Bags, Basket-making, Boot and Shoe making and repairing, and processes incidental to above.

## OFFENSIVE TRADES.

There are on the Register of Offensive Trades in the City 63 businesses under this category.

The trades are as follows :—

Soap-boiler.

Gut Scraper.

Blood Boiler.

Bone Boiler.

Fellmonger.

Tallow Melter.

Rags, Bones, and Uncured Skins.

These trades are under constant supervision and the appropriate Acts appertaining to their working are strictly applied. In a few instances where the premises were not being kept clean, marked improvements were effected following representations from this Department.

## FLY NUISANCE.

Complaints regarding nuisance from flies were received during the Summer. The District Inspectors carried out a special survey of their Districts with a view to discovering and taking steps to remove refuse of every kind that might be lying or dumped in their Districts, and having done this, they exercised vigilance to see that a recurrence of such conditions did not take place. This embraced the contents of privies, where they existed, manure heaps, ashpits, yards, passages, streets, and derelict spaces.

This Department receives valuable co-operation from other Corporation Departments, consequently many sanitary defects are brought to notice. Were it not for this early intimation, it is possible that defects might remain undiscovered until such time as the Sanitary Inspector visits the premises in the course of a house-to-house inspection.

The Sanitary Department co-operates with other Departments, by reporting matters relative to waste water, defective street and passage paving, choked street gulleys, and dangerous structures, etc.

# VETERINARY DEPARTMENT

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## REPORT

OF THE

## CHIEF VETERINARY INSPECTOR

MR. P. F. DOLAN, M.R.C.V.S., D.V.S.M.

for the Year ended 31st December, 1947.

### MILK INSPECTION.

On the 31st December, 1947, the following were entered on the Register of Dairymen kept by the Corporation in accordance with the requirements of the Milk and Dairies Act, 1935 :—

No. of Dairymen registered	.....	1,510
No. of Premises registered	.....	1,705
No. of Producers of Milk registered		128

During the year 152 premises, comprising 119 milk shops, 7 dairy yards, 24 milk stores and 2 vehicles were registered. Refusal of Registration Orders were served in respect of applications for two premises.

The following is a summary of the Dealers' Licences issued under the Milk and Dairies (Special Designations) Regulations, 1938 :—

No. of Licences issued	.....	797
No. of premises licensed	.....	876

No. of Licences issued for the sale of Pasteurised Milk	.....	.....	790
No. of Licences issued for the sale of Highest Grade Milk	.....	.....	7

Refusal Orders were served on four applicants for Dealers' Licences.

Regular inspections of milk shops and milk stores were made by Dairy Inspectors to ensure that the provisions of the Act and Regulations were being complied with; in the course of the year 10,823 inspections were made. When any breach of conditions was observed the matter was reported and if the Law Agent deemed it advisable, legal proceedings were instituted against the offender.

The number of visits to dairy yards, milk shops, etc., totalled 10,410 for the year, on which 28 violations of relevant regulations were detected, prosecutions amounting to 28 in respect of which fines totalling £113 5s. 6d. were imposed, Costs £4 6s. 0d. D.P.O.A—5 cases.

#### MILK SAMPLING.

During the year 193 samples of milk sold under general designation and 12 samples of milk sold under special designation were taken on the Corporation's own behalf at various places of distribution and submitted for bacteriological examination to an official bacteriologist appointed under the Act. The samples of milk sold under special designation were taken from persons selling milk under the designation Pasteurised Milk and who were empowered to do so by virtue of a Dealer's Licence issued by the Corporation. A summary of the results of the bacteriological examination of the samples is given hereunder. For comparison purposes the results of samples taken during the winter and summer periods are shown separately.

Total Living Organisms per Cubic Centimetre	General Designation No. of Samples		Special Designation No. of Samples	
	Summer Period	Winter Period	Summer Period	Winter Period
Less than 1,000	3	3	—	1
1,000 to 50,000	70	62	2	2
50,000 to 100,000	14	10	—	—
100,000 to 200,000	7	4	—	—
200,000 to 300,000	2	3	1	—
300,000 to 400,000	2	1	1	2
400,000 to 500,000	2	—	2	—
500,000 to 600,000	5	1	—	1
600,000 to 700,000	—	—	—	—
700,000 to 800,000	—	1	—	—
800,000 to 900,000	1	2	—	—
900,000 and over	—	—	—	—
TOTALS ...	106	87	6	6

In addition to the foregoing sampling, 231 samples of highest Grade Milk and 456 samples of Pasteurised Milk were taken and forwarded to the State Chemist on behalf of the Minister for Health from suppliers operating under licence issued by the Minister who is the licensing authority for the production or pasteurisation or bottling of all milk for sale under special designation. For the year, 22 persons were holders of licences for either the production or bottling of Highest Grade Milk, and 17 of these were distributing milk in the City. 57 persons were holders of licences for either the pasteurisation of milk or the bottling of Pasteurised Milk, and 34 of these were distributing milk in the City.

#### EXAMINATION OF MILCH COWS IN CITY DAIRY YARDS.

Special visits were made to City Dairy Yards for the purpose of examining the cows housed therein. The procedure of examination is that samples of milk

were taken from cows with abnormal udders and in cases where tuberculosis was suspected, the milk was centrifuged and the deposit examined for tubercle bacilli. If microscopic examination was negative, the milk was submitted to biological examination. In all other cases of abnormal udders, where the condition was found not to be due to streptococci, etc., samples of milk were grouped and the group samples submitted to biological examination. These measures were adopted to ensure that all cows with tuberculous udders were detected. Cows found to come within the provisions of the Bovine Tuberculosis Order, 1926, were immediately slaughtered.

Notices interdicting the sale of milk from cows affected with a disease or a condition likely to infect milk were served on the owners.

The following is a summary of the work :—

No. of Cows housed in City Dairy Yards	4,024
No. of special visits to dairy yards	377
No. of examinations of milch cows	7,983
No. of cows from which separate samples of milk were taken for bacteriological examination	112
No. of samples taken and bacteriologically examined	142
No. of cows for which notices interdicting the sale of milk were served	69
No. of cows in City Dairy Yards found with tuberculosis of the udder	3

#### INFECTIOUS DISEASES ON DAIRY PREMISES.

Disease.	No. of Cases
Diphtheria	4
Scarlatina	3
Mumps	1

SUMMARY OF PROSECUTIONS FOR OFFENCES IN  
CONNECTION WITH THE SALE OF MILK HEARD  
IN THE DISTRICT COURT DURING THE YEAR.

Offence	No. of Cases	Fines			Costs			D.P.O.A
		£	s.	d.	£	s.	d.	
Unsuitable Premises	3	4	5	0				1
Selling Milk without being registered ...	8	15	0	0	0	10	6	1
Selling Pasteurised Milk without being the holder of a Dealer's Licence ... ..	1		—			—		1
Using Dirty Utensils	4	7	0	0		—		—
Milk exposed for sale not covered ...	6	4	10	0		—		1
Milk in Dirty Bottles	5	80	10	6	3	15	6	1
Selling Milk without having a tap fitted to Churn ...	1	2	0	0		—		—
<b>TOTAL</b> ...	<b>28</b>	<b>£113</b>	<b>5</b>	<b>6</b>	<b>4</b>	<b>6</b>	<b>0</b>	<b>5</b>

## 2, MEAT INSPECTION.

NUMBER OF ANIMALS SLAUGHTERED AT THE  
CORPORATION ABATTOIR.

Bulls	.....	.....	.....	.....	.....	768
Bullocks	.....	.....	.....	.....	.....	6,868
Cows	.....	.....	.....	.....	.....	22,705
Heifers	.....	.....	.....	.....	.....	13,404
Calves	.....	.....	.....	.....	.....	1,079
<b>TOTAL CATTLE</b>						<b>44,824</b>
Sheep	.....	.....	.....	.....	.....	41,330
Swine	.....	.....	.....	.....	.....	25,914
<b>TOTAL ANIMALS</b> .....						<b>112,068</b>

CARCASSES WHOLLY OR PARTIALLY CONDEMNED AT THE CORPORATION ABATTOIR  
DURING TWELVE MONTHS ENDED 31st DECEMBER, 1947.

	CATTLE		SHEEP		SWINE	
	Whole	Partial (Weight in lbs.)	Whole	Partial (Weight in lbs.)	Whole	Partial (Weight in lbs.)
Tuberculosis ...	622	48,181	—	—	18	462
Traumatism ...	52	18,881	—	129	—	330
Oedematous and Wasted	113	—	29	—	1	—
Gangrene ...	1	—	—	—	—	—
Redwater ...	3	—	—	—	—	—
Moribund and Ill. bled	40	—	—	—	—	—
Decomposition ...	4	15	38	—	23	—
Septic Conditions	19	1,911	29	—	7	—
Carcinoma ...	20	—	7	245	7	95
Swine Erysipelas	—	—	1	—	—	—
Other Conditions	27	1,742	—	—	2	—
<b>TOTALS</b> ...	<b>901</b>	<b>70,730</b>	<b>112</b>	<b>380</b>	<b>63</b>	<b>897</b>

**CYSTICERCUS BOVIS**:—Total number of Cattle examined—27,605; Total number of Cattle affected—160 (Percentage affected .58%—Cows 38, Heifers, 65, Bullocks, 54, Bulls 3). 16 Carcases sent into Cold Storage for three weeks. 160 heads and tongues seized.

RETURN OF ORGANS, ETC., CONDEMNED AT DUBLIN CORPORATION ABATTOIR DURING TWELVE MONTHS  
EDNED 31ST DECEMBER, 1947.

	Cattle	Sheep	Swine	Total		Cattle	Sheep	Swine	Total
<b>LUNGS :</b>									
Tuberculosis	4,519	—	317	4,836	LIVERS— <i>Contd.</i>	8,812	1,140	14	9,966
Abscesses	24	8	9	41	Distomatosis	940	8	2	950
Pneumonia	32	4	34	70	Cav. Angioma	113	—	16	129
Pleurisy	60	11	101	172	Other Conditions	—	—	—	—
Parasitism	155	2	—	157	<b>KIDNEYS :</b>	131	—	2	133
Cysts	5	—	—	5	Tuberculosis	21	—	2	23
Other Conditions	26	9	14	49	Nephritis	6	—	5	11
					Cysts	59	2	4	65
					Other Conditions	—	—	—	—
<b>HEARTS :</b>	3,863	—	311	4,174	<b>UDDERS :</b>	34	—	—	34
Tuberculosis	76	28	140	244	Tuberculosis	1	—	—	1
Other Conditions	—	—	—	—	Mastitis	1	—	—	1
					Other Conditions	1	—	—	1
<b>SKIRTS :</b>	936	—	8	944	<b>UTERI :</b>	31	—	—	31
Tuberculosis	42	5	6	53	Tuberculosis	—	—	—	—
Other Conditions	—	—	—	—	Other Conditions	—	—	—	—
					<b>FOETUSES :</b>	—	—	—	—
<b>STOMACHS :</b>	1,447	4	75	1,522	<b>HEADS :</b>	2,673	—	1,193	3,866
Tuberculosis	17	—	21	42	Tuberculosis	330	—	—	330
Other Conditions	—	—	—	—	Actino	6	—	—	6
					Abscesses	157	1	2	160
<b>INTESTINES :</b>	1,899	—	88	1,987	Other Conditions	—	—	—	—
Tuberculosis	20	6	23	49	<b>TONGUES :</b>	2,673	—	1,193	3,866
Other Conditions	—	—	—	—	Tuberculosis	355	—	—	355
					Actino	162	1	2	165
<b>SPLEENS :</b>	39	—	4	43	Other Conditions	—	—	—	—
Tuberculosis	1	—	—	1					
Other Conditions	—	—	—	—					
<b>LIVERS :</b>	2,077	—	251	2,328					
Tuberculosis	307	6	89	402					
Abscesses	38	—	1	39					
Necrosis	3,964	—	53	4,017					
Cirrhosis	—	—	—	—					

ESTIMATE OF ANIMALS SLAUGHTERED IN PRIVATE  
SLAUGHTERHOUSES AND FACTORIES.

Cattle	.....	.....	.....	.....	.....	43,472
Sheep and Lambs			.....	.....	.....	101,231
Pigs	.....	.....	.....	.....	.....	58,338

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No. of Private Slaughterhouses	.....	.....	.....	54
No. of Knackers' Yards	.....	.....	.....	1
No. of Victuallers using Private Slaughterhouses				147
No. of Victuallers using Corporation Abattoir	.....			123

No. of Inspections of :—

Slaughterhouses	.....	.....	.....	.....	7,695
Shops, Factories and Depots			.....	.....	512
Stallholders, Hawkers, etc.			.....	.....	6,506
Markets and Stores	.....	.....	.....	.....	179

In addition to the foregoing inspections, whole-time inspection was carried out at the Corporation Abattoir and inspection of the weekly Cattle Market was also made.

Result of one prosecution for Breach of Slaughterhouse Bye-Laws—£1 in Poor Box.

The amount of unsound meat condemned as a result of visits to private Slaughterhouses was 188 tons, 6 cwts. 2 qrs. 16 lbs.

DISEASED AND SUSPECTED ANIMALS DEALT WITH IN MARKETS, LAIRS, ETC., UNDER  
FOOD INSPECTION DURING THE YEAR.

ANIMALS DEALT WITH	HOW CARCASSES WERE DEALT WITH						Inspected by Staff of Dept. of Agriculture
	Passed	Condemned			Removed Outside our Jurisdiction		
		Total	Partial	Organs only			
CATTLE 181 ...	17	23	20	59	20	42	
SHEEP 17 ...	5	2	2	8	—	—	
PIGS 9 ...	5	1	1	1	1	—	
TOTAL 207 ...	27	26	23	68	21	42	

## NUMBERS OF ANIMALS IN MARKETS DURING THE YEAR.

PERIOD	BEASTS		CATTLES	SHEEP	PIGS
	Fat	Dairy			
March Quarter ...	41,545	2,101	178	56,115	11,219
June Quarter ...	30,246	2,367	132	57,984	12,451
September Quarter ...	43,651	3,662	172	73,576	11,531
December Quarter ...	64,986	3,056	136	57,008	10,761
TOTALS ...	180,428	11,186	618	244,683	45,962

## TOTAL WEIGHT OF UNSOUND FOOD FOR THE YEAR.

Meat and Organs, Beef, Mutton, Pork and Bacon	.....	.....	.....	2,369,992 lbs.
Fish	.....	.....	.....	61,628 lbs.
Fruit and Vegetables	.....	.....	.....	74,674 lbs.
Miscellaneous	.....	.....	.....	71 lbs.

## FOOD COMPLAINTS.

During the year 109 complaints were made by members of the public concerning food purchased by them in the city. Each complaint was investigated and, where necessary, an examination was made of the food on the vendor's premises. The following is a list of the various articles submitted for examination, with the number of complaints shown in brackets:—

Milk (20); Fowl (1); Black and White Pudding; (5); Butter (1); Fish (7); Sweets and Chocolate (3); Meat (21); Rabbits (2); Jam (7); Fruit (8); Ice Cream (1); Cheese (2); Flour (3); Bread and Cakes (14); Flakemeal (2); Eggs (2); Sauce (2); Margarine (2); Vegetables (4); Tea (1); Baby Food (1).

## SUMMARY OF PROSECUTIONS FOR UNSOUND FOOD, ETC.

During the year 361 visits were made to Food Shops, the amount of food condemned being 1 cwt. 1 qr. 26 lbs., two prosecutions heard resulting in two fines of £10 each and £2 in the Poor Box.

151 visits were made to premises of street traders, depots and cold stores. The amount of food condemned in Depots, etc. as a result of these visits was 41 tons 9 cwts. 2 qrs. 20 lbs.; no prosecutions followed. The number of occasions on which unsound food was reported to the Department and was condemned as a result of visits to Depots, etc.—43.

Four prosecutions were heard for offences connected with unsound food, and fines amounting to £21 8s. 6d. were imposed, with 3s. in Court Poor Box, and 10s. 6d. expenses.

For breaches of the bye-laws relating to the conveyance of meat, fines totalling £9 15s. 0d. with £5 to be placed in the Poor Box, were imposed in ten prosecutions.

### SLAUGHTER OF ANIMALS ACT, 1935.

Slaughter licences were issued under the Act to 147 applicants and the fees therefor amounting to £36 15s. were received.

#### PROSECUTIONS—SLAUGHTER OF ANIMALS ACT.

Three prosecutions were heard for breaches of the above Act, and fined amounting to £7 were imposed, with £2 to be placed in the Poor Box.

### 3. DISEASES OF ANIMALS ACTS.

#### BOVINE TUBERCULOSIS ORDER :

No. of cows found to be affected with tuberculosis of the udder .....	5
No. of animals found to be showing definite clinical symptoms of tuberculosis with chronic cough .....	3
No. of cows with abnormal udders in City Dairy Yards on samples of milk being bacteriologically examined found not to be affected with tuberculosis of the udder .....	109
No. of animals suffering from tuberculosis emaciation .....	—
	—
Total No. of Animals dealt with .....	117
	—

Eight animals were found to come within the scope of the Bovine Tuberculosis Order. Five of these animals were slaughtered by the owners. For the

remaining three, the agreed valuation amounted to £46, and compensation of £25 10s. was paid to the owners. The net cost of compensation was £13 8s. 11d.

#### SHEEP SCAB ORDER :

No. of Actual outbreaks	.....	.....	2
No. of Animals affected	.....	.....	7
No. of Animals in contact	.....	.....	23
No. of prosecutions under the Order	.....	.....	3

Total penalties imposed :

Fines £3 5s.

Court Poor Box £1.

#### SHEEP DIPPING ORDER :

Four inspectors specially appointed to ensure that the provisions of this Order were being complied with made 26 visits to Markets and Sheep Sales.

No. of sheep for which Declarations of Dipping were presented to the Inspector	57,770
No. of sheep dipped under supervision	..... Nil
No. of prosecutions under the Order	..... One
Penalty imposed	..... £25

Routine work was carried out under the following Orders :—

Antrax Order, Rabies Order, Parasitic Mange Order, Swine Fever Order and Foot and Mouth Disease Orders.

The work performed in connection with other Orders under the Diseases of Animals Acts was mainly of a preventive nature.

## RETURN OF SPECIAL SHEEP SALES AND SALES OF STORE CATTLE DURING THE YEAR.

	—				SHEEP	STORE CATTLE
First Quarter ...	...	...	...	...	—	9,719
Second Quarter ...	...	...	...	...	40	16,510
Third Quarter ...	...	...	...	...	13,963	18,125
Fourth Quarter ...	...	...	...	...	9,356	15,724
TOTALS	...	...	...	...	23,359	60,078

#### 4. BACTERIOLOGICAL LABORATORY.

##### MICROSCOPIC EXAMINATION OF MILK.

##### SAMPLES OF MILK FROM COWS IN CITY DAIRY YARDS :

No. of Examinations	.....	.....	.....	140
Streptococci	.....	.....	.....	50
Diplococci	.....	.....	.....	14
Staphylococci	.....	.....	.....	—
Mixed Infection	.....	.....	.....	—
Tubercle Bacilli	.....	.....	.....	6
Other Organisms	.....	.....	.....	4
Negative	.....	.....	.....	66

##### SAMPLES OF SPUTUM :

No. of Examinations	.....	.....	.....	6
Tubercle Bacilli	.....	.....	.....	4
Negative	.....	.....	.....	2

##### SAMPLES OF MILK FROM COWS OTHER THAN IN CITY DAIRY YARDS :

No. of Examinations	.....	.....	.....	4
Tubercle Bacilli	.....	.....	.....	4
Other Organisms	.....	.....	.....	—
Negative	.....	.....	.....	—

##### SAMPLES OF SPUTUM :

No. of Examinations	.....	.....	.....	—
Tubercle bacilli	.....	.....	.....	—
Negative	.....	.....	.....	—

## BIOLOGICAL EXAMINATION OF MILK.

## GROUP SAMPLES :

No. of Examinations	.....	.....	.....	3
Positive	.....	.....	.....	—
Negative	.....	.....	.....	3

## DIRECT SAMPLES :

No. of Examinations	.....	.....	.....	1
Positive	.....	.....	.....	—
Negative	.....	.....	.....	1

## SAMPLES TAKEN AT INFANT AID DEPOTS :

No. of Examinations	.....	.....	.....	8
Positive	.....	.....	.....	—
Negative	.....	.....	.....	8

## SAMPLES TAKEN AT HOSPITALS :

No. of Examinations	.....	.....	.....	—
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## MISCELLANEOUS SAMPLES :

No. of Examinations	.....	.....	.....	19
Positive	.....	.....	.....	1
Negative	.....	.....	.....	18

## MICROSCOPIC EXAMINATIONS—GENERAL.

## SKIN SCRAPINGS FOR PARASITIC MANGE :

No. of Specimens	.....	.....	.....	3
Positive (Psoroptic Mange in Cow)	.....	.....	.....	1
Negative	.....	.....	.....	1
Positive (Sarcoptic Mange in Pig)	.....	.....	.....	1

## WOOL SAMPLES :

No. of Specimens	.....	.....	.....	4
No. of cases in which the <i>Psoroptis ovis</i> was found	.....	.....	.....	4
No. of cases negative	.....	.....	.....	—

## BLOOD FILMS FOR ANTHRAX :

No. of Specimens	.....	.....	.....	10
Positive	.....	.....	.....	—
Negative	.....	.....	.....	10

### 5. THE ATTENDANCE ON ANIMALS THE PROPERTY OF THE CORPORATION.

## HORSES :

No. of visits	.....	.....	.....	66
No. of attendances	.....	.....	.....	105
No. of horses purchased	.....	.....	.....	3
No. of horses cast	.....	.....	.....	4
Total number of horses in Stud on 31st December, 1947	.....	.....	.....	20

## CATTLE :

In the course of the year the animals at the Crook-sling Sanatorium Farm were attended on and each animal of the dairy herd was subjected periodically to the tuberculin test, and has been maintained abortion free.

On the 31st December, 1947, the herd numbered 60 cows, 2 bulls, 7 heifers in calf, 6 yearlings.

The following tables give (1) an analysis of the causes of the elimination of animals for each year since the formation of the herd in October, 1926, to the end of 1947, and (2) a summary of the results of the post mortem examination on 132 of the eliminated animals during the same period.

## ELIMINATION OF ANIMALS IN HERD FROM OCTOBER, 1926, TO 31ST DECEMBER, 1947.

Year	Reactors	Doubtful Reactors	Mastitis	Defective Quarters	Sterility	Milk Records	Bulls	Reactors Agglutination Test	Other Causes	TOTAL
1927 ...	5	—	1	—	—	1	—	—	—	7
1928 ...	3	2	—	—	1	—	—	—	1	7
1929 ...	1	2	3	2	2	—	—	—	3	13
1930 ...	1	2	1	2	—	2	1	1	—	10
1931 ...	2	1	2	—	—	1	1	—	2	9
1932 ...	—	—	—	—	2	—	—	—	2	4
1933 ...	2	—	3	—	1	4	—	—	2	12
1934 ...	4	—	2	—	—	1	1	—	—	8
1935 ...	—	—	5	—	2	—	1	—	—	8
1936 ...	—	—	10	—	—	2	—	—	—	12
1937 ...	—	2	5	5	3	—	—	—	1	16
1938 ...	—	—	3	—	3	—	—	—	1	7
1939 ...	—	—	2	—	—	—	1	—	2	10
1940 ...	6	—	3	—	—	5	—	—	1	15
1941 ...	—	—	1	—	—	6	—	—	3	10
1942 ...	2	—	5	—	5	3	1	—	2	18
1943 ...	1	1	2	1	—	—	—	1	1	7
1944 ...	2	—	5	—	1	4	—	4	1	17
1945 ...	—	—	2	1	1	1	1	—	1	7
1946 ...	1	—	2	1	—	2	—	—	2	9
1947 ...	3	—	6	—	—	2	—	—	3	14
TOTAL	33	10	63	12	22	39	7	6	28	220

POST-MORTEM EXAMINATIONS HELD ON 132 OF THE 220 ELIMINATED ANIMALS.

	Post-Mortem Examinations	EVIDENCE OF TUBERCULOSIS FOUND				No Macroscopic Lesions of Tuberculosis
		Mesenterics only	Bronchal and Mediastinal only	Pharyngeal only	Pseudo- Tuberculosis	
—						
Reactors 30	29	7	7	1	2	12
Doubtful Reactors 9	5	1	—	—	—	4
Remaining Eliminated Animals 167	98	—	—	—	—	98

DEPARTMENT OF THE CITY ANALYST.

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**ANNUAL REPORT FOR YEAR 1947.**

CITY LABORATORY,  
MUNICIPAL BUILDINGS,  
DUBLIN.

To The City Manager,  
Public Health Committee,  
Dublin Corporation.

SIR,

I have the honour to submit my report on the work of my Department for the year 1947.

Analysis and investigations were conducted under the following headings :—

1. The Sale of Food and Drugs Acts.
2. The Public Health Preservatives Regulations, 1928.
3. Daily control and fortnightly analysis of the City Water Supply.
4. Analysis in connection with the Corporation Supplies.
5. Chemical control of sewage effluent.
6. Analyses of medicines for County Homes and Hospitals.

7. Analyses for other Local Authorities under the Food and Drugs Acts and Preservatives Regulations.
8. Miscellaneous analyses for Public Institutions, Companies and Private Individuals.

**GENERAL STATEMENT OF WORK FOR DUBLIN CORPORATION AND CITY OF DUBLIN.**

Nature of Article	Number of Samples	Department
Food and Drugs ... ..	2,731	Public Health
City Water Supplies ... ..	56	Engineers
Sewage ... ..	327	"
Effluent ... ..	331	"
Sludge ... ..	28	"
Water (Special analyses) ... ..	4	"
Tallow ... ..	1	"
Sewage (special) ... ..	3	"
Lead Piping ... ..	1	"
Coffee Residue ... ..	1	"
Concrete Paving ... ..	1	"
Asphalt ... ..	2	"
Bread ... ..	1	Veterinary
Milk ... ..	10	"
Water ... ..	1	"
Coffee Essence ... ..	1	"
Butter ... ..	1	"
Water ... ..	2	Sanitary
Cheese ... ..	3	School Meals
Argentine Honey ... ..	1	"
Milk ... ..	11	"
Nectar Spread ... ..	1	"
Chloride of Lime ... ..	1	A.R.P.
Water ... ..	2	Law Agent's
D.D.T. ... ..	1	Disinfecting.
Water ... ..	1	Public Health
Rag Flock ... ..	20	"
TOTAL (Dublin Corporation) ...	3,523	

**Analyses for Private Individuals, City of Dublin :—**

City of Dublin	...	...	621		
Dublin Union	...	...	149		
			770	...	...
Total	...	...	770	...	770
Total (Dublin Corporation)	...	...		...	3,523
					4,293
Total (City of Dublin)	...	...		...	4,293

**Analyses for Bodies outside City of Dublin :—**

Local Bodies and Hospitals	...	6,246
Private Individuals	...	282

Total	...	6,528	...	6,528
Grand Total for year 1947	...		...	10,821

The falling-off in the total was mainly due to the strike in the Drug trade in the early part of the year, causing a reduction in the number of samples of medicines.

Comparison of the total number of samples analysed in 1947 with that of previous years :—

YEAR	Total Number from all sources
1922-1926 (both inclusive)	... 53,751
1927-1932 (both inclusive)	... 68,002
1933-1936 (both inclusive)	... 74,209
1937-1941 (both inclusive)	... 73,758
1942 ... ..	... 11,987
1943 ... ..	... 11,401
1944 ... ..	... 11,279
1945 ... ..	... 11,528
1946 ... ..	... 11,413
1947 ... ..	... 10,821

## FOOD AND DRUGS ACTS.

### AND

## PRESERVATIVE REGULATIONS.

Details of articles submitted by the Food and Drugs Inspectors of the Dublin Corporation, and analysed under the above headings are set out below.

The total number of articles submitted were 2,731, of which 55 were informal samples.

Nature of Sample	Number of Samples	Number Adulterated
Milk ... ..	1,725	138
Butter ... ..	832	1
Margarine ... ..	111	—
Lime Juice ... ..	1	1
Cheese ... ..	2	—
Honey ... ..	2	—
Pepper ... ..	3	—

### INFORMAL SAMPLES.

Milk ... ..	46	3
Sweets ... ..	2	1
Solac Syrup ... ..	1	—
Cheese ... ..	1	—
Ice Cream ... ..	2	—
Fizz Bags (Sherbet) ... ..	1	1
Fish Paste ... ..	1	—
Mustard ... ..	1	—

## MILK.

1,725 samples were taken officially during the year, and of these 138 were found to be adulterated and 3 to be preserved with formalin.

68 were found deficient in milk solids other than milk fat in amounts varying from 2·94 per cent. to 27·05 per cent. 30 were found to be deficient in milk fat in amounts varying from 8·33 per cent. to 3·166 per cent. There were 39 samples deficient in both milk fat and milk solids, the worst having a deficiency of 22·94 per cent. and 15·0 per cent., respectively.

Three samples were found to contain formalin present as a preservative, which is an offence against the Public Health (Saorstát Éireann) (Preservatives, etc., in Food) Regulations, 1938.

Of the 46 samples taken informally, 3 were found adulterated, one was deficient of 8·23 per cent. non-fatty solids, and two were deficient of 12·94 per cent. non-fatty solids, and 11·66 per cent. milk fat, and 10·58 per cent. non-fatty solids and 11·66 per cent. respectively.

## LIME JUICE.

This sample proved to be an artificial preparation consisting of 99·6 per cent. of water, acidulated with tartaric acid, and containing an aniline dye and a synthetic sweetening substance. It was actually an article made in imitation of lime juice cordial.

Lime Juice consists of the natural juice of the fruit, and contains about 7 per cent. of citric acid.

## FIZZ BAGS.

This sample was found to be composed mainly of coloured maize starch, with some bread soda and

tartaric acid. The two latter ingredients cause the effervescence or "fizz" when the article becomes wet.

"Sherbet" should not contain starch, but should be composed of finely-ground sugar, bread soda and tartaric or citric acid.

### **ENGINEER'S DEPARTMENT.**

755 samples were received during the year from the various sections of this Department. Of this number, 56 were samples of water in connection with the chemical control of the City Water Supply. This work consisted of the chemical analysis of the finished waters delivered to the consumer from the three sources supplying the City:—Vartry, Bohernabreena and Poulaphouca. In former years it included the analysis of samples of the raw waters, but that portion of the work is now performed in the Waterworks Laboratory at Ballymore Eustace.

In connection with the routine control of the Sewage Disposal Scheme, 331 samples of effluent, 327 of sewage, and 28 of sludge were examined.

The four special samples of water were taken on premises where flooding had occurred, with a view to ascertaining, if possible, the source of the leakage.

The lead pipe was examined for its content of tin; the chloride of lime for its content of available chlorine, and the tallow to ascertain if it contained any water soluble ingredients.

The coffee residue was submitted for examination to test its suitability for admission to the sewers.

The two samples of asphalt were analysed for Bitumen content, and the specimen of concrete paving for its water absorption properties.

### **SCHOOLS COMMITTEE.**

The samples received from this Committee were all found to be of satisfactory quality:—The "Nectar Spread" was a coloured and flavoured honey.

## **VETERINARY DEPARTMENT.**

The samples of milk were submitted for examination by the Phosphatase Test to ascertain if they were pasteurised. The sample of water was analysed to ascertain if it could be used for washing dairy utensils. It proved to be polluted, and could not be recommended for that purpose.

The remaining samples were examined in reference to complaints. The specimen of bread was found to contain a fragment of soap. The coffee essence possessed a somewhat bitter taste, possibly due to a low sugar content. The butter, whilst it proved to be genuine, had a rancid odour and taste.

## **DISINFECTING DEPARTMENT.**

The sample submitted was a preparation of D.D.T. in Kerosene. It was found to contain the requisite percentage, namely, 5 per cent.

## **LAW AGENT'S AND SANITARY DEPARTMENTS.**

The samples of water analysed for these Departments were in reference to a legal action concerning pollution of a stream.

## **PUBLIC HEALTH DEPARTMENT.**

20 samples of Rag Flock were submitted under the Rag Flock Act, 1911. The Regulations under the Act provide that "Flock shall be deemed to conform to the standard of cleanliness for the purposes of the Rag Flock Act, 1911, when the amount of soluble chlorine in the form of Chlorides, removed by thorough washing with distilled water at a temperature not exceeding 25°C from not less than 40 grams of a well-mixed

sample, does not exceed 30 parts of chloride per 100,000 parts of flock.

All samples complied with the regulations.

### Analyses for other Public Bodies, Private Individuals, etc.

The total number of articles received from all sources, under the above heading during the year was 7,298.

The fees received for analysis, in the same period, amounted to £3,987 15s. 8d. This sum was lodged to the credit of the Corporation in accordance with the terms of my appointment.

The following table compares the number of samples analysed under the above headings, and the fees received, with those recorded in previous years.

Year	Number of Samples	Fees for Analyses		
		£	s.	d.
1922-1926 ... ..	53,751	6,668	18	1
1927-1931 ... ..	45,094	10,011	11	4
1932-1936 ... ..	50,230	9,033	18	5
1937-1941 ... ..	48,681	10,611	5	6
1942 ... ..	7,854	2,379	8	2
1943 ... ..	7,415	2,700	0	6
1944 ... ..	7,476	3,473	10	10
1945 ... ..	7,905	3,655	18	10
1946 ... ..	7,638	3,717	6	1
1947 ... ..	7,298	3,987	15	8

In conclusion, I wish to express my appreciation of the loyal and capable manner in which the members of my staff carried out their duties.

Your obedient servant,

B. G. FAGAN,  
City Analyst.

## FOOD SUPERVISION.

Food supervision in the City is maintained by inspection of shops, stores, markets, slaughter-houses, dairies, etc. Details as to the unsound food dealt with, totalling over two million lbs., and of other activities in this connection, are set out in the report of the Veterinary Section.

The exact incidence of food-transmitted infection is a matter of conjecture. "Food poisoning" as such is not notifiable, and individuals could receive treatment unknown to the Health Authority. Anything in the nature of an outbreak could hardly occur unnoticed, and only one such, i.e., that described on page 34 came to light during the year.

The activity of health officials in unearthing over two million lbs. of unsound food and stopping its use for human consumption, undoubtedly prevented much sickness. Nevertheless, there are gaps in the effort to prevent food-borne infection.

The Health Authority has statutory obligations in regard to food deposited or exposed for sale. This can be examined and any appearing unwholesome, seized. Now the frequency with which City food shops are inspected is proportional to the inspecting personnel available. Further, it is now appreciated that viands contaminated with pathogenic organisms may show no evidence of "unwholesomeness" to naked eye inspection by even a trained observer. Thus, even when there is staff sufficient to cover all food shops at frequent intervals, naked eye inspection is not sufficient to prevent bad food reaching the consumer.

In this respect, ante and post-mortem examination of cattle to be used as food would be a great advance. This is practical in the case of beasts killed in the Abattoir. Because, however, 54 private slaughter-houses continue to function, and in the absence of regulations to specify the time of killing in these

premises, routine examination of all carcasses is not feasible.

There is little doubt but that the City's milk supply constitutes a serious health hazard. Its production is governed by the Milk and Dairies Act, 1935, regulations under which specify, among other matters, standards for cow-houses, six-monthly examination of cattle, cleansing of milkers' hands and cows udders, and sterilisation of milk receptacles.

Of all the factors governing a clean milk supply, cleansing of hands, udders and sterilisation of receptacles are probably the most important. To ensure, however, that those very factors receive attention, constant inspection at actual milking time would be necessary—an obviously impossible task. Milk produced any great distance from Dublin may not reach City milk shops for some twenty-four hours. The bad results which must accrue to milk contained in imperfectly cleansed receptacles over such long periods is obvious.

Ten out of 193 general designated, and 7 of 12 special designated, milks examined failed to reach the prescribed bacteriological standards. In addition, a sample of milk stated to have been pasteurised was shown by guinea-pig inoculation to contain tubercle bacilli. Some 600 samples of special designated milk were also taken and forwarded for examination on behalf of the Department of Agriculture—the licensing Department for special designated milks. Since July, 1948, the Department of Agriculture have been very kindly transmitting to the Corporation, at monthly intervals, information as to the results of these examinations.

A most peculiar position has developed in regard to the examination of milk in that the Laboratory approved to carry out these tests for the Corporation do not see their way to record the results in bacteria per c.c., as specified by Regulation, but in terms of

“living organisms,” per c.c. This deviation from specific legal requirement has been used with success in one Court case, and with this precedent in mind the Corporation do not see their way to bring proceedings against those selling milk exceeding prescribed bacteriological standards. While this impasse continues it seems this Section of the Regulations will just not be enforced.

On the question of milk, it will be remembered that the Milk Tribunal appointed to go into this matter found the milk supply to Dublin sufficiently unsatisfactory to recommend pasteurisation of all raw milk. Their report was issued in 1946, but to date has not been implemented.

138 of the samples of milk tested for composition, as distinct from purity, were certified to be adulterated. Legal proceedings were only instituted by the Corporation in 55 instances.

The tendency towards communal feeding has increased during recent years, but eating-houses need conform to no particular standard. In actual practice, the dining apartment must satisfy the critical gaze of the customer. The kitchen is not, however, open to the public eye and, apart from provisions of the Shops Acts in regard to heating, lighting and ventilation, is not kept under observation by the health authority. Storage space may be unsuitable; there may be no refrigerator; there may be infestation by insects and rodents; and equipment for sterilising crockery and cutlery may be grossly inadequate.

A particular problem met with during the year was the manufacture of sweets by persons able to get sugar quotas. It is not necessary for persons to get the prior consent of the health authority as to the lay-out of the premises in which they propose to start this work. The result is that several premises, hastily

improvised and, needless to say, inadequately equipped, sprang up here and there throughout the City and functioned for quite a while before coming to the notice of the District Health Inspectors. As concrete examples, one such workshop was found operating next door to a public lavatory, and another in a stable loft.

The processing of these sweets entailed much hand manipulation, but despite the unhygienic circumstances in which produced, the finished article looked quite good. Though many outbreaks of food poisoning have been attributed to viands which to outward appearances seem all right, under existing legislation a food must actually appear unsound before it can be seized. Moreover, if bacteriological examination be carried out and reveals sweets infected by human pathogens, it seems that only the individual sweets so found, but not the whole consignment, may be seized.

With the increasing tendency for people to patronise public eating places, there is an urgent need that food establishments should be made to conform to stipulated standards. This should involve some form of licensing, conformity with the requirements of the licensing authority being conditional for the granting of a licence. These requirements should include approval of location in the case of new establishments, and in the case of those already operating should be made to cover such matters as fly-proofing, rat-proofing, storage arrangements, a refrigerator, staff washing facilities, and equipment for the sterilising of crockery, cutlery, etc. Visits by officials of the licensing authority should be made to achieve compliance with these requirements.

It would be further desirable if the relevant legislation were expended to provide for the seizure and condemnation of whole consignments when the examination of representative samples indicates unsoundness.

**FOOD AND DRUGS AND MARGARINE ACTS.**  
**ANNUAL RETURN TO 31ST DECEMBER, 1947.**

Articles Collected for Analysis	Number	Number Certified Adulterated	Number of Prosecutions	Number of Convictions	Penalties	Remarks
Milk	1,715	138	55	54	£102 5s. 0d. Fines £11 9s. 6d. Costs £1 10s. 6d. Expenses £7 10s. Court Poor Box P.O. Act.	} 1 proved but dismissed. 82 no Legal Action taken.
Butter	832	1	1	1	3s. 6d. Expenses.	
Margarine	111	—	—	—	—	
Lime Juice	1	1	1	1	—	
Cheese	3	—	—	—	—	
Honey	2	—	—	—	—	
Pepper	3	—	—	—	—	
Flock	20	—	—	—	—	

## BLIND PERSONS ACT, 1920.

### SCHEME FOR THE WELFARE OF THE BLIND.

#### Statement in respect of the Year to 31st December, 1947.

—————

Number assisted in their own homes—

Single or Widowed Persons :

Males	.....	.....	.....	245
Females	.....	.....	.....	510
Number of Married Blind Men				183
Number of Married Blind Women				37
Total				975

Number maintained in Institutions :

Males	.....	.....	.....	76
Females	.....	.....	.....	59
Total				135
Grand Total				1,110

Payments made in connection with Scheme—

Allowances to Blind Persons in their own homes	.....	.....	£19,170	3	3
Food Vouchers issued	.....	.....	10,098	12	7
Payments to Institutions	.....	.....	4,020	7	6
			£33,289	3	4

## PUBLIC CLEANSING.

The Public Cleansing Service comprise three important functions, namely :—

1. Street Cleansing.
2. Collection of Refuse.
3. Disposal of Refuse.

### STREET CLEANSING.

The Cleansing Department are responsible for the cleaning of all the streets, of which there are 458 miles of main road, road gullies and catchpits within the City boundary and the periodic emptying of ashbins and the disposal of the refuse collected therefrom.

All the streets are swept weekly, bi-weekly or thrice weekly, depending on their location. The principal streets, and streets in congested areas receive daily attention. Patrol men provided with Litter Carts are daily employed patrolling the main thoroughfares collecting and disposing of litter.

Petrol-driven washing and sweeping machines are utilised for washing and sweeping the principal thoroughfares.

Petrol-driven vacuum gully emptying vehicles are utilised for emptying the catchpits connected with the road gullies.

For the year ending March, 1948, 26,182 tons of street sweepings were collected and disposed of at the various disposal grounds and depots.

On Sunday a limited staff is engaged on street cleansing work.

## REFUSE COLLECTION.

Domestic refuse collections are made thrice weekly in the centre city area, twice weekly in other areas and once weekly in residential areas.

Petrol-driven refuse collection vehicles, varying from three to five tons and fitted with hydraulic tipping gear and with sliding covers to prevent scattering of contents (in the central city area dustless barrier-type collection vehicles are used) and a number of horse-drawn vehicles, are utilised for the collection of domestic refuse, street, refuse, etc.

For the year ending March, 1948, the total quantity of domestic and trade refuse collected was 107,525 tons, equivalent to an average yield of 11·48 cwts. per thousand of population per day. 104,084 tons were disposed of on the various disposal grounds, principally at East Wall Road (foreshore reclamation) on the North side of the City and Irishtown (foreshore reclamation) and North Crumlin (disused clay pits) on the South side, which is being filled in for use as a public park. 3,441 tons were consumed at the Stanley Street Destructor.

## PUBLIC CONVENIENCES.

There are eighty-six Public Conveniences in the City which are washed and cleansed daily.

## BATHS AND WASH HOUSES.

It will be observed that the Corporation's public health services include a D.D.T. team and a Scabies Clinic. The experience of these units clearly demonstrates a high incidence of infestation in the City.

To those familiar with housing conditions here, this is not surprising. Approximately one-fifth of the City's population live in tenement houses or similar

dwellings, but in few of these is there a bathroom. The difficulties encountered by this large section of the community in endeavouring to maintain complete bodily cleanliness is appreciated by those cognisant with the pattern of tenement life. Water must be carried several flights of stairs, and the trouble in transporting and heating sufficient to fill a makeshift bathtub is manifest. For the adults in a family occupying but one room, there is the practical problem of the necessary privacy.

Infestation is directly influenced by the opportunities for maintaining cleanliness. Because of circumstances these facilities are at a minimum for those living in tenement and similar dwellings. Indeed, a vicious circle is often started, and a young housewife, though starting with the best of intentions, wearies in the struggle for cleanliness, gives up the fight, and becomes tolerant of dirt.

This is a problem by no means confined to Dublin. It is, indeed, of universal application though reaching most significance in large centres of population. The remedy is houses with their own bathrooms, and, in fact, hundreds of such houses come into circulation every year. The provision of bathrooms in every City dwelling is, however, a very distant project, perhaps in this country even an unattainable ideal.

A practical alternative is the provision of washing facilities on a community basis, and it is well to recollect that for over 100 years, i.e., since the Baths and Wash-houses Act, 1846, Town Councils have had the power to build public baths and wash-houses.

This Act gives power which one might have expected to see exercised to the full. Public baths of which individuals could avail, and wash-houses in which housewives could launder domestic articles, would surely be a boon. One such centre has been

founded, and is run by the Corporation at Tara Street. In a city, however, whose housing circumstances have created such appalling need, it is unfortunate many more such centres have not been erected with the passage of years since 1846.

The following is a report from Mr. Lynch, Superintendent of Tara Street Baths :

The returns from the Baths and Wash Houses show that 123,053 persons visited the establishment during the year ended 31st December, 1947.

The income derived during the year came to £2,220 4s. 4d., an increase in the receipts, as compared with the previous year, amounting to £157 7s. 8d., and an increase in visitors amounting to 2,681.

During the ten months the Swimming Baths were open, they were used by 46,382 persons, an increase in the number of visitors amounting to 5,892.

Pupils from the "Christian Brothers," "National Schools," "Baden-Powell Scouts," "Catholic Boy Scouts," "Vocational Education," recruits from "Garda Depot," and "Defence Forces," attended for instructional purposes during the season.

Two hundred and fifty-nine visits were made after the usual closing hours by Swimming Clubs.

The Private Reclining Baths were availed of by 46,179 Males, the number of Females being 10,445. Comparison with previous year shows an increase of Male visitors to the number of 919, and a decrease in the number of Female visitors to the number of 139.

The Public Wash House (Laundry) was utilised by

20,047 women, a decrease of 2,889 as compared with 1946.

As there is no filtration plant attached to the two swimming baths, the water was renewed every twenty-four hours (each bath contains approximately 70,000 galls.); the water is chlorinated twice daily in accordance with arrangements and instructions given by B. J. Fagan, Esq., B.Sc., F.I.C., A.R.C.Sc.I., City Analyst.

### PATRICK LYNCH.

CITY ENGINEER'S DEPARTMENT,  
8th June, 1948.

### **WATER SUPPLY.**

REPORT BY N. A. CHANCE, B.A.I., M.I.C.E.I.,  
City Engineer.

The domestic water supplied to the City is from three sources—the River Vartry, the River Liffey, and Bohernabreena. All have upland catchment areas with large storage reservoirs. The Vartry and Bohernabreena supplies are purified with slow sand filters. The River Liffey is purified by chemical precipitation and by rapid gravity filters.

Howth area is supplied partly by Vartry water and partly by a small local reservoir at Balcill, the water from which is treated by slow sand filters.

Fortnightly chemical and daily bacteriological tests are made of all filtered water and tests of the raw water and of water at intermediate stages of purification are also made at regular intervals.

Throughout the year the chemical analyses showed only those seasonal changes which have been known to occur over a long number of years.

The average daily consumption of water at present is 28 million gallons, of which approximately 8 million gallons is drawn from the River Liffey, 3 million from the Bohernabreena catchment, and 17 million gallons from the Vartry.

## DISINFECTING DEPARTMENT.

### Transport, Equipment and Distribution of Staff.

The Disinfecting Depot is equipped with a Washington-Lyons Steam disinfecting machine, a formalin chamber, and ten reclining baths.

Transport consists of six motor vans, and one bicycle.

Four of the six vans are used for the collection of infected articles. One is used for the return of articles disinfected. One is used part-time for the carriage of disinfectors working on delousing and disinfection in persons' homes, and part-time for the carriage of Rodent Control operatives and their equipment to and from premises under treatment. The bicycle is used by the Superintendent in the course of his outdoor duties, and the Health Officer is supplied with bus tickets for his transport during the course of his investigations and control of contacts.

Each of the four vans working on disinfection is manned by a Disinfector and a driver who assists him, and it carries the necessary sprayers, mops, cloths, buckets, canvas bags, etc., and supplies of disinfectants.

The delivery van is manned by a driver and helper.

The sixth van distributes and collects the four disinfection operatives with their equipment of sprayers, canisters and supplies of D.D.T. powder, solution and emulsion. It also distributes and collects two Rodent Control operatives with their equipment of cans of baits and poisons, gas pump and cyanide powder.

Stocks of sulphur, sulphur pots and trays (for deratization of ships), sprayers (bucket, hand and atomizing), chemical disinfectants (cyllin, lysol and

formalin), baits (sausage rusk, groats, bread, etc.), poisons (zinc phosphide, arsenious oxide, red squill and barium carbonate, etc.), rat and mouse traps, etc., are held in the Depot stores and issued as required.

### DISTRIBUTION OF STAFF.

Superintendent  
(Health Inspector).

DISINFECTION	RODENT CONTROL	DISINFESTATION
1 Enquiry Officer (Health Inspector)		
6 Disinfectors— (On Vans 4, On machine 2)	2 Rodent Control Operators (Disinfectors)	4 Disinfectors (1 is a lady).
5 Motor Drivers— (On disinfecting vans 4, On delivery van 1).		
2 Labourers— (1 on delivery van. 1 Yardman).	1 Motor driver serving Rodent Control and Disinfestation.	
1 Boilerman		
2 Charwomen		

1 Time-keeper Clerk.

At the Disinfecting Depot, Marrowbone Lane, the following works are carried out, viz. :—

Disinfection, Disinfestation and Rodent Control.

#### DISINFECTION.

On receipt of notification of admission of a case of infectious disease into a hospital, or the termination of illness of a case treated at home, a van is dispatched to the patient's home and the necessary disinfection is carried out.

If the disease is pulmonary tuberculosis all the surfaces of the room are sprayed with a 2% solution of Cyllin and the furniture cleansed with cloths soaked

in the same solution. The patient's bedding and apparel are removed to the Depot and disinfected by steam in a Washington-Lyons disinfecting apparatus. A Brown Sterilization Control tube is inserted with the goods in order to check on the time-temperature equation. Articles which would be injured by steam are dealt with appropriately by the use of formalin spray or gas.

If the disease belongs to the enteric group (typhoid, para-typhoid), dysentery, poliomyelitis, the same procedure is followed, except that it is not considered necessary to spray all room surfaces. The dwelling, and fly-breeding places adjacent are sprayed with a 5% solution of D.D.T.

If the disease is diphtheria or scarlatina, the bedding and clothing are not removed for disinfection.

Hospitals and dispensaries, etc., are disinfected on receipt of requests from the Medical Officers concerned, in the manner indicated by them. Bedding and clothing belonging to hospitals are disinfected as required.

Bales and parcels of imported second-hand clothing and rags are collected at the Port, disinfected and returned to the Customs Officers with a certificate of disinfection.

#### DISINFESTATION.

Commencing in July, 1945, a campaign was initiated with the object of eradicating lice, bed-bugs, fleas, flies and other insect pests from the poorer quarters of the City, common lodging-houses, Corporation housing schemes, etc., by the use of D.D.T. This work continued throughout the year under review.

Requests for treatments are also received from Hospitals, Institutions, Food-producing concerns, Doctors, Health Inspectors, Child Welfare Nurses, etc.

Persons found to be infested with body, head or pubic lice, are treated at the Depot. Their dwellings are visited and other members of the household and their bedding disinfested there.

The furniture and effects of families being re-

housed are disinfested before removal from the old dwelling.

STATEMENT SHOWING WORK PERFORMED BY DISINFECTING BRANCH FOR YEAR 1947.

Quarter of Year	Dwellings Disinfected	Rooms Disinfected	Removals of Clothing	Articles Disinfected	Articles Washed	Disinfections after Phthisis	Beds Supplied	Mattresses Supplied	Persons Using Baths in Depot
1	432	793	668	44,804	151	217	—	2	26
2	427	753	642	46,551	140	237	—	—	41
3	409	742	650	43,612	144	217	—	—	49
4	614	1,051	630	47,271	156	219	—	—	28
Total for 1947	1,882	3,339	2,590	182,238	591	890	—	2	144

### Notes on the use of D.D.T.

D.D.T. is supplied made up and ready for use in three forms, viz., Solution in kerosene, Powder and Emulsion.

It acts as a contact insecticide, is toxic as a spray and also as a filmy deposit possessing residual toxicity.

Since not all of the insect pests present in a dwelling will receive a direct hit of the spray, it is the residual film left after evaporation of the kerosene which will kill the remainder when they emerge from their hiding places to pursue their quest for food.

The spray should be applied with a sprayer (built on the aspirating principle) capable of depositing an even film over all surfaces.

Before using spray, all foodstuffs should be removed and cooking and eating utensils covered. Fires and naked lights should be extinguished and smoking prohibited.

Operatives should work in pairs.

### TREATMENT FOR BUGS.

Spray furniture after removing drawers and shelves. Pay particular attention to joints, corners and cracks. Spray drawers and shelves, and replace. Dismantle bedsteads and spray particularly all joints and fittings, frames of spring mattresses and recesses of box mattresses. Take down pictures and any other articles hanging on walls and spray them. If the backing paper of the pictures is torn in such a manner as to afford harbourage for bugs, remove it altogether. Then move all sprayed articles to the centre of the room and spray the walls and ceiling. Force the spray behind skirting boards, picture rails, hearth and mantelpiece, gas and electric light fittings, door and window frames and sash boxes, and into nail holes, ventilators and cracks in plaster or woodwork and behind loose wallpaper. In cases of very heavy bug infestation the wallpaper should be removed, and skirting and floor boards eased so that the solution can be introduced behind them.

A single thorough application effects complete con-

trol, but if spray deposits are removed or covered during cleansing or redecorating, a second spraying may be necessary.

Approximately three pints of 5% D.D.T. solution should be used for 1,000 square feet.

Bedding, soft goods and upholstery are treated with 5% D.D.T. powder. It is best applied with a perforated canister. Powder both sides of every blanket, sheet and coverlet and mattress. Pay particular attention to the sides and seams of mattresses. Work the powder well into the articles using about 4 ozs. per bed.

Thoroughness is the keynote in bug infestation. Never take it for granted that no bugs exist under certain partitions, architraves or flooring boards—leave nothing to chance.

#### TREATMENT FOR LICE.

Treat bedding with 5% D.D.T. Powder, applying it with a perforated canister. Personal clothing should be spread out on a table or bench and each article powdered inside and outside, working the powder well into them. Particular attention should be directed to the seams.

For head and pubic lice D.D.T. Emulsion is applied as directed by the manufacturers of the emulsion. It should be left in contact with the hair for 24 hours before washing out. A Sackers Nit comb will remove all dead lice and nits.

#### TREATMENT FOR FLEAS.

Treat bedding and upholstery as for bugs and lice. Introduce spray into cracks and divisions in skirting boards. Powder floors and sweep powder well into crevices.

#### TREATMENT FOR COCKROACHES AND STEAM FLIES (GERMAN COCKROACHES).

Spray into all crevices, cracks and holes around fireplaces and cooking apparatus. Fire powder into pipe

holes and behind shelving, cupboards, etc. Leave down a three-inch border of powder at base of all walls. Issue instructions that the D.D.T. is not to be interfered with for at least three weeks.

#### TREATMENT FOR FLIES.

Spray all walls, ceilings, windows, mirrors, lights, flex cords, etc., and particularly where flies congregate and rest. Dust bins, ashpits, swill buckets, manure heaps, piggeries, cowsheds, stables, etc., at or near the location of infestation should be sought out and sprayed thoroughly.

In treating occupied hospital wards, pull beds away from walls, and spray only the windows and lockers. Then push back the beds and spray central lights and mirrors.

#### EQUIPMENT.

Sprayers, powder guns, canisters, buckets and cans to carry solution and powder.

#### PROTECTIVE CLOTHING, ETC.

Masks to cover nose and mouth, eye-shades, sleeved overalls, rubber gloves, towel and soap.

#### RODENT CONTROL.

A special Branch to deal with rodent infestations was established and commenced to operate as from 17/11/47.

Acting on the dictum "Clean before your own doorstep first," initial operations were confined to Corporation properties.

It is proposed to deal with the control of rats in the City Sewers early in the coming year, and to extend the scope of our activities generally so as to provide a service which may be availed of by the public on a repayable basis at cost.

A statement as to Rodent Control Operations, covering the period 17/11/47 to 31/12/47, will be found on page 202.



**RODENT CONTROL OPERATIONS—FROM 17th NOVEMBER, 1947 TO 31st DECEMBER, 1947**

ADDRESS	PROPERTY OWNER	Bait	Poison	Men Employed	Cost	Rats Killed
Capuchin Graveyard, Lower Kevin Street	Dublin Corporation Public Health Dept.	Sausage Rusk	Zinc Phosphide	2	£ 1 16 6	96
Piggery, rere 18 New Street ...	Do. ...	Sausage Rusk	Red Squill ...	2	1 7 4	45
Stables, rere 18 New Street ...	Do. ...	Sausage Rusk	Zinc Phosphide	2	0 9 2	15
57, 59, 61, 63, 65 Carrow Road	Dublin Corporation House Maintenance Dept. ...	Sausage Rusk	Zinc Phosphide	2	2 12 10	0
70 Marcievicz House ...	Do. ...	Sausage Rusk	Zinc Phosphide	2	0 14 11	20
St. Anne's Estate, Clontarf ...	Do. ...	Sausage Rusk	Zinc Phosphide	2	8 12 11	90
Mt. Argus Tip-head ...	Dublin Corporation Cleansing Dept. ...	Sausage Rusk	Red Squill ...	2	8 13 5	980
Marrowbone Lane Tip-head ...	Do. ...	Sausage Rusk	Zinc Phosphide	2	7 10 6	585
Quarry Dump, Kimmage ...	Dublin Corporation Paving Department ...	Sausage Rusk	Red Squill ...	2	8 13 5	105
					£40 11 0	1,936

## PLACES OF PUBLIC RESORT.

Under the Public Health (Amendment) Act, 1890, an Urban Authority is responsible for the inspection of premises used as public resorts.

During the year 130 premises were used as places of public entertainment. These included 7 theatres, 37 cinemas, 41 public dance halls, 44 local and parochial halls and one boxing stadium. It was not practicable to insist on structural improvements which are considered desirable in some of the older premises owing to the continued stringency of the supply position. Lack of suitable equipment also precluded amelioration in ventilation systems which it had been hoped to secure in many cases. Regular inspection of all places of entertainment in the city was continued during the year by officers of the City Architect's, the City Engineer's, Fire and Public Health Departments. The total number of inspections was 2,266.

During the year plans were approved for one new cinema and two new dance halls, while proposals for additions and alterations to 18 existing premises were sanctioned. Plans were disapproved in two cases. Additions and alterations to 11 existing buildings were completed in accordance with plans previously approved.

## HOUSING.

From a Public Health viewpoint the housing of the Working Classes has always been a question of great importance. It has never been so important as now.

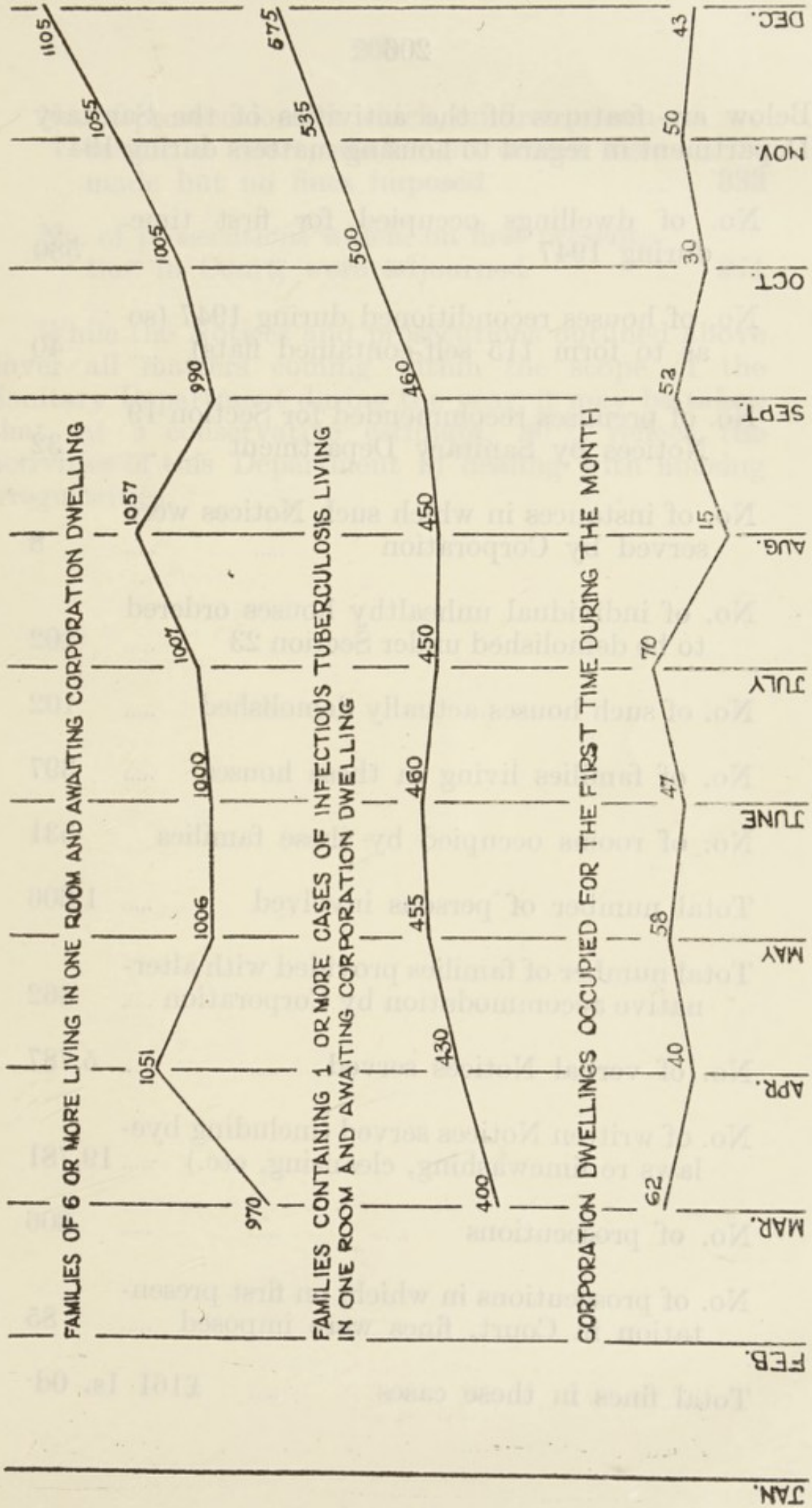
If infantile mortality is to be reduced, and the incidence of tuberculosis and other infectious diseases

lowered, the first essential is the improvement of housing conditions. Moreover, it is well to consider the price that is being paid to-day not only in ill-health, but even in social unrest, immorality, and crime because of the prevalence of slum conditions. Living in houses that are worn out, decayed, and insanitary, must have a demoralising effect on those forced to an upbringing in such an environment. The cumulative effects of living in houses that are going downhill may well be to start the occupants also on the down grade.

The housing problem is not of recent growth. It has, however, been intensified of recent years by the continuing drift of population from rural areas to the City. It is further intensified by smaller families. To illustrate this latter point: whereas a hundred people taken at random in the City fifty years ago would almost certainly include a number of families of ten or more each needing its own home, a hundred people similarly surveyed to-day would consist of a greater number of smaller families each of which naturally seeking its own home. The larger population when composed of smaller units thus even further exacerbates an already unsolved problem.

Not only the dictates of public health, but also the councils of humanity and statesmanship, proclaim that slums must be abolished. Although for nearly sixty years there has been an obligation on the Corporation to deal with the plight of the working class, the slums are still here.

Below is depicted graphically some features of the housing problem as experienced from month to month :



Below are features of the activities of the Sanitary Department in regard to housing matters during 1947

No. of dwellings occupied for first time during 1947	580
No. of houses reconditioned during 1947 (so as to form 115 self-contained flats)	40
No. of premises recommended for Section 19 Notices by Sanitary Department	32
No. of instances in which such Notices were served by Corporation	8
No. of individual unhealthy houses ordered to be demolished under Section 23	102
No. of such houses actually demolished	102
No. of families living in these houses	397
No. of rooms occupied by these families	531
Total number of persons involved	1,606
Total number of families provided with alternative accommodation by Corporation	862
No. of verbal Notices served	5,787
No. of written Notices served (including byelaws re limewashing, cleansing, etc.)	19,781
No. of prosecutions	806
No. of prosecutions in which, on first presentation in Court, fines were imposed	85
Total fines in these cases	£161 ls. 0d.

No. of prosecutions in which, on first presentation in Court, abatement orders were made but no fines imposed .....	333
No. of prosecutions which, on first presentation in Court, were adjourned .....	271

While the Notices and prosecutions outlined above cover all matters coming within the scope of the Sanitary Department during the year, it may be taken that, at a conservative estimate, 80% reflect the activities of this Department in dealing with housing irregularities.

Cases	27
Developed Fever	22
Children, Medical Inspection of	24
Cleaning of Streets	148
Cases, No.	70
Cases, Dental	40
Cases, Ultra-Violet Light	40
Cases, Wallpaper	31
Compost Ladings, Removal	151
Condemned Rooms	14
Condemned, Meat	200
Crustacea, Examination	20
Dairy Yards, Inspection of	107
Deaths	17
Deaths in Public Institutions	17
Deaths in Schoolchildren	72
Dental Services	45
Disinfectants and Exterminators	31
Disinfectants	27
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APPENDIX A.

Table showing Annual Rate of Mortality, and Deaths from Certain Causes, City of Dublin, 1910—1945.

	Annual Rate of Mortality		Total Deaths	Deaths under One Year	Infant Mor-tality Rate	Typhus	Typhoid	Measles	Scarlet Fever	Whoop-ing Cough	Diph-theria	Diarr-hoeal Diseases	Dysen-tery	Tuberculosis		Cancer	Pneu-monia	Diseases of Respir-atory System
	From all Causes	From Principal Epidemic Diseases												Pul-monary	Other Forms			
1910 ...	21.2	1.6	6,576	1,417	145	5	32	19	37	105	49	238	—	798	385	316	508	1,001
1911 ...	23.0	3.9	7,119	1,532	159	4	70	187	71	160	89	570	4	864	331	286	468	875
1912 ...	22.0	2.4	6,758	1,336	142	2	39	248	56	79	75	210	2	845	311	277	661	987
1913 ...	21.3	2.4	6,559	1,474	157	11	33	22	28	69	65	470	4	839	296	334	485	820
1914 ...	22.3	2.9	7,049	1,412	148	2	51	355	36	49	62	335	4	876	300	304	555	969
1915 ...	23.0	2.4	7,194	1,421	168	3	25	90	26	133	50	388	7	949	282	334	556	1,101
1916 ...	21.9	1.9	6,636	1,237	164	2	44	80	26	63	29	329	6	820	251	311	463	905
1917 ...	20.1	2.0	6,122	1,110	160	—	18	105	6	67	30	265	8	826	236	262	463	901
1918 ...	25.0	2.0	7,625	1,178	161	—	23	90	12	170	25	272	2	896	267	317	882	884
1919 ...	22.0	1.3	6,954	1,194	152	—	8	24	27	20	22	263	19	738	261	316	748	1,061
1920 ...	19.1	2.1	6,074	1,384	152	10	11	100	14	221	45	239	6	615	205	313	639	892
1921 ...	16.8	1.6	5,432	1,166	143	2	7	44	7	21	48	382	6	583	106	321	485	724
1922 ...	17.6	1.3	5,740	1,027	120	—	8	170	18	40	31	158	1	574	164	313	631	983
1923 ...	15.0	1.2	4,952	991	117	—	14	15	16	128	22	205	1	507	159	342	381	642
1924 ...	16.2	1.2	5,482	1,097	119	—	8	109	17	19	32	214	—	518	122	352	636	895
1925 ...	15.8	1.6	5,302	1,015	117	—	7	113	25	97	36	267	2	515	149	337	537	726
1926 ...	15.8	1.5	4,999	1,049	118	1	5	54	20	37	54	291	—	424	150	332	406	658
1927 ...	17.1	1.5	5,416	996	122	1	5	61	12	197	60	144	1	533	123	328	650	758
1928 ...	15.0	1.3	4,791	845	103	—	3	171	9	15	44	174	2	466	112	368	391	566
1929 ...	16.0	1.0	5,103	866	107	1	1	3	8	83	56	159	—	443	113	353	520	864
1930 ...	15.0	0.9	6,161	1,031	98	—	1	86	7	66	77	151	—	586	162	471	606	787
1931 ...	15.9	1.2	6,562	977	94	—	4	223	19	31	72	144	—	617	197	439	773	828
1932 ...	15.6	1.1	6,536	1,067	102	—	14	42	24	121	82	190	2	551	144	484	638	890
1933 ...	15.3	0.9	6,405	891	83	—	9	72	9	42	110	152	—	584	157	478	696	851
1934 ...	13.6	0.7	5,748	578	79	—	11	11	4	88	76	124	—	570	144	544	521	491
1935 ...	15.2	1.0	6,506	1,067	93	—	2	87	18	18	89	203	—	565	164	527	665	703
1936 ...	15.0	1.3	6,996	1,337	115	—	11	90	66	57	110	254	—	602	138	540	662	754
1937 ...	14.9	1.0	7,023	1,231	106	—	1	46	26	73	84	242	—	565	156	563	656	891
1938 ...	13.3	0.8	6,355	1,144	98	—	2	37	22	33	92	214	—	558	135	581	586	550
1939 ...	13.3	0.8	6,403	1,036	90	—	7	51	5	26	84	209	—	568	148	585	431	601
1940 ...	14.5	0.7	7,065	1,039	92	—	3	23	7	43	56	233	—	636	153	584	457	785
1941 ...	14.1	1.3	6,905	1,339	118	—	4	32	5	38	54	506	—	610	151	582	368	555
1942 ...	14.0	1.3	6,855	1,311	105	—	6	17	6	72	56	465	—	762	162	626	374	434
1943 ...	14.5	1.5	7,268	1,617	128	—	3	5	7	63	84	609	—	733	174	631	385	453
1944 ...	14.1	1.3	7,141	1,509	125	—	8	47	—	39	74	513	1	604	195	643	406	451
1945 ...	14.0	1.3	7,036	1,424	114	—	3	5	—	30	36	557	5	643	181	622	381	396
1946 ...	13.2	1.0	6,690	1,266	96	—	2	13	—	43	13	461	—	594	176	602	338	349
1947 ...	14.1	0.8	7,253	1,194	88	—	—	22	—	120	5	282	1	651	193	648	448	436



APPENDIX B.

Return showing the number of Notifications of Infectious Diseases, City of Dublin, 1910—1945.

	Typhus.	Typhoid.	Diphtheria.	Scarlet Fever.	Cerebro-Spinal Fever.	Continued Fever.	Encephalitis Lethargica.	Erysipelas.	Ophthalmia Neonatorum.	Pneumonia.	Puerperal Sepsis.	Dysentery.	Malaria.	Diarrhoea and Enteritis.	Measles.	Whooping Cough.	Acute Anterior Poliomyelitis.	Trachoma.	Perphigus Neonatorum.
1910 ...	26	299	478	652	1	55	.	533	.	.	2	.	.	.	.	.	.	.	.
1911 ...	33	622	569	976	2	78	.	379	.	.	2	.	.	.	.	.	.	.	.
1912 ...	11	255	439	712	2	49	.	314	.	.	4	.	.	.	.	.	.	.	.
1913 ...	65	287	365	699	—	28	.	238	.	.	4	.	.	.	.	.	1	.	.
1914 ...	31	329	415	569	3	20	.	171	.	.	4	.	.	.	.	.	—	.	.
1915 ...	31	207	256	425	14	14	.	151	.	.	4	.	.	.	.	.	—	.	.
1916 ...	11	326	181	374	7	13	.	99	.	.	4	.	.	.	.	.	8	.	.
1917 ...	2	133	119	186	2	5	.	77	.	.	—	.	.	.	.	.	—	.	.
1918 ...	5	110	122	311	5	4	.	73	.	.	10	.	.	.	.	.	2	.	.
1919 ...	13	59	153	672	4	3	.	109	.	199	6	175	102	.	.	.	—	.	.
1920 ...	48	141	274	328	6	3	.	105	.	213	2	60	10	.	.	.	—	.	.
1921 ...	17	56	269	247	4	1	.	80	.	217	7	27	4	.	.	.	—	.	.
1922 ...	—	43	242	345	—	—	.	104	.	230	9	6	5	.	.	.	—	.	.
1923 ...	1	97	219	322	2	1	.	79	.	143	11	7	1	.	.	.	—	.	.
1924 ...	2	84	265	444	4	—	.	58	—	242	10	4	—	.	.	.	—	.	.
1925 ...	—	41	303	515	2	—	4	61	1	213	9	7	—	.	.	.	—	.	.
1926 ...	1	28	475	614	—	1	.	79	2	230	8	—	—	.	.	.	—	.	.
1927 ...	1	26	440	386	—	2	.	59	7	246	2	1	—	.	.	.	—	.	.
1928 ...	4	24	407	638	—	8	—	73	7	201	8	—	—	.	.	.	—	.	.
1929 ...	1	15	500	430	3	7	—	55	6	256	11	—	1	.	.	.	—	.	.
1930 ...	—	28	646	435	4	6	6	31	—	334	5	—	—	.	.	.	—	.	.
1931 ...	—	26	634	1,015	3	—	5	55	—	289	10	—	—	.	.	.	—	.	.
1932 ...	2	96	862	1,082	8	1	1	105	1	253	12	—	—	.	.	.	—	.	.
1933 ...	—	49	1,073	714	6	—	5	117	—	196	12	—	—	.	.	.	—	.	.
1934 ...	—	38	983	661	15	1	1	128	—	134	15	—	—	.	.	.	—	.	.
1935 ...	—	22	936	907	19	—	—	158	—	135	23	—	—	.	.	.	—	.	.
1936 ...	—	53	870	1,768	33	—	3	188	1	120	18	—	—	.	.	.	2	.	.
1937 ...	—	44	810	1,075	38	—	2	130	—	156	13	1	—	.	.	.	—	.	.
1938 ...	—	19	958	1,154	25	—	6	148	2	136	15	—	—	.	.	.	—	.	.
1939 ...	—	27	913	761	13	—	4	85	1	151	16	3	1	.	.	.	3	.	.
1940 ...	—	65	720	627	27	—	3	94	11	200	13	1	—	.	.	.	1	.	.
1941 ...	—	53	451	511	34	—	3	117	12	213	18	—	—	.	.	.	8	100	3
1942 ...	—	33	624	678	33	—	2	130	13	358	22	1	1	2,657	1,427	1,423	53	42	1
1943 ...	—	23	1,351	658	38	—	2	163	7	346	15	2	—	2,031	419	586	7	64	1
1944 ...	—	*148	1,330	355	50	1	6	212	3	448	17	8	1	1,279	3,548	1,267	3	47	—
1945 ...	—	14	891	303	20	—	8	207	10	452	14	28	1	1,837	2,112	1,275	19	48	—
1946 ...	—	15	403	341	6	—	1	205	5	767	12	8	—	1,853	798	1,288	21	15	1
1947 ...	—	10	185	476	32	1	—	200	6	633	9	8	1	1,868	3,440	2,293	28	22	—

Dot (·) indicates that the disease in question was not notifiable in that particular year.  
 \* Includes 83 cases Paratyphoid Fever B.

Table showing the distribution of...

Year	...	...	...	...	...	...	...	...
1901	...	...	...	...	...	...	...	...
1902	...	...	...	...	...	...	...	...
1903	...	...	...	...	...	...	...	...
1904	...	...	...	...	...	...	...	...
1905	...	...	...	...	...	...	...	...
1906	...	...	...	...	...	...	...	...
1907	...	...	...	...	...	...	...	...
1908	...	...	...	...	...	...	...	...
1909	...	...	...	...	...	...	...	...
1910	...	...	...	...	...	...	...	...
1911	...	...	...	...	...	...	...	...
1912	...	...	...	...	...	...	...	...
1913	...	...	...	...	...	...	...	...
1914	...	...	...	...	...	...	...	...
1915	...	...	...	...	...	...	...	...
1916	...	...	...	...	...	...	...	...
1917	...	...	...	...	...	...	...	...
1918	...	...	...	...	...	...	...	...
1919	...	...	...	...	...	...	...	...
1920	...	...	...	...	...	...	...	...
1921	...	...	...	...	...	...	...	...
1922	...	...	...	...	...	...	...	...
1923	...	...	...	...	...	...	...	...
1924	...	...	...	...	...	...	...	...
1925	...	...	...	...	...	...	...	...
1926	...	...	...	...	...	...	...	...
1927	...	...	...	...	...	...	...	...
1928	...	...	...	...	...	...	...	...
1929	...	...	...	...	...	...	...	...
1930	...	...	...	...	...	...	...	...
1931	...	...	...	...	...	...	...	...
1932	...	...	...	...	...	...	...	...
1933	...	...	...	...	...	...	...	...
1934	...	...	...	...	...	...	...	...
1935	...	...	...	...	...	...	...	...
1936	...	...	...	...	...	...	...	...
1937	...	...	...	...	...	...	...	...
1938	...	...	...	...	...	...	...	...
1939	...	...	...	...	...	...	...	...
1940	...	...	...	...	...	...	...	...
1941	...	...	...	...	...	...	...	...
1942	...	...	...	...	...	...	...	...
1943	...	...	...	...	...	...	...	...
1944	...	...	...	...	...	...	...	...
1945	...	...	...	...	...	...	...	...
1946	...	...	...	...	...	...	...	...
1947	...	...	...	...	...	...	...	...
1948	...	...	...	...	...	...	...	...
1949	...	...	...	...	...	...	...	...
1950	...	...	...	...	...	...	...	...
1951	...	...	...	...	...	...	...	...
1952	...	...	...	...	...	...	...	...
1953	...	...	...	...	...	...	...	...
1954	...	...	...	...	...	...	...	...
1955	...	...	...	...	...	...	...	...
1956	...	...	...	...	...	...	...	...
1957	...	...	...	...	...	...	...	...
1958	...	...	...	...	...	...	...	...
1959	...	...	...	...	...	...	...	...
1960	...	...	...	...	...	...	...	...
1961	...	...	...	...	...	...	...	...
1962	...	...	...	...	...	...	...	...
1963	...	...	...	...	...	...	...	...
1964	...	...	...	...	...	...	...	...
1965	...	...	...	...	...	...	...	...
1966	...	...	...	...	...	...	...	...
1967	...	...	...	...	...	...	...	...
1968	...	...	...	...	...	...	...	...
1969	...	...	...	...	...	...	...	...
1970	...	...	...	...	...	...	...	...
1971	...	...	...	...	...	...	...	...
1972	...	...	...	...	...	...	...	...
1973	...	...	...	...	...	...	...	...
1974	...	...	...	...	...	...	...	...
1975	...	...	...	...	...	...	...	...
1976	...	...	...	...	...	...	...	...
1977	...	...	...	...	...	...	...	...
1978	...	...	...	...	...	...	...	...
1979	...	...	...	...	...	...	...	...
1980	...	...	...	...	...	...	...	...
1981	...	...	...	...	...	...	...	...
1982	...	...	...	...	...	...	...	...
1983	...	...	...	...	...	...	...	...
1984	...	...	...	...	...	...	...	...
1985	...	...	...	...	...	...	...	...
1986	...	...	...	...	...	...	...	...
1987	...	...	...	...	...	...	...	...
1988	...	...	...	...	...	...	...	...
1989	...	...	...	...	...	...	...	...
1990	...	...	...	...	...	...	...	...
1991	...	...	...	...	...	...	...	...
1992	...	...	...	...	...	...	...	...
1993	...	...	...	...	...	...	...	...
1994	...	...	...	...	...	...	...	...
1995	...	...	...	...	...	...	...	...
1996	...	...	...	...	...	...	...	...
1997	...	...	...	...	...	...	...	...
1998	...	...	...	...	...	...	...	...
1999	...	...	...	...	...	...	...	...
2000	...	...	...	...	...	...	...	...

Note: (.) indicates that the data is missing in question and the variable is not used.



