[Report 1945] / Medical Officer of Health, Belfast County Borough.

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REPORT

ON THE

Health of the County Borough of Belfast for the Year 1945

BY THE

Medical Superintendent
Officer of Health

GRAHAM & HESLIP LTD., BELFAST

REPORT

ON THE

Health of the County Borough of Belfast

FOR THE YEAR 1945

BY

SAMUEL BARRON, M.R.C.P., D.P.H.

The Medical Superintendent Officer of Health for the City.

COUNTY BOROUGH OF BELFAST.

Public Health Committee
1945

Chairman:
ALDERMAN THOMAS LOFTUS COLE, L.P.S., J.P.

Deputy Chairman:
COUNCILLOR STUART KNOX HENRY, J.P.

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CLARKE SCOTT, J.P.

COUNTY BOROUGH OF BELFAST—1945

Summary of Vital Statistics

Area (Census 1937) (Exclusive of 1,262 acres of tidal water)	15,289 acres.
Population	435,900 (estimate of Registrar-General for N.I.)
Marriages	4,290
Marriage Rate	9.8 per 1,000 of the population.
Births Registered	9,853
Birth Rate	22.6
Births (notified)	11,307
Still Births (included in total births notified) ...	362
Birth Rate average for the ten years 1936-1945 ...	21.5
Deaths	5,069
Death Rate	11.6
Death Rate average for the ten years 1936-1945 ...	13.3
Deaths of Infants under one year of age ...	828
Infant Mortality Rate	84 deaths per 1,000 births.
Average for the ten years 1936-1945 ...	96 deaths per 1,000 births.
Neo-natal Deaths (under one month) ...	391
Deaths from Pregnancy, Childbirth, and the Puerperal State	18
Death Rate per total births registered ...	1.8
Deaths from Epidemic Diseases	272
Death Rate from Epidemic Diseases ...	0.6
Deaths from Measles	10
Deaths from Typhoid Fever	1
Deaths from Scarlet Fever	2
Deaths from Whooping Cough	26
Deaths from Diphthéria	7
Deaths from Diarrhœa and Enteritis (under two years of age)	172
Deaths from Dysentery	1
Deaths from Influenza	16
Deaths from Tuberculosis of the Respiratory System	326
Death Rate from Tuberculosis of the Respiratory System	0.7
Deaths from Bronchitis	243
Deaths from Pneumonia	274
Deaths from Pleurisy	4
Deaths from other Diseases of the Respiratory System (Tuberculosis excepted) ...	92

To

The Right Honourable the Lord Mayor (Councillor The Right Honourable Sir Crawford McCullagh, Bart., D.L., P.C.), and the Aldermen and Councillors of the County Borough of Belfast.

PUBLIC HEALTH DEPARTMENT,
CITY HALL,
June, 1946.

MY LORD MAYOR, ALDERMEN, AND COUNCILLORS,

I have the honour to submit the Annual Report on the Public Health Services of the city for the year 1945.

This year will be recorded in history as an eventful period, for in it came the termination of the world war which had raged for nearly six years, bringing not only its terrible toll of death and destruction, but also conditions which one might have expected to adversely affect the health and well-being of the people. It would be reasonable to expect that hardship, privation, physical stress, and mental anxiety resulting from air raids, 'black-out,' food restrictions, bad housing, and many other war conditions would be reflected in very unsatisfactory public health records; yet, when we examine the statistical figures for 1945, we find that they bear favourable comparison with previous years, and indicate that the public health of the city in 1945 was much better than could have been anticipated.

The *death rate* at 11.6 per 1,000 of the population was the lowest rate on record for the city, with the exception of 1942, when it was 11.2.

The *infantile mortality rate* was 84 deaths of children under one year of age per 1,000 births; the rate for 1944 was 89, and for 1943, 111: the average for the ten year period 1936-1945 being 96. The maternal mortality rate of 1.8 per 1,000 registered births is the lowest on record for the city.

The deaths from pulmonary *tuberculosis* numbered 326, which was the lowest number on record; there were 354 deaths from pulmonary tuberculosis in 1944 and 367 in 1943. The number of deaths from the non-pulmonary forms of tuberculosis (80) was also the lowest on record; there were 89 deaths in 1944 and 117 in 1943. It would thus appear that the downward trend in the tuberculosis mortality in Belfast has been resumed after a moderate increase in 1940, 1941, and 1942. The number of deaths from pulmonary tuberculosis in 1914 was 836, thus showing a reduction of 61 per cent. in thirty-one years; the non-pulmonary deaths show a reduction of over 72 per cent. over the same period.

During the year a Mass Radiography Unit was provided by the Ministry of Health and Local Government, and installed in premises at No. 225 Albertbridge Road. The Unit came into operation in June.

The scheme for the payment of financial assistance to patients undergoing treatment for tuberculosis was largely taken advantage of during the year; the payment of treatment allowances, however, is limited to early hopeful cases, but it is hoped that the scheme will be extended to include all patients suffering from tuberculosis.

During the year the demand for institutional treatment of tuberculosis was greatly increased; the Tuberculosis Committee, after taking administrative control of the Tuberculosis Scheme in August, made arrangements for additional hospital beds for the treatment of tuberculosis patients at the Municipal Sanatorium, Whiteabbey, the Emergency Hospital, Musgrave Park, the Belfast City Hospital, and at Purdysburn. These arrangements increased the number of available beds at the end of the year to almost five hundred.

In spite of the considerable increase in beds available for institutional treatment, the waiting-list of patients seeking admission to hospital increased, and many patients required isolation in their homes. In an attempt to prevent the spread of infection in households where tuberculous patients were found to have unsatisfactory sleeping accommodation, the Tuberculosis Committee authorised the purchase of beds, blankets, and bedding, which were supplied for the use of such patients. Home isolation is at best merely a makeshift in many cases, but failing facilities for institutional isolation, we should make the most of any resources available.

One of the most pressing needs in Belfast is the provision of housing accommodation. It is estimated that some twenty-five thousand houses are required to meet the demand and remedy overcrowding. Bad environmental and social conditions, such as bad housing, overcrowding, malnutrition, etc., have a direct bearing on the causation of tuberculosis.

It might serve a useful purpose to refer to the necessity of an educational campaign against spitting in public ; this is a practice that will have to be abolished if we are to make any headway against tuberculosis as well as other airborne or 'droplet' diseases. The slogan "Coughs and Sneezes spread Diseases" should be extended to a warning that "Spitting spreads T.B."

Towards the end of the year, the Minister of Health and Local Government introduced a Bill in the Parliament of Northern Ireland to make provision for the prevention and treatment of tuberculosis. The Bill authorises the setting up of a Tuberculosis Authority for the whole of Northern Ireland.

Infectious Diseases

The number of infectious diseases notified during the year was well below the average ; this was particularly the case with typhoid fever, scarlet fever, and diphtheria. The decreasing incidence of diphtheria coincides with the increase in the number of children immunised against the disease. An interesting table appears on page 25 of this report, which shows the age grouping of children immunised since October, 1936, and reveals that 15,434, or 48 per cent. of children under five years of age were immunised at the end of 1945 ; 64 per cent. of the 5 to 10 years age-group and 56 per cent. of the 10 to 15 years age-group were immunised during the same period. Although these figures are fairly satisfactory, we must require a larger measure of protection, especially for the under-five age-group. We are still far from the ideal of having all children at or before the age of one year immunised.

Smallpox

It is disquieting to learn from the annual report of the School Medical Services that 18 per cent. of the children examined did not show evidence of having been vaccinated at the present time, when large numbers of people are returning to this country from areas where smallpox is endemic. During the year 1945, we received notifications of forty-six persons arriving in Belfast who had been in contact with smallpox on board vessels arriving at British ports from the Far East. These contacts were kept under surveillance during their quarantine period : none of them developed the disease.

In connection with the report of the Medical Superintendent of Purdysburn Fever Hospital, reference is made to twenty-six patients treated with Penicillin with satisfactory results.

Maternity and Child Welfare

The section of this Report dealing with the Maternity and Child Welfare gives full details of the work carried out under the extended scheme.

School Medical Services

The Annual Report of the School Medical Services is incorporated in the report of the Director of Education.

Sanitary Inspection

It can now be revealed that 56,662 houses in the city were damaged by enemy air raids during the war ; 3,200 of these were completely demolished. The loss of these houses and the cessation of building operations during the war years have created a very grave housing problem. This shortage of housing accommodation has created a large amount of overcrowding. The disrepair of property and the delay in having repairs effected had the effect of greatly increasing the number of complaints received from householders for investigation by the Sanitary Officers. A short period of extremely cold weather early in the year caused much damage by the freezing and bursting of water-pipes, cisterns, and boilers, and thus added to the work and responsibilities of the Sanitary Inspection staff.

Port Sanitary Regulations

Constant vigilance on the part of the Port Sanitary staff keeps in check the possible danger of imported infectious diseases, such as smallpox, typhus, cholera, or plague. As previously indicated, there is now much passenger traffic, both sea and airborne, between British and foreign ports. Owing to the increased speed of travel, the danger of disease from "infected" foreign countries is greatly increased.

Supervision of Food

The supervision and control of food in factories, stores, shops, restaurants, and catering establishments required the constant attention of Food Inspectors, whilst the taking of samples of food to detect adulteration was energetically pursued.

On the 1st November, 1945, Dr. Charles S. Thomson, your former Medical Superintendent Officer of Health and Port Medical Officer, retired, after holding office for almost seventeen years. Various Committees of the Corporation with whom he was associated showed appreciation of his services to the city during his term of office, and these appreciations have been recorded in the minutes of proceedings of the Committees.

Before concluding this report, I should like to express my grateful thanks to the chairman and members of the various Committees dealing with the public health services of the Corporation for the kindness and support which I have received in carrying out the important duties for which I am responsible. I should also like to pay tribute to my brother officers throughout the various sections of the Public Health Department for their loyal co-operation and help.

I have the honour to be,

My Lord Mayor, and Gentlemen,

Your obedient Servant,

S. BARRON,

Medical Superintendent Officer of Health and Port Medical Officer.

TABLE I

COUNTY BOROUGH OF BELFAST

Causes of Death at Different Age Periods

Detailed International List Nos.	Causes of Death		AGES AT DEATH																														
			All Ages	Under 1 day	1 day & less than 7 days	1–4 weeks	1–2 months	2–3 months	3–6 months	6–12 months	Total under 1 year	1–	2–	3–	4–	Total under 5 years	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85–	90–	95 and upwards
	Total Deaths (All Causes)	M	2,485	51	74	90	52	32	82	78	459	36	22	7	4	528	27	23	34	38	29	40	54	84	108	149	171	217	268	285	243	126	45	14	2
		F	2,584	41	59	76	39	28	72	54	369	32	10	6	8	425	25	11	37	58	62	58	57	70	107	103	148	217	274	346	319	156	78	31	2
1, 2	Typhoid and Paratyphoid Fevers	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
3	Plague	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Scarlet Fever	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	2	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	Whooping Cough	M	13	...	...	...	1	...	...	5	6	6	1	...	...	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	13	...	...	1	...	1	1	5	8	4	1	...	...	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	Diphtheria	M	6	...	...	...	...	...	...	...	...	3	1	...	...	4	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	Tuberculosis of the Respiratory System	M	164	...	...	...	...	...	...	3	3	1	...	...	...	4	...	2	14	18	11	8	9	23	21	22	9	12	8	1	...	2	...	...	...
		F	162	...	...	...	...	...	...	2	2	2	...	...	...	4	...	...	18	33	27	24	14	7	8	6	4	5	5	4	1	2	...	...	...
14	Tuberculosis of the Meninges and Central Nervous System	M	27	...	1	1	...	...	1	2	5	4	6	2	1	18	4	...	1	1	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	18	...	...	...	...	...	1	3	4	3	2	1	1	11	3	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	Tuberculosis of the Intestines and Peritoneum	M	2	...	...	...	1	...	...	...	1	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
		F	6	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	1	...	1	...	...	...	...	1	...	...	...	...	...	...	...
16–22	All other foms of Tuberculosis	M	14	...	...	...	...	...	...	...	...	3	...	1	...	4	...	2	...	1	...	1	...	2	1	...	1	1	...	1	...	...	...	...	...
		F	13	...	...	...	...	...	...	1	1	...	...	...	1	2	...	3	1	...	...	1	1	...	1	2	1	...	...	1	...	...	...	...	...
24	Purulent Infection and Septicæmia (non-puerperal)	M	8	...	...	...	1	1	2	...	4	...	1	...	...	5	...	...	...	1	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...
		F	5	...	...	...	...	...	1	1	2	...	...	...	...	2	...	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...	...	...	...
27	Dysentery	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
		F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	Malaria	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
		F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	Syphilis	M	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	2	2	2	1	1	...	1	...	...	...	...
		F	6	1	...	...	2	...	1	...	4	...	...	...	...	4	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...
33	Influenza	M	5	...	...	...	...	...	1	...	1	...	1	...	...	2	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...	...	...	...
		F	11	...	...	...	...	...	...	...	...	1	...	1	...	2	...	...	...	...	...	...	...	...	...	1	2	1	...	1	2	1	1	...	...
34	Smallpox	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
35	Measles	M	6	...	...	...	1	...	...	1	2	2	2	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	4	...	...	...	1	1	...	2	4	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39	Typhus Fever	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE I—*continued*

Detailed International List Nos.	Causes of Death		AGES AT DEATH																													
			All Ages	Under 1 day	1 day & less than 7 days	1–4 weeks	1–2 months	2–3 months	3–6 months	6–12 months	Total under 1 year	1–	2–	3–	4–	Total under 5 years	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85–	90–	95 and upwards
40–42	Diseases due to Helminths ...	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4, 7, 11, 12, 23, 25, 26, 29, 31, 32, 36, 37, 38, 43, 44	Other Infective or Parasitic Diseases	M	23	...	...	4	...	...	...	3	7	...	2	...	...	9	3	...	...	1	1	...	1	1	1	...	...	3	2	1	...	...	...	...	...
		F	21	...	...	1	...	...	...	3	4	...	1	...	...	5	2	...	...	1	1	...	2	1	...	1	...	4	2	1	1	...	...	...	...
1–44	Totals of Infective and Parasitic Diseases	M	283	...	1	5	4	1	4	14	29	19	14	3	1	66	8	5	16	22	14	12	10	28	25	26	13	18	11	5	2	2	...	...	...
		F	264	1	...	2	3	2	4	17	29	11	4	2	4	50	7	4	19	36	31	25	18	10	10	11	8	11	9	7	4	3	1	...	...
45	Cancer and other Malignant Tumours of the Buccal Cavity and Pharynx ...	M	22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	4	3	6	3	3	...	...	...
		F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...
46	Cancer and other Malignant Tumours of the Digestive Organs and Peritoneum ...	M	173	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	2	5	11	9	15	15	24	28	34	21	5	2	...	...
		F	188	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	3	3	5	11	9	13	29	30	43	26	12	2	...	...
47	Cancer and other Malignant Tumours of the Respiratory System	M	49	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	7	3	11	6	4	10	3	1	...	...	...
		F	17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	2	5	1	1	1	3	1	1	...	...	...	...
48	Cancer and other Malignant Tumours of the Uterus ...	F	34	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	3	8	1	4	6	4	1	4	2	...	...	...
50	Cancer and other Malignant Tumours of the Breast ...	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	42	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	6	3	4	6	4	3	7	5	1	1	...	...
49, 51–55	Cancer and other Malignant Tumours of other or Unspecified Organs	M	67	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	...	1	1	3	2	6	9	8	8	15	4	5	1	...	...
		F	70	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	1	...	1	1	3	4	5	6	9	12	5	8	9	3	...	...
56, 57	Non-malignant Tumours or Tumours of undetermined nature	M	12	...	...	...	1	...	...	...	1	...	1	...	...	2	...	...	1	...	...	1	...	...	1	1	...	1	...	2	2	1	...	...	...
		F	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	2	3	1	1	1	1	...	...	...
45–57	Totals of Cancer and other Tumours	M	323	...	...	...	1	...	...	...	1	...	1	...	...	2	2	1	2	1	1	4	8	16	20	25	37	43	43	67	33	15	3	...	...
		F	365	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	4	1	6	5	20	32	20	32	52	54	59	45	25	6	...	...
58	Rheumatic Fever	M	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	...	...	2	1	...	...	1	...	...	1	...	1	...	...	...	...	...
		F	14	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	2	...	3	...	...	...	2	1	...	2	1	...	...	...	...	...	...
59, 60	Chronic Rheumatism and Gout	M	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...
		F	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
61	Diabetes Mellitus	M	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	3	2	...	...	...	1	...	...
		F	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	2	1	2	4	3	7	5	1	...	...	...

TABLE I—*continued*

Detailed International List Nos.	Causes of Death		AGES AT DEATH																														
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63	Diseases of the Thyroid and Parathyroid Glands ...	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...
		F	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	2	...	2	1	...	...	...	...
62, 64–66	Other General Diseases ...	M	3	...	...	...	...	...	...	1	1	...	...	1	...	2	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	3	...	...	...	...	...	1	...	1	...	...	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
67–71	Vitamin-deficiency Diseases ...	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
58–71	Totals of Rheumatism, Diseases of Nutrition, and the Endocrine Glands, other General and Vitamin-deficiency Diseases	M	27	...	...	...	...	...	...	1	1	...	...	1	...	2	...	1	4	1	...	3	1	...	1	3	1	...	3	2	4	1	...	...	...
		F	59	...	...	...	...	...	1	...	1	...	...	...	1	2	2	1	2	...	4	...	...	2	6	3	4	9	8	9	5	1	1	...	...
73	Pernicious and other Anæmias	M	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	1	...	...	...
		F	20	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	1	...	3	2	2	6	2	...	1	...	...	...
72, 74–76	Leukæmias, Aleukæmias, and other Diseases of the Blood and Blood-forming Organs ...	M	5	...	...	1	...	...	...	...	1	...	1	...	...	2	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...
		F	9	...	...	...	...	...	1	...	1	...	...	...	...	1	...	1	2	...	...	1	...	1	...	1	...	1	1	...	...	...	...	...	...
72–76	Totals of Diseases of the Blood and Blood-forming Organs ...	M	9	...	...	1	...	...	...	...	1	...	1	...	...	2	...	...	...	...	1	...	1	1	...	...	1	...	2	...	...	1	...	...	...
		F	29	...	...	...	...	...	1	...	1	...	...	...	...	1	1	1	2	...	1	2	...	2	...	1	3	3	3	6	2	...	1	...	...
77	Chronic or Acute Alcoholism	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...
		F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
78–79	Other Chronic Poisoning ...	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
77–79	Totals of Chronic Poisoning and Intoxication	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...
		F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
81	Non-meningococcal Meningitis	M	9	...	...	...	...	1	1	2	4	2	...	...	...	6	1	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
		F	7	...	...	...	...	1	1	...	2	2	3	...	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
82	Diseases of the Medulla and Spinal Cord, other than Locomotor Ataxia	M	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...
		F	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	2	...	...	...	...	...	...
83	Intra-Cranial Lesions of Vascular Origin	M	185	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	3	8	12	13	15	36	31	36	18	9	1	...
		F	264	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	1	3	6	16	16	23	27	44	52	46	15	8	4	...
84	Mental Disorders and Deficiency	M	2	...	...	1	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
		F	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	1	...	...	...	1	...	...	...	...	...	...	...
85	Epilepsy	M	7	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	1	1	...	...	...	1	...	...	1	...	...	...	...
		F	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	1	1	...	...	2	...	...	...	...	...	...	...	...

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80, 86, 87	Other Diseases of the Nervous System	M	17	...	2	1	...	...	3	2	8	...	...	...	...	8	...	...	...	...	...	...	...	1	2	...	3	1	2	...	...	...	...	...	...
		F	22	...	1	1	2	2	4	...	10	1	...	...	...	11	1	...	1	1	...	...	...	1	1	1	...	3	1	...	1	...	...	...	...
88–89	Diseases of the Eye, Ear, and their Annexa	M	13	...	...	...	1	1	2	2	6	...	...	...	...	6	2	2	...	1	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
		F	3	...	...	...	1	...	...	1	2	1	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
80–89	Totals of Diseases of the Nervous System and Sense Organs	M	237	...	2	2	1	2	6	6	19	2	...	...	1	22	5	3	1	2	1	2	3	5	10	12	20	16	39	31	37	18	9	1	...
		F	313	...	1	1	3	3	5	1	14	4	3	...	...	21	1	...	2	5	4	4	5	7	17	19	23	32	47	52	47	15	8	4	...
90	Pericarditis (including Chronic Rheumatic Pericarditis)	M	3	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...
		F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
92	Chronic Affections of the Valves and Endocardium	M	46	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	4	5	2	6	3	3	6	7	4	3	1	...	...	...
		F	78	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	2	2	3	3	6	3	9	6	4	4	9	10	5	6	3	...	...
93	Diseases of the Myocardium, including Aneurysm of the Heart	M	293	...	...	...	...	1	...	...	1	...	...	...	...	1	...	1	...	1	1	1	...	5	8	8	15	34	55	61	59	30	11	2	...
		F	387	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	4	1	...	3	3	13	26	41	46	84	81	42	29	12	...
94	Diseases of the Coronary Arteries and Angina Pectoris	M	147	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	7	7	19	17	23	30	20	16	5	...	1	...
		F	92	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	3	4	14	16	20	17	9	8	...	...	...
91, 95	Other Diseases of the Heart	M	32	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	1	1	1	1	2	3	4	7	5	4	...	...	...	...
		F	52	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	1	...	1	4	2	6	3	2	5	6	8	10	2	...	...	...
97, 98	Arterio-sclerosis and Gangrene	M	28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	4	6	9	3	2	...	...
		F	25	...	...	1	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	4	...	3	6	3	4	3	...	...
96, 99–103	Other Diseases of the Circulatory System	M	24	...	...	...	...	...	1	...	1	...	...	...	...	1	...	...	...	...	...	2	...	...	1	1	1	4	6	1	5	1	1	...	...
		F	34	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	3	4	2	3	3	7	5	4	1	...	...	...
90–103	Totals of Diseases of the Circulatory System	M	573	...	...	...	...	1	1	...	2	...	...	...	1	3	2	1	...	3	4	7	8	15	23	35	39	73	109	97	97	40	14	3	...
		F	668	...	...	1	...	...	...	...	1	1	...	...	...	2	1	3	4	4	9	5	10	11	26	28	53	69	91	130	112	63	35	12	...
106	Bronchitis	M	130	...	...	2	...	...	3	3	6	...	...	...	...	6	1	...	...	2	1	...	4	3	5	12	23	24	12	11	12	7	5	2	...
		F	113	...	...	...	...	1	1	...	2	1	...	...	...	3	...	...	...	1	...	1	...	2	2	4	3	10	18	27	25	12	3	2	...
107–109	Pneumonia and Broncho-Pneumonia	M	140	...	6	15	7	11	17	22	78	7	...	1	...	86	...	...	2	...	...	1	4	1	3	2	9	4	7	7	9	3	1	1	...
		F	134	...	1	13	8	10	21	15	68	7	1	...	...	76	1	...	...	1	...	1	1	1	1	3	4	6	11	8	12	4	4	...	...
110	Pleurisy (non-tuberculous)	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
		F	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
104, 105 111–114	Other Diseases of the Respiratory System	M	43	...	...	1	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	2	3	1	4	5	5	5	5	4	4	3	1	...	...
		F	49	...	...	1	...	...	2	1	4	...	...	...	...	4	...	...	1	...	2	2	2	4	4	2	6	2	6	9	5	...	...	...	...
104–114	Totals of Diseases of the Respiratory System	M	314	...	6	18	7	11	20	23	85	7	...	1	...	93	1	...	2	2	1	3	11	5	12	19	38	33	24	22	25	13	7	3	...
		F	299	...	1	14	8	11	24	16	74	8	1	...	...	83	1	...	2	3	3	4	3	7	7	9	13	18	35	44	42	16	7	2	...

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117	Ulcer of the Stomach or Duodenum	M	19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	2	2	2	3	3	4	...	...	...	...	...
		F	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	2	1	3	1	...	...	...	...
119	Diarrhœa and Enteritis (under 2 years of age)	M	104	...	...	15	14	10	38	25	102	2	...	...	...	104	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	68	...	1	4	7	8	29	15	64	4	...	...	...	68	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
120	Diarrhœa, Enteritis, and Ulceration of the Intestines (2 years of age and over)	M	3	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...
		F	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	2	2	...	4	1	1	...	...	...	...
121	Appendicitis	M	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	1	...	...	2	1	1	...	...	...	...	...	...	...
		F	7	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	...	...	...	...	...	2	...	1	1	...	...	...	...	...	...	...
122	Hernia, Intestinal Obstruction	M	16	1	...	...	...	...	2	2	5	...	...	...	...	5	...	...	...	...	...	...	...	1	...	1	2	3	...	3	1	...	...	...	...
		F	20	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	...	1	...	...	2	...	...	4	2	4	2	2	1	...	...	...	...
124	Cirrhosis of the Liver	M	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2	1	1	...	3	...	...	...	...	...
		F	7	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	1	1	1	...	1	2	...	...	...	...	...
125–127	Other Diseases of the Liver and Biliary Passage, including Biliary Calculi	M	6	...	...	...	1	...	...	1	2	...	1	...	...	3	...	1	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...
		F	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	4	3	1	...	...	...	...
115, 116, 118, 123, 128, 129	Other Diseases of the Digestive Organs	M	16	...	...	1	1	...	...	1	3	...	...	...	...	3	3	...	...	...	...	...	2	...	...	...	1	2	1	2	2	...	...	...	...
		F	13	...	...	...	1	...	...	...	1	...	...	1	1	3	...	...	...	1	1	1	...	...	1	1	1	2	...	1	1	...	...	...	...
115–129	Totals of the Diseases of the Digestive System	M	181	1	...	16	16	10	40	29	112	2	2	...	...	116	3	1	1	1	1	3	4	1	3	8	8	11	6	13	1	...	...	...	...
		F	148	...	1	4	8	8	29	15	65	6	...	1	1	73	3	...	1	3	1	1	3	4	5	8	7	10	12	12	5	...	...	...	...
130–132	Nephritis	M	50	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	1	1	3	6	3	5	5	7	4	6	2	2	1	...	1
		F	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	3	5	1	3	3	1	...	2	1	5	...	...	...	...
133	Other Diseases of the Kidneys and Ureters	M	13	...	...	1	...	...	...	2	3	2	...	...	...	5	...	...	...	2	...	...	1	...	...	1	...	1	2	1	...	...	...	...	...
		F	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	1	1	2	...	...	...	...	...	...
134	Calculi of the Urinary Passages	M	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...
		F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
135	Diseases of the Bladder, except Tumours	M	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	2	...	...	...	...
		F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
136	Diseases of the Urethra, Urinary Abscess, etc.	M	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	1	...	1	...	...	...	...
		F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
137	Diseases of the Prostate	M	43	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	2	11	14	8	4	1	...	...
138, 139	Other Diseases of the Genital Organs (not specified as Venereal or connected with Pregnancy or the Puerperium)	M	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...

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130–139	Totals of Diseases of the Urinary and Genital System (not Venereal or connected with Pregnancy or the Puerperium)	M	120	...	...	1	...	...	...	2	3	2	...	...	...	5	...	3	...	3	1	1	4	6	5	8	7	12	18	22	14	8	2	...	1
		F	35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	3	7	2	3	3	2	2	4	1	5	...	...	...	...
142–145	Diseases and Accidents of Pregnancy	F	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...
141	Abortion without mention of Septic Conditions	F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
140	Post-abortive Infection ...	F	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
147	Infection during Childbirth and Puerperium	F	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	...	1	...	...	...	...	...	...	...	...	...	...	...	...
146, 148–150	Other Accidents and Diseases of Childbirth and the Puerperium	F	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	...	...	...	...	...	...	...	...	...
140–150	Totals of Diseases of Pregnancy, Childbirth, and the Puerperal State	F	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	3	4	4	3	...	...	...	...	...	...	...	...	...	...	...
151–153	Diseases of the Skin and Cellular Tissue	M	7	...	...	...	...	...	2	...	2	...	...	...	...	2	...	...	...	...	...	...	...	1	...	..	1	...	1	1	1	...	...	...	...
		F	4	...	...	...	...	...	2	1	3	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
154–156	Diseases of the Bones and Organs of Movement, except Tuberculosis and Rheumatism	M	3	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
		F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
157	Congenital Malformations (still-births excepted) ...	M	45	6	5	10	7	4	4	...	36	4	1	...	...	41	...	1	1	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
		F	30	4	6	9	5	2	1	1	28	...	...	...	...	28	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
158	Congenital Debility	M	25	2	...	5	9	3	5	1	25	...	...	...	...	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	18	1	...	5	7	2	2	1	18	...	...	...	...	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
159	Premature Birth (still-births excluded)	M	76	30	29	13	4	...	...	...	76	...	...	...	...	76	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	79	27	33	16	2	...	1	...	79	...	...	...	...	79	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
160	Injury at Birth (still-births excluded)	M	11	4	4	2	...	...	...	1	11	...	...	...	...	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	9	1	6	1	...	...	...	1	9	...	...	...	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
161	Other Diseases peculiar to the first year of life	M	53	7	27	16	3	...	...	...	53	...	...	...	...	53	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	38	3	11	23	1	...	...	...	38	...	...	...	...	38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE I—*continued*

Detailed International List Nos.	Causes of Death		AGES AT DEATH																														
			All Ages	Under 1 day	1 day & less than 7 days	1–4 weeks	1–2 months	2–3 months	3–6 months	6–12 months	Total under 1 year	1–	2–	3–	4–	Total under 5 years	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85–	90–	95 and upwards
158–161	Totals of Diseases peculiar to the first year of life ...	M	165	43	60	36	16	3	5	2	165	...	...	...	...	165	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	144	32	50	45	10	2	3	2	144	...	...	...	...	144	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
162	Senility, Old Age	M	90	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	4	16	27	25	9	7	1
		F	131	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3	3	21	44	28	17	13	1
163, 164	Suicide	M	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	1	...	2	...	1	1	...	...	...	...
		F	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...
165, 168	Homicide	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
170	Automobile Accidents (all motor-driven road vehicles)	M	25	...	...	...	...	...	...	...	...	...	2	...	...	2	3	3	2	1	2	1	3	...	...	1	1	...	1	4	...	1	...	...	...
		F	14	...	...	...	...	...	...	...	...	1	1	1	1	4	5	...	...	...	1	2	...	...	...	...	1	...	1	...	...	...	...	...	...
169, 171–195	Other Violent or Accidental Deaths (automobile accidents excepted)	M	52	...	...	1	...	...	...	1	2	...	1	2	...	5	2	4	5	1	3	2	1	3	5	6	4	2	2	3	1	2	1	...	...
		F	40	1	...	...	2	...	1	1	5	1	1	2	1	10	1	...	...	...	1	1	...	1	1	...	1	2	3	4	7	5	2	...	1
197	Deaths of Civilians due to Operations of War ...	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
198	Legal Executions	M	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		F	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
163–195 197, 198	Total of Violent or Accidental Deaths	M	85	...	...	1	...	...	...	1	2	...	3	2	...	7	5	7	7	2	5	4	4	5	5	8	5	4	3	8	2	3	1	...	...
		F	57	1	...	...	2	...	1	1	5	2	2	3	2	14	6	...	...	...	3	3	1	1	1	...	2	3	4	4	7	5	2	...	1
199, 200	Causes of Death Unstated or Ill-defined	M	2?	1	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	1	...	1	4	3	...	5	5	1	...	...	...	...	...
		F	18	3	...	...	...	...	1	...	4	...	...	...	...	4	...	1	...	...	...	1	1	1	...	...	1	5	3	...	1	...	...	...	...

The principal causes of death (in order of importance) were as follows :—

1.	Heart disease	1,130
2.	Cancer	664
3.	Pulmonary tuberculosis	326
4.	Bronchitis	243
5.	Diarrhœa and enteritis	188
6.	Senile decay	221
7.	Premature births (still-births excluded)	155
8.	Pneumonia and broncho-pneumonia	274
9.	Violence	142
10.	Nephritis	77

TABLE II

Trend of mortality from the four principal causes of death in Belfast from **1936** :—

Year	Heart Disease	Cancer	Pulmonary Tuber-culosis	Respiratory Tract
1936	1,280	585	406	724
1937	1,306	564	414	795
1938	1,314	568	348	691
1939	1,344	572	365	580
1940	1,387	576	412	840
1941	1,277	570	426	685
1942	995	633	369	546
1943	1,116	613	367	655
1944	1,098	620	354	523
1945	1,130	664	326	517

A reference to Table II will show the trend of mortality from the four principal causes of death : these are in the same order and relative proportions as occur in other parts of the country. They account for the great bulk of deaths.

Heart Disease.—Stress has been laid on deaths from heart disease and to the fact that the majority of them are found to be recorded in the later age groups, giving rise to the supposition that they represent a degenerate condition rather than an infective one. It may be, however, that the degenerative change in many cases was the result of an infective condition in earlier life, particularly juvenile carditis. On this hypothesis many forms of heart disease could be regarded as preventable diseases.

Cancer.—The trend of mortality in the case of cancer, as judged by recorded deaths from the disease, is on the increase. The increase is due in part to the fact that there is a steady increase in the population in the middle and later age groups in which malignant disease is more common ; the increase is also due in part to better diagnosis and better certification of the causes of death.

Pulmonary Tuberculosis.—Reference has already been made to the decreasing trend in the mortality from all forms of tuberculosis.

Respiratory Tract.—The trend of mortality from diseases of the respiratory tract varies from year to year and is largely dependent upon epidemic prevalence of these diseases.

TABLE III

Shewing the number of deaths at various age periods, the percentage of the total number registered, and the death-rates per 1,000 of the population.

	No. of Deaths	Percentage of Total Deaths	Death Rate per 1,000 of the Population
Under 1 year - - - -	828	16.3	1.9
1 year and under 5 years - - -	125	2.5	0.3
5 years and under 25 years - - -	253	5.0	0.6
25 years and under 45 years - - -	454	8.9	1.0
45 years and under 65 years - - -	1,220	24.1	2.8
65 years and upwards - - -	2,189	43.2	5.0
Total	5,069		

TABLE IV

Shewing the number of Deaths registered as having been caused by Phthisis and Diseases of the Respiratory Organs during the twenty years, 1926-1945.

Year	Population	Phthisis	Rate per 1,000	Diseases of the Respiratory System			Total Chest Affections
				Pneumonia	Others	Total	
1926 ...	416,000	570	1.4	516	630	1,146	1,716
1927 ...	416,000	515	1.2	479	526	1,005	1,520
1928 ...	415,151	499	1.2	521	542	1,063	1,562
1929 ...	415,151	485	1.2	680	761	1,441	1,926
1930 ...	415,151	436	1.0	357	482	839	1,275
1931 ...	415,151	452	1.1	518	479	997	1,449
1932 ...	415,151	448	1.1	539	461	1,000	1,448
1933 ...	415,151	429	1.0	583	605	1,188	1,617
1934 ...	415,151	398	0.96	434	421	855	1,253
1935 ...	415,151	389	0.93	597	445	1,042	1,431
1936 ...	436,000	406	0.93	450	373	823	1,229
1937 ...	438,112	414	0.95	503	405	908	1,322
1938 ...	443,500	348	0.78	465	294	759	1,107
1939 ...	443,500	365	0.82	316	357	673	1,038
1940 ...	444,500	412	0.93	404	539	943	1,355
1941 ...	444,500	426	0.96	330	446	776	1,202
1942 ...	444,500	369	0.83	325	298	623	992
1943 ...	425,000	367	0.86	451	291	742	1,109
1944 ...	430,800	354	0.82	315	286	601	955
1945 ...	435,900	326	0.75	274	339	613	939

TABLE V

Showing the number of deaths from Epidemic Diseases during the ten years 1936—1945.

Year	Smallpox	Typhus Fever	Typhoid Fever	Scarlet Fever	Diphtheria	Puerperal Fever	Cerebro-Spinal Fever	Measles	Influenza	Diarrhœa	Dysentery	Whooping Cough
1936	—	—	1	13	38	22	3	7	46	258	—	64
1937	—	—	7	7	14	20	5	27	218	193	1	32
1938	—	—	—	8	11	12	8	224	57	163	1	51
1939	—	—	—	7	34	6	5	13	50	216	—	35
1940	—	—	1	10	85	7	22	150	161	316	—	54
1941	—	—	—	2	56	3	20	—	88	202	—	19
1942	—	—	—	—	15	6	13	17	18	182	—	9
1943	—	—	4	3	10	11	5	11	50	310	—	40
1944	—	—	—	2	11	4	3	1	21	202	1	22
1945	—	—	1	2	7	5	2	10	16	188	1	26

TABLE VI

Shewing the Population, the number of Births, the Birth Rate per 1,000, the number of Deaths, the Death Rate per 1,000, and the natural increase during the twenty years, 1926-1945.

Year		Population	No. of Births	Birth Rate per 1,000	No. of Deaths	Death Rate per 1,000	Natural Increase
1926	...	416,000	10,356	24.9	6,411	15.4	3,945
1927	...	416,000	9,509	22.9	5,653	13.6	3,856
1928	...	415,151	9,356	22.5	5,804	14.0	3,552
1929	...	415,151	8,899	21.4	6,462	15.6	2,437
1930	...	415,151	9,558	22.7	5,451	12.9	4,107
1931	...	415,151	9,470	22.8	5,857	14.1	3,613
1932	...	415,151	8,882	21.4	5,783	13.9	3,099
1933	...	415,151	8,599	20.7	6,318	15.2	2,281
1934	...	415,151	9,086	21.9	5,676	13.7	3,410
1935	...	415,151	8,848	21.3	6,238	15.0	2,610
1936	...	436,000	9,242	21.2	6,207	14.2	3,035
1937	...	438,112	9,150	20.9	6,341	14.5	2,809
1938	...	443,500	9,146	20.6	6,069	13.7	3,077
1939	....	443,500	8,966	20.2	5,758	12.9	3,208
1940	...	444,500	8,704	19.6	6,583	14.8	2,121
1941	...	444,500	8,383	18.9	6,641	14.9	1,742
1942	...	444,500	9,659	21.7	4,973	11.2	4,686
1943	...	425,000	10,713	25.2	5,511	13.0	5,202
1944	...	430,800	10,456	24.3	5,176	12.0	5,280
1945	...	435,900	9,853	22.6	5,069	11.6	4,784

TABLE VII

Shewing the number of cases of infectious diseases notified during the ten years 1936—1945, pursuant to the Infectious Disease (Notification) Act, 1889.

	Typhoid Fever	Scarlet Fever	Diph-theria	Cerebro-Spinal Meningitis	Polio-myelitis	Puerperal Fever	Erysipe-las
1936 -	21	1811	1053	14	2	22	135
1937 -	21	1486	847	20	2	11	128
1938 -	12	2107	664	35	3	14	119
1939 -	20	1696	686	12	5	7	134
1940 -	17	1266	1165	166	2	9	115
1941 -	44	453	683	246	7	3	83
1942 -	10	778	427	122	5	12	82
1943 -	29	1964	322	75	2	2	60
1944 -	5	1679	217	48	5	5	67
1945 -	14	768	213	39	20	1	76

Measles - 1,702 Whooping Cough - 603

TABLE VIII

Shewing the number of deaths from Cancer and other Tumours for the year **1945**, as compared with the preceding five years.

Year.	Under 1	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90 and over	M	F	Grand Total
1945	1	...	1	...	...	4	1	4	5	2	10	13	36	52	45	69	95	97	126	78	40	9	...	323	365	688
1940	...	...	...	1	...	...	1	3	2	6	10	12	32	45	53	79	89	97	95	50	22	6	1	270	334	604
1941	...	...	1	...	...	1	4	4	7	9	5	11	29	49	48	78	84	114	83	35	25	7	—	267	327	594
1942	2	...	1	1	...	2	1	3	...	2	12	23	40	49	66	78	90	104	94	55	18	10	2	312	341	653
1943	...	1	...	2	...	1	2	1	1	4	7	16	25	49	68	66	98	106	103	58	20	5	2	287	348	635
1944	...	...	...	1	1	2	...	3	3	8	13	17	29	46	54	76	100	108	91	57	19	6	3	315	322	637
Totals	2	1	2	5	1	6	8	14	13	29	47	79	155	238	289	377	461	529	466	255	104	34	8	1,451	1,672	3,123

It will be seen from the above table that the average number of deaths registered annually as having been caused by Cancer and other Tumours during the quinquennial period 1940 to 1944 was 625 (290 males and 335 females).

It should be noted that the above Table includes non-malignant tumours and tumours of undetermined nature.

Infectious Diseases

SCARLET FEVER.

768 cases were notified during the year, but on investigation 26 were found not suffering from the disease, which made the total number that occurred during the year 742, an attack-rate of 1.7 per 1,000 of the population.

The number of cases which occurred during the preceding year was 1,632, and the average number notified annually during the ten years 1935—1944 was 1,663.

2 deaths occurred, equivalent to a case mortality-rate of 0.3 per cent., or a death-rate of 0.005 per 1,000 of the population. There were 2 deaths in the preceding year. The average number annually during the ten years 1935—1944 was 9.

DIPHTHERIA.

213 cases were notified, but on investigation 23 were found not suffering from the disease. In addition to those notified, one case notified as scarlet fever was found to be suffering from diphtheria, which made the total number that occurred during the year 191 ; an attack-rate of 0.4 per 1,000 of the population.

The number of cases that occurred during the preceding year was 173, and the average number notified annually during the ten years 1935—1944 was 726.

7 deaths occurred, equivalent to a case mortality-rate of 3.6 per cent., or a death-rate of 0.02 per 1,000 of the population. The number of deaths in the preceding year was 11, and the average number annually during the ten years 1935—1944 was 33.

TYPHOID FEVER.

14 cases were notified during the year, but on investigation 2 were found not suffering from the disease, which made the total number that occurred during the year 12 ; an attack-rate of 0.03 per 1,000 of the population.

The number of cases which occurred during the preceding year was 28, and the average number notified annually during the ten years 1935—1944 was 30.

1 death occurred during the year, equivalent to a case mortality-rate of 8.3 per cent., or a death-rate of 0.002 of the population. No deaths occurred in the preceding year ; the average number occurring annually during the ten years 1935—1944 was 2.

ERYSIPELAS.

76 cases were notified during the year. The number of cases that occurred in the preceding year was 67, and the average number notified annually during the ten years 1935—1944 was 108.

CEREBRO-SPINAL FEVER.

39 cases were notified during the year, 9 of which were found not suffering from the disease, making the total number of cases that occurred during the year 30 ; an attack-rate of 0.07 per 1,000 of the population. Of these, 2 deaths occurred, equivalent to a case mortality-rate of 6.7 per cent., or a death-rate of 0.005 per 1,000 of the population.

MEASLES.

1,702 cases of Measles were notified during the year, an attack-rate of 3.9 per 1,000 of the population.

The number of cases that occurred during the preceding year was 3,048.

10 deaths occurred during the year, 1 occurred in the preceding year, and the average number annually during the ten years 1935—1944 was 70.

WHOOPING-COUGH

603 cases of Whooping-Cough were notified during the year, an attack-rate of 1.4 per 1,000 of the population.

The number of cases notified during the preceding year was 734.

26 deaths were caused by whooping-cough, equivalent to a death - rate of 0.06 per 1,000 of the population. In the preceding year the number of deaths from this disease was 22, and the average number registered annually during the ten years 1935—1944 was 35.

DIARRHŒA AND ENTERITIS.

172 deaths of children under 2 years of age were caused by this disease during the year, equivalent to a death-rate of 0.39 per 1,000 of the population.

The number of deaths that occurred during the preceding year was 184, and the average number of deaths annually during the ten years 1935—1944 was 210.

PUERPERAL FEVER.

One case of this disease was notified. The number of cases notified during the preceding year was 5, and the average number notified annually during the ten years 1935—1944 was 12.

EPIDEMIC DISEASES.

258 deaths were caused by epidemic diseases during the year, equivalent to 5.1 per cent. of the total number of deaths from all causes, or a death-rate of 0.6 per 1,000 of the population. During the preceding year the deaths from epidemic diseases numbered 242, equivalent to 4.7 per cent. of the total deaths, or a death-rate of 0.6.

One, or 0.4 per cent. of the total deaths from epidemic diseases, was caused by typhoid fever ; 2, or 0.8 per cent., by scarlet fever ; 7, or 2.7 per cent., by diphtheria ; 5, or 1.9 per cent., by puerperal fever ; 2, or 0.8 per cent., by cerebro-spinal fever ; 10, or 3.9 per cent., by measles ; 16, or 6.2 per cent., by influenza ; 188, or 72.9 per cent., by diarrhœa and enteritis ; 1, or 0.4 per cent., by dysentery ; and 26, or 10.8 per cent., by whooping-cough.

Infectious Diseases

CORRECTED DIAGNOSIS FOR 1945.

Two cases of typhoid fever, 26 cases of scarlet fever, 23 cases of diphtheria, and 9 cases of cerebro-spinal fever were found not suffering from the disease notified. Of these, 5 scarlet fever were found to be suffering from measles and one scarlet fever was found to be suffering from diphtheria. The remainder were found not to be suffering from any notifiable disease.

Venereal Diseases

Statement showing the services rendered at the Treatment Centre at Royal Victoria Hospital, Belfast, during the year ended 31st March, 1946, classified according to the areas in which the patients resided.

Name of County or County Borough	Belfast	Co. Down	Co. Antrim	Co. Armagh	Co. Derry	Co. Fermanagh	Co. Tyrone	Co. Donegal	Port	Gibraltar Evacuees	Travelling	Total
A. Number of cases from each area dealt with during the year for the first time and found to be suffering from:—												
Syphilis	310	13	31	2	6	...	6	...	23	3	...	394
Gonorrhœa	389	25	33	4	7	1	9	...	36	3	1	508
Soft Chancre	...	...	...	...	...	...	...	...	...	...	...	...
Conditions other than Venereal	1,891	31	37	10	6	...	8	...	22	...	...	2,005
Total	2,590	69	101	16	19	1	23	...	81	6	1	2,907
B. Total number of attendances of all patients residing in each area	18,486	710	1,479	81	177	2	147	...	334	79	2	21,497
C. Aggregate number of "In-patient days" of all patients residing in each area	1,078	27	350	98	444	...	45	16	67	2	...	2,127
D. Number of doses of arseno-benzol compounds given in the: 1. Out-Patient Clinic	9,541	539	1,233	51	135	...	121	...	197	18	...	11,835
2. In-Patient Dept.	36	6	16	17	37	...	13	...	6	...	...	131
to patients residing in each area												

Venereal Diseases

Return relating to all Persons who were treated at the Treatment Centre at Royal Victoria Hospital, Belfast, during the year ended 31st March, 1946.

	Syphilis		Gonorrhoea		Soft Chancre		Conditions other than Venereal		Total		
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
1. Number of cases which:—											
(a) at the beginning of the year under report were under treatment or observation for	4,370	2,134	3,757	130	...	...	...	...	8,127	2,264	
(b) had been marked off in a previous year as having ceased to attend or as transferred to other Centres, and which returned to the Treatment Centre during the year under report suffering from the same infection	99	44	77	2	...	...	...	...	176	46	
Total—Items 1 (a) and (b)	4,469	2,178	3,834	132	...	...	...	...	8,303	2,310	
2. (a) Number of cases dealt with at the Treatment Centre during the year for the first time	252	142	431	77	...	...	1,402	603	2,085	822	
Total—Items 1 (a), 1 (b), and 2 (a)	4,721	2,320	4,265	209	...	..	1,402	603	10,388	3,132	
2. (b) Number of cases included in Item 2 (a) known to have received previous treatment at other Centres for the same infection	25	8	12	...	...	...	...	...	37	8	
3. Number of cases which ceased to attend—											
(a) before completing the first course of treatment for	18	15	38	10	...	...	...	...	56	25	
(b) after one or more courses, but before completion of treatment for	7	6	39	9	...	...	...	...	46	15	
(c) after completion of treatment, but before final tests as to cure of	...	...	...	...	...	...	...	...	...	...	
4. Number of cases transferred to other Treatment Centres after treatment for	20	11	21	3	...	...	...	...	41	14	
5. Number of cases discharged after completion of treatment and observation for	...	...	171	...	...	...	...	...	171	...	
6. Number of cases which, at the end of the year under report, were under treatment or observation for	4,676	2,288	3,996	187	...	...	...	...	8,672	2,475	
Total—Items 3, 4, 5, and 6	4,721	2,320	4,265	209	...	...	...	...	8,986	2,529	
7. Out-patient attendances:—											
(a) For individual attention by the Medical Officer	...	...	...	...	...	...	...	...	...	...	
(b) For intermediate treatment, e.g., irrigation, dressings, etc.	...	...	5,618	...	...	...	...	...	5,618	...	
Total Attendances	...	...	...	...	...	...	...	...	...	...	21,497
8. Aggregate number of "In-patient days" of treatment given to persons who were suffering from	396	451	818	462	...	...	...	...	1,214	913	

Venereal Diseases

Statement showing the services rendered at the Treatment Centre at Mater Infirmorum Hospital, Belfast, during the year ended 31st March, 1946, classified according to the areas in which the patients resided.

Name of County or County Borough	Belfast	Co. Antrim	Co. Down	Co. Derry	Co. Fermanagh	Co. Tyrone	Co. Armagh	Port	Total
A. Number of cases from each area dealt with during the year for the first time and found to be suffering from:—									
Syphilis	110	12	5	...	2	1	1	8	139
Gonorrhœa	136	7	8	1	1	1	1	13	168
Soft Chancre	...	...	...	...	...	...	...	...	...
Conditions other than Venereal	456	...	...	...	...	...	...	...	456
Total	702	19	13	1	3	2	2	21	763
B. Total number of attendances of all patients residing in each area	5,182	136	76	4	3	10	4	79	5,494
C. Aggregate number of "In-patient days" of all patients residing in each area	305	44	22	...	40	...	...	...	411
D. Number of doses of arseno-benzol compounds given in the: 1. Out-Patient Clinic	1,827	57	13	...	...	2	2	30	1,931
2. In-Patient Dept.	75	11	8	...	8	...	...	...	102
to patients residing in each area									

Venereal Diseases

Return relating to all Persons who were treated at the Treatment Centre at Mater Infirmorum Hospital, Belfast, during the year ended 31st March, 1946.

	Syphilis		Gonorrhoea		Soft Chancre		Conditions other than Venereal		Total	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1. Number of cases which:—										
(a) at the beginning of the year under report were under treatment or observation for - -	245	69	31	7	...	...	30	21	306	97
(b) had been marked off in a previous year as having ceased to attend or as transferred to other Centres, and which returned to the Treatment Centre during the year under report suffering from the same infection -	4	...	...	...	...	...	3	1	7	1
Total—Items 1 (a) and (b) - -	249	69	31	7	...	...	33	22	313	98
2. (a) Number of cases dealt with at the Treatment Centre during the year for the first time -	97	42	133	35	...	...	204	252	434	329
Total—Items 1 (a), 1 (b), and 2 (a) -	346	111	164	42	...	...	237	274	747	427
2. (b) Number of cases included in Item 2 (a) known to have received previous treatment at other Centres for the same infection - - -	29	6	16	3	...	...	...	...	45	9
3. Number of cases which ceased to attend—										
(a) before completing the first course of treatment for - - - - - -	5	...	...	...	...	...	...	...	5	...
(b) after one or more courses, but before completion of treatment for - - -	13	4	10	...	...	...	...	...	23	4
(c) after completion of treatment, but before final tests as to cure of - - - -	46	8	48	5	...	...	...	...	94	13
4. Number of cases transferred to other Treatment Centres after treatment for - - - -	34	2	21	...	...	...	...	...	55	2
5. Number of cases discharged after completion of treatment and observation for - - -	42	8	65	15	...	...	...	...	107	23
6. Number of cases which, at the end of the year under report, were under treatment or observation for - - - - - -	206	89	20	22	...	...	...	...	226	111
Total—Items 3, 4, 5, and 6 - -	346	111	164	42	...	...	...	...	510	153
7. Out-patient attendances:—										
(a) For individual attention by the Medical Officer - - - - - -	2,112	995	812	218	...	...	387	418	3,311	1,631
(b) For intermediate treatment, e.g., irrigation, dressings, etc. - - - - -	174	137	116	125	...	...	...	...	290	262
Total Attendances - - -	2,286	1,132	928	343	...	...	387	418	3,601	1,893
8. Aggregate number of "In-patient days" of treatment given to persons who were suffering from -	184	210	10	7	...	...	...	...	194	217

Diphtheria Immunisation

During the year **7,751** persons completed a course of treatment against diphtheria; of these, **6,625** were immunised at clinics, schools, and institutions, **1,452** by private practitioners with material supplied by the Department, and **34** by the medical staff at Purdysburn Fever Hospital, while undergoing treatment for scarlet fever.

The total number of persons who had completed a course of treatment from the inception of the work in October, **1936**, until the end of December, **1945**, details of whose age grouping are given in the table below, was **72,800**.

In addition, **2,445** children received reinforcing injections.

Table shewing age grouping of children immunised since October, **1936**.

Age at Date of Inoculation	1936-37	1938	1939	1940	1941	1942	1943	1944	1945	
Under 1 year -	27	21	6	17	33	71	36	69	33	Total under 5 years at end of 1945 **15,434** Equal to 48% of this age-group
1 year - -	362	413	253	299	906	1634	2576	2492	2445	
2 years - -	470	363	204	335	1405	1373	1642	1329	1474	
3 years - -	539	450	205	285	1258	985	1043	628	614	
4 years - -	527	534	268	346	1228	937	997	455	358	
5 years - -	814	690	366	508	1262	929	1022	663	542	Total over 5 and under 10 years at end of 1945 **25,637** Equal to 64% of this age-group
6 years - -	1336	1209	656	818	1408	1123	1133	965	810	
7 years - -	1281	1539	753	756	1356	1017	963	802	678	
8 years - -	905	1233	420	399	995	567	706	492	360	
9 years - -	645	668	223	182	647	315	382	251	170	
10 years - -	506	295	119	88	433	221	222	107	71	Total over 10 and under 15 years at end of 1945 **22,442** Equal to 56% of this age-group
11 years - -	358	127	50	61	200	103	81	44	44	
12 years - -	289	95	29	33	213	85	73	33	18	
13 years - -	192	77	28	22	171	86	78	47	40	
14 years - -	136	62	17	20	141	60	40	26	27	
Over 15 years -	148	58	24	11	78	180	37	25	67	Total over 15 years **9,287**

Mosquito Control

Attention was again directed during the year to draining and spraying in order to remove the breeding-places of the mosquito. **57** samples of larvae were taken and brought to the Department for examination. Ten of these were found not to be mosquito larvae.

395 gallons of "Civic" Fluid,
2,040 gallons of waste condenser oil, and
30 gallons of waste motor oil
were used in spraying.

Treatment of Scabies

During the year **2,756** treatments were carried out at the Scabies Clinic at the Disinfecting Station, Laganbank Road.

Port Sanitary Authority, Belfast

Report for the Year 1945

I.—Amount of Shipping Entering the Port During the Year.

TABLE A

Number Inspected		Number Reported to be Defective	Number of Vessels Number of Vessels on which Defects were Remedied	Number of Vessels reported as having or having had during the voyage Infectious Disease on Board
By Medical Officer	By Sanitary Inspector			
68	1913	604	587	11

TABLE C

Cases of Infectious Sickness landed from vessels.

Disease	Number of Cases During 1945		Number of Vessels Concerned
	Passengers	Crew	
Tuberculosis - -	3	1	4
Measles - -	...	2	2
Typhoid Fever -	...	1	1

TABLE D

Cases of Infectious Sickness occurring on vessels during the voyage, but disposed of prior to arrival.

Disease	Number of Cases During 1945		Number of Vessels Concerned
	Passengers	Crew	
Typhoid Fever -	...	1	1
Measles -	...	1	1
Tuberculosis - -	...	1	1
Smallpox - -	...	1	1

No case of plague, cholera, yellow fever, smallpox, or typhus fever occurred, and no plague-infected rats were discovered during the year.

THE PARROTS (PROHIBITION OF IMPORT) REGULATIONS, 1930.

No notices were served during the year under above Regulations.

NUMBER OF RATS DESTROYED DURING THE YEAR.

TABLE E

(1) On Vessels.

Destroyed	Examined	Found to be Infected with Plague
390	376	None

TABLE F

(2) In Docks, Quays, Wharves, and Warehouses.

Destroyed	Examined	Found to be Infected with Plague
120	104	None

TABLE G

Measures of Rat Destruction on Plague "Infected or Suspected" Vessels, or Vessels from Plague Ports arriving in the Port during the year.

Total Number of such vessels arriving	Number of such vessels fumigated with So_2	Number of rats killed	Number of such vessels fumigated with HC.*n*	Number of rats killed	Number of such vessels on which trapping, poisoning, etc., were employed	Number of rats killed	Number of such vessels on which measures of rat destruction were not carried out
11	...	...	2	40	5	13	4

TABLE H

Deratization Certificates and Deratization Exemption Certificates issued during the year.

Number of Ships	Number of Deratization Certificates Issued *					Number of Deratization Exemption Certificates Issued	Total Certificates Issued
	After Fumigation with			After Trapping, Poisoning, etc.	Total		
	HC.*n*	Sulphur	HC.*n* and Sulphur				
29	16	...	...	...	16	13	29

VI.—HYGIENE OF CREWS' SPACES.

TABLE J

CLASSIFICATION OF NUISANCES.

NATIONALITY OF VESSEL	Number Inspected during 1945	Defect of Original Construction	Structural Defects through wear and tear	Dirt, Vermin and other conditions prejudicial to health
British - -	1612	21	24	476
Other Nationalities -	301	15	11	115

VII.—FOOD INSPECTION.

During the year, 22 tons 1 cwt. 3 qrs. 2 lbs. of unsound foodstuffs were seized, and destroyed or disposed of otherwise than for the food of man.

Report on the Administration of the Factories Act (Northern Ireland), 1938, for the Year 1945.

Part 1.—INSPECTIONS for the purposes of provisions as to health, including Inspections made by Sanitary Inspectors.

PREMISES (1)	NUMBER OF		
	Inspections (2)	Written Notices (3)	Occupiers Prosecuted (4)
Factories with mechanical power - - -	1,631	150	...
Factories without mechanical power - -	1,131	80	...
*Other premises under the Act (including works of building and engineering construction, but not including outworkers' premises) - - -	1,417	47	...
TOTAL - -	4,179	277	...

*Electrical Stations should be reckoned as factories.

Part 2.—DEFECTS FOUND.

PARTICULARS (1)	NUMBER OF DEFECTS			Number of defects in respect of which Prosecutions were instituted (5)
	Found (2)	Remedied (3)	Referred to Chief Inspector (4)	
Want of cleanliness (S.1) - - - -	278	274	...	...
Overcrowding (S.2) - - - - -	3	3	...	...
Unreasonable temperature (S.3) - - -	...	...	...	...
Inadequate ventilation (S.4) - - - -	11	11	...	...
Ineffective drainage of floors (S.6) - - -	1	1	...	...
Sanitary Conveniences (S.7) — Insufficient	19	13	...	...
Sanitary Conveniences (S.7) — Unsuitable or defective	163	137	...	...
Sanitary Conveniences (S.7) — Not separate for sexes	2	...	...	...
Other offences (excluding offences relating to Home Work, which are included in Part 3 of this report) - - - - - - -	72	52	1	3
Breach of special sanitary requirements for bakehouses (S.56 to S.59) - - - -	35	25	...	...
TOTAL - -	584	516	1	3

Part 3.—HOMEWORK.

Nature of Work (1)	Number of Inspections of Out-workers' Premises (2)	Outwork in Unwholesome Premises (Section 115)			Outwork in Infected Premises (Sections 116 and 117)		
		Instances (3)	Notices Served (4)	Prose-cutions (5)	Instances (6)	Orders Made (S. 117) (7)	Prose-cutions (Ss.116&117) (8)
1. Making, cleaning, washing, altering, ornamenting, finishing, and repairing of wearing apparel	1,827	76	76	...	3	3	...
2. Making-up, ornamenting, finishing, and repairing of table linen, bed linen or other household linen (including in the term linen articles of cotton or cotton and linen mixtures)	1,525	62	62	...	2	2	...
3. Textile Weaving, and any process incidental thereto -	...	...	...	...	...	...	...
4. Other - -	74	10	10	...	...	...	...
Total - -	3,426	148	148	...	5	5	...

Sanitary Report
for the Year

SUMMARY OF INSPECTIONS.

Houses, Shops, Schools, Common Lodging Houses, Milk-shops, Piggeries, Stabling Yards, Tipping Grounds, Offensive Trades, etc.	154,714
Drain Tests	402
Nuisances discovered and complained of	72,544
Sanitary improvements carried out	26,979

Sale of Food and Drugs Acts

During the Year 1,300 Samples were taken for Analysis.

Return shewing particulars of adulterated samples.

Nature of Sample	Samples Taken	Adulterations	Prosecutions	Convictions	Probation of Offenders Act	Fines £ s. d.
Baking Powder	30	1	—	—	—	—
Buttermilk	26	9	7	7	—	9 0 0
Buttermilk (informal)	8	4	—	—	—	—
Dripping	1	1	–	—	—	—
Golden Raising Powder	3	1	—	—	—	—
Ice Cream (informal)	14	1	—	—	—	—
Sauce	14	1	—	—	—	—
Sauce (informal)	3	1	—	—	—	—
Soup (tinned) (informal)	3	1	—	—	—	—
Sweetmilk	541	20	7	6	1	4 10 0
Sweetmilk (informal)	115	6	—	—	—	—
						£13 10 0

In the foregoing return, the term "informal" is used where the formalities of the Sale of Food and Drugs Acts were not observed in taking the samples.

Cases of Adulteration in which no Legal Proceedings were taken.

Formal Samples:

1 of Baking Powder, 2 of Buttermilk, 1 of Dripping, 1 of Golden Raising Powder, 1 of Sauce, and 13 of Sweetmilk.

Public Health Acts

Unsound foodstuffs inspected by the Food and Drugs Inspectors under above Acts, and destroyed or disposed of otherwise than for the food of man, under their supervision.

2,610	tins	Beans.
3	„	Benger's Food.
1,261	„	Fish.
171	„	Fruit.
8	„	Groats.
576	„	Health Salts.
146	„	Jam.
35	„	Lemon Powder.
1,227	„	Meat.
2,576	„	Meat and Fish Paste.
669	„	Condensed Milk.
19	„	Neave's Food.
139	„	Peas.
1,555	„	Soup.
28	„	Syrup.
499	„	Vegetables.
51	„	Unlabelled Foodstuffs.
15	gallons	Treacle.
2	„	Pickles.
45		Puddings.
51		Fowl.

also 160 Jars, 32 Cartons, 1,178 Bottles, 2,622 Packets, and 26 tons 12 cwt. 3 qrs. and 16 lbs. of miscellaneous items.

TABLE IX

Legal Proceedings

	Summonses	Orders	Fines £	s	d
Under Public Health Acts—					
For abatement of nuisances	1,580	93	23	5	0
Disobedience of Justices' Orders ...	9	—	10	15	0
For having deposited for the purpose of sale unsound food	4	—	39	0	0
For failing to take all reasonable precautions to secure the cleanliness of premises in which food was stored ...	2	—	20	0	0
For failing to take all reasonable precautions to prevent contamination of food	1	—	5	0	0
For obstructing a Sanitary Officer in the execution of his duty	1	—	3	0	0
Under Preservatives in Food Regulations ...	1	—	2	0	0
Under Sale of Ice Cream Act	1	—	5	0	0
Under Sale of Food and Drugs Act ...	—	—	13	10	0

TABLE X

Rainfall

The following Table, kindly supplied by Mr. D. McGarrigle, Secretary and Registrar to the Belfast City and District Water Commissioners, shows the rainfall in inches during the several months of the year as recorded at the Water Works at Old Park.

	1945
January	4.57
February	4.92
March	1.88
April	2.41
May	4.49
June	5.32
July	4.72
August	1.38
September	3.48
October	4.69
November	1.50
December	4.64
	44.00

Report of the City Veterinarian

On the Work of his Department for the Year 1945

To The Medical Superintendent Officer of Health.

Sir,

I beg to submit my report on the work at the Belfast Municipal Abattoir, in connection with the Ante-mortem and Post-mortem examinations of the animals slaughtered for human food.

Table shewing the number and description of Animals slaughtered and the number condemned during the year.

	Cows	Heifers	Bulls	Bullocks	Calves	Sheep and Lambs	Goats	Pigs	Total
Slaughtered	31,836	13,115	653	26,042	25,457	156,338	1,797	1,660	256,898
Condemned	2,463	55	13	115	585	248	14	44	3,537

Table shewing amount examined and amount seized and destroyed at the Meat Inspection Station, Public Abattoir.

BEEF—Sides examined, 11; seized and destroyed, 4. Quarters examined, 9; seized and destroyed, 6. Cuts examined, 61; seized and destroyed, 30.

MUTTON—Carcases examined, 8; seized and destroyed, 3.

PORK—Carcases examined, 334; seized and destroyed, 119.

VEAL—Carcases examined, 1; seized and destroyed, 1.

FOWL—Fowl examined, 2,690; seized and destroyed, 2,690.

TINNED MEATS—Tinned Meats examined, 12,416; seized and destroyed, 12,416.

CEREALS—Packets examined, 7,696; seized and destroyed, 7,696.

DATES—Boxes examined, 35; seized and destroyed, 35.

FISH AND FOWL MARKETS.

Seized and Surrendered.

18 Barrels of Salt Herrings, 67 Boxes of Fillets,
11½ stones of Whiting, and 62 Fowl.

Services Rendered to Other Departments.

During the year, a general supervision of the health of the animals of the several Committees of the Corporation was exercised. Several animals were purchased for the different departments.

Fortunately, the most of the work during the year was in the nature of preventive medicine, and calls for little comment.

Yours faithfully,

ALEX. McLEAN,
City Veterinarian and Manager of Abattoir.

Purdysburn Fever Hospital, Belfast

To the Medical Superintendent Officer of Health.

Dear Sir,

I beg to submit the Annual Report for the year 1945 (52 weeks ending 29th December, 1945).

1,789 cases were admitted during this period, 123 cases remained from the previous year, making 1,912 cases under treatment ; 102 cases remained in hospital, so that 1,810 cases were treated to a conclusion.

The number of admissions in the previous year was 2,582 ; and the average number of admissions in the previous five years, 2,796.

TABLE 1

Showing the classification of cases and the mortality in cases treated to a conclusion.

Disease	Remaining on 30/12/44	Admitted during Year	Total	Remaining on 29/12/45	Nett	Died	Mortality per cent. calculated on cases treated to a conclusion
Enteric Typhoid	1	12	13	...	13	1	7.69
Para A	...	...	...	...	...	...	...
Para B	...	4	4	...	4	...	...
Scarlatina	83	722	805	58	747	3	0.40
Diphtheria	11	225	236	19	217	7	3.23
Cerebro-Spinal Fever	3	40	43	1	42	2	4.76
Tuberculous Meningitis	...	15	15	...	15	14	93.33
Acute Poliomyelitis	...	23	23	...	23	5	21.74
Pneumonia	1	7	8	...	8	...	0.00
Erysipelas	...	17	17	...	17	...	0.00
Whooping Cough	2	34	36	...	36	4	11.11
Measles	15	111	126	1	125	...	0.00
Pulmonary Tuberculosis	...	26	26	20	6	2	33.3
Other Diseases	7	553	560	3	557	38	6.80
Totals	123	1,789	1,912	102	1,810	76	4.20
Comparative Nos. in 1944	249	2,582	2,831	123	2,708	47	1.74

ENTERIC FEVER.

12 cases of Enteric (B.T.) were admitted during the year.

One case remained over from the previous year, none remained at the end of this year, so that 13 cases were treated to a conclusion. There was one death from Enteric Infection. The 12 admissions all came from within the city boundary. In the previous year the admissions numbered 5. Average number of admissions for the previous five years was 11.

DIPHTHERIA.

225 cases were admitted during the year. 11 remained from the previous year and 19 remained at the end of this year, so that 217 cases were treated to a conclusion : of these, 7 died, giving a death-rate of 3.23 per cent.

The average stay in hospital of the cases which recovered was 36 days.

Of the 225 admissions, 195 came from within the city boundary, and 30 were military patients.

In the previous year the admissions numbered 188 : average number of admissions for the previous five years was 528.

TABLE 2

Showing the case mortality in age periods.

Ages	Cases	Deaths	Mortality Per Cent.
Under 1 year	5	...	0.00
1— 2 years	13	3	23.07
2— 5 years	41	1	2.44
5—10 years	40	2	5.00
10—20 years	71	1	1.41
Over 20 years	47	...	0.00
Totals	217	7	3.23

The incidence of clinical Diphtheria continues to fall mainly on groups from school age onwards, probably attributable to the benefits of immunization directed largely at the younger children.

LARYNGEAL DIPHTHERIA.

5 cases required operative interference for laryngeal obstruction.

All five cases were treated by intubation. Two died within twenty-four hours of admission from toxæmia.

TABLE 3

Showing results in age periods in cases in which operative interference was required.

Ages	Cases	Deaths	Mortality Per Cent.
Under 1 year - -	0	0	00.00
1—2 years - -	3	1	33.33
2—3 years - -	0	0	00.00
3—4 years - -	0	0	00.00
4—5 years - -	1	0	00.00
Over 5 years - -	1	1	100.00
Totals -	5	2	40.00

CEREBRO-SPINAL FEVER.

40 cases were admitted during the year. 3 cases remained from the previous year, and 1 remained at the end of this year, so that 42 cases were treated to a conclusion ; of these, 2 died, giving a mortality of 4.76 per cent.

Of the 40 admissions, 28 were from the city and 12 were military patients.

In the previous year the admissions numbered 48 : average number of admissions for the previous five years was 135.

Penicillin in very limited supply was used in the treatment of five patients, of whom one of 63 years died.

TABLE 4

Showing the case mortality in age periods.

Ages	Cases	Deaths	Mortality Per Cent.
Under 1 year - -	3	...	0.00
1— 2 years - -	3	...	0.00
2— 5 years - -	8	...	0.00
5—10 years - -	4	1	25.00
10—20 years - -	10	...	0.00
20—30 years - -	10	...	0.00
30—40 years - -	2	...	0.00
40—60 years - -	1	...	0.00
Over 60 years - -	1	1	100.00
Totals -	42	2	4.76

TUBERCULOUS MENINGITIS.

15 cases were admitted, and 14 treated to a conclusion during the year. One case was transferred to another hospital to die.

ACUTE POLIOMYELITIS.

23 cases were admitted and treated to a conclusion during the year. Of these, 5 died. There was no apparent relationship between any of the cases. The surviving cases were ultimately transferred to orthopædic units with residual paralysis ranging in degree, from slight to extensive.

3 cases were nursed in the Both Respirator. The only survivor of these three has very extensive paralysis.

TABLE 5

Showing case mortality and sex incidence in age periods.

Ages	Cases	Sex		Deaths	Mortality Per Cent.
		M	F		
Under 5 years -	9	6	3	1	11.11
5—10 years - -	5	3	2	2	40.00
10—20 years - -	2	2	0	0	0.00
20—30 years - -	6	5	1	1	16.66
Over 30 years -	1	1	0	1	100.00
Totals -	23	17	6	5	21.74

The surviving patients remained in this hospital for an average of 35 days before transfer. The fatal cases died on 1st, 2nd, 6th, 6th, and 42nd days in hospital, respectively.

SCARLATINA.

722 cases were admitted, 83 remained from the previous year, 58 remained this year, so that 747 were treated to a conclusion. Of these, 3 died, giving a mortality of 0.40 per cent.

In the previous year the admissions numbered 1,611 : average number of admissions for the previous five years was 1,240.

Return Cases.

In 8 cases the return home of a Scarlatina patient was followed by other cases of Scarlatina in the household, giving a return rate of 1.08 per cent. On the average, these 8 cases had reached the thirty-third day from onset of their disease when they were discharged.

PULMONARY TUBERCULOSIS.

Owing to the fall in numbers of the ordinary infectious diseases, a ward was made available for the reception of female patients with Tuberculosis. Of the six cases treated to a conclusion, four were discharged home and two died.

OTHER DISEASES.

The certified causes of death of the 38 fatal cases listed as Other Diseases are as follows :—

Gastro-Enteritis - -	20	Cellulitis, Septicæmia -	1
Broncho-Pneumonia -	3	Meningitis, Pneumococcal -	7
Brain Abscess - -	2	,, b. Enteriditis -	3
Tetanus - - -	1	,, Influenzal -	1

PENICILLIN.

During the year Penicillin was made available in sufficient quantity to treat 26 cases. These were classified as follows :—

Cerebro-Spinal Fever - - - - -	5 cases—4 recovered.
Pneumococcal Meningitis - - - - -	8 cases—3 recovered.
Influenzal Meningitis - - - - -	2 cases—1 recovered.
Streptococcal Meningitis - - - - -	1 case —recovered.
Meningitis due to b. Enteriditis - - - -	3 cases—all fatal.
Brain Abscess (no bacteriology) - - -	1 case —fatal.
Scarlatina and Mastoidectomy - - - -	1 case —recovered.
Cellulitis and Septicæmia - - - - -	1 case —fatal.
Diphtheria—Faucial, Laryngeal, and Pulmonary - - - - - -	1 case —fatal.
Axillary Adenitis - - - - - -	1 case —recovered.
Quinsy - - - - - - - -	1 case —recovered.
Carbuncle - - - - - - -	1 case —recovered.

INFECTIOUS CONDITIONS AMONGST THE STAFF.

4 Nurses, fully immunized, were found to be swab positive on routine swabbing on change of duties from Diphtheria wards. All cleared up quickly.

2 Nurses developed Rubella.

Yours faithfully,

F. F. KANE, *Medical Superintendent.*

Municipal Laboratory,
Queen's University,
Belfast,

30*th March*, 1946.

To the Medical Superintendent Officer of Health.

Dear Sir,

I beg to present herewith a summary of the work carried out at the laboratory during the year 1945.

INFECTIOUS DISEASES.

	Pos.	Neg.	Total.
Diphtheria.			
1. Swabs from Practitioners	93	1,263	1,356
2. Do. Hospitals	1,200	2,003	3,203
3. Do. Public Health Departments	24	238	262
4. Do. Contacts	3	46	49
5. Direct Examinations	4	212	216
6. Virulence Tests	20	17	37
Vincent's Angina.			
Swabs	141	275	416
Enteric Group.			
1. Agglutination Reactions	42	361	403
2. Fæces, Blood, etc. ...	91	142	233
Food Poisoning.			
Food Stuffs	—	—	46
Meningitis.			
1. Cerebro-spinal Fluids	21	297	318
2. Typing	0	2	2
Tuberculosis.			
1. Sputa	64	222	286
2. Pus	0	23	23
3. Urine	1	21	22
4. Fluids	0	4	4
Anthrax	0	1	1
Plague.			
Rats	—	—	480
Streptococcal Infections.			
Swabs for Group A. Typing	2	64	66

BRUCELLA ABORTUS INFECTIONS.

Bloods	1	249	250
Milks	2	100	102

VENEREAL DISEASES.

Wassermann Reactions (Blood)	259	1,822	2,081
Wassermann Reactions (C.S.F.)	0	2	2
Films for Gonococci	40	168	208
Kahn Reactions	—	—	2,081

MILK EXAMINATIONS.

Grade A	3
Grade B	3
Grade B (Pasteurized)	7
Grade C	47
Grade C (Pasteurized)	204
Reductase Tests	264
Biological Tests for T.B.	102

WATER EXAMINATIONS.

Swimming Bath Waters	13
Ordinary Waters	4

UNCLASSIFIED EXAMINATIONS.

Urines, Pus, etc.	287
Blood Films, Counts, etc.	137

Yours faithfully,

G. F. W. TINSDALE,

City Bacteriologist.

Maternity and Child Welfare

INFANTILE MORTALITY.

The extremely adverse weather conditions in the early weeks of the year led to a sharp increase in the incidence of respiratory infection, especially among infants, with a resulting high death rate from pneumonia and other acute respiratory conditions. During the second half of the year, however, mortality among infants was unusually low, and we were able to complete the year with an Infantile Mortality Rate of 84, a position which seemed hardly possible in the early months. Prematurity, Diarrhœa and Enteritis, and Pneumonia, Broncho-Pneumonia and Bronchitis, the rates for which are shown in Table A, headed the causes of death and accounted for 57 per cent. of the Infantile Mortality.

Table A shows the number of deaths from these conditions and the death rate per 1,000 registered births during the past ten years.

Table B shows the deaths of infants under one year and the infantile mortality rates during the past ten years, with an analysis of these deaths, and death rates according to different mortality groups.

NEO-NATAL MORTALITY.

Neo-natal mortality is deaths occuring among infants during the first four weeks of life. Prematurity was the main cause of death among these infants, and was responsible for approximately 38 per cent. of the neo-natal mortality. Infection, as well as accounting for many of the deaths due to diseases of the "Respiratory and Digestive Systems," also contributed to a considerable proportion of the deaths due to "Other Diseases peculiar to the first year of life," as cases certified "Neo-Natal Sepsis" are included in this group. The majority of these "Neo-Natal Sepsis" cases were associated with an epidemic of infection occurring among hospital cases in the early part of the year, when the respiratory infection referred to above was prevalent throughout the city.

Table C shows the Neo-Natal deaths and Neo-Natal death rates during the past ten years, with an analysis of these deaths and death rates according to different mortality groups.

MATERNAL MORTALITY.

The number of women who died from Pregnancy, Childbirth, and the Puerperal state during the year was 18, giving a Maternal Mortality Rate for the city of 1.8 per 1,000 live births. This rate is the lowest figure recorded for the city, the previous lowest being that for the year 1944, which was 2.3.

Table D shows the Maternal Mortality per 1,000 live births analysed according to the cause of death. From this table it will be seen that infection accounted for approxmiately 50 per cent. of the mortality during the year 1945.

TABLE A

Showing the number of Deaths of Infants under one year from Prematurity, Diarrhœa and Enteritis, Pneumonia, Broncho-Pneumonia, and Bronchitis.

	1936		1937		1938		1939		1940		1941		1942		1943		1944		1945	
	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births
Prematurity - -	234	25.32	205	22.40	167	18.26	149	16.62	194	22.29	159	18.96	187	19.36	240	22.40	211	20.18	155	15.73
Diarrhœa and Enteritis -	204	22.07	163	17.81	128	13.99	170	18.96	257	29.53	173	20.64	155	16.05	287	26.79	178	17.02	166	16.85
Pneumonia, - - Broncho-Pneumonia - - and Bronchitis - -	159	17.20	161	17.59	162	17.71	138	15.39	189	21.71	127	15.15	188	19.46	247	23.06	171	16.35	154	15.63

TABLE B

Showing the Deaths of Infants under one year and the Infantile Mortality Rates during the ten years 1936—1945, with an analysis of these deaths and death rates according to Mortality Groups.

Year	Births	Deaths under One Year	Infantile Mortality Rate	Infective & Parasitic Diseases		Diseases of the Nervous System		Diseases of the Respiratory System		Diseases of the Digestive System		Congenital Malformations		Congenital Debility		Premature Birth		Injury at Birth		Other Diseases peculiar to the First Year of Life		Other Causes	
				Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1936	9,242	933	101	67	7.26	41	4.44	168	18.18	219	23.70	62	6.71	65	7.03	234	25.32	19	2.06	31	3.35	27	2.92
1937	9,150	860	94	39	4.26	43	4.70	175	19.13	176	19.24	70	7.65	66	7.21	205	22.40	32	3.50	26	2.84	28	3.06
1938	9,146	880	96	116	12.68	38	4.15	176	19.24	142	15.53	90	9.84	65	7.11	167	18.26	20	2.19	34	3.72	32	3.50
1939	8,966	762	85	42	4.68	42	4.68	148	16.51	181	20.19	61	6.80	78	8.70	149	16.62	12	1.34	23	2.57	26	2.89
1940	8,704	1,065	122	106	12.18	26	2.99	199	22.86	269	30.91	64	7.35	104	11.95	194	22.29	22	2.53	34	3.91	47	5.40
1941	8,383	759	91	38	4.53	33	3.94	131	15.63	185	22.06	62	7.39	73	8.71	159	18.96	15	1.79	21	2.51	42	5.01
1942	9,659	884	92	32	3.31	37	3.83	192	19.88	165	17.08	85	8.80	107	11.08	187	19.36	25	2.59	23	2.38	31	3.20
1943	10,713	1,189	111	81	7.56	39	3.64	255	23.80	300	28.00	84	7.84	73	6.81	240	22.40	26	2.42	58	5.41	33	3.08
1944	10,456	927	89	53	5.07	42	4.02	174	16.64	191	18.27	67	6.41	55	5.26	211	20.18	21	2.01	90	8.61	23	2.20
1945	9,853	828	84	58	5.89	33	3.35	159	16.14	177	17.96	64	6.50	43	4.36	155	15.73	20	2.03	91	9.24	28	2.84

TABLE C

Showing the Neo-Natal Deaths and Neo-Natal Death Rate during ten years **1936—1945**, with an analysis of these deaths and death rates according to Mortality Groups.

Year	Births	Deaths under FourWeeks	Neo-Natal Rate	Diseases of the Respiratory System		Diseases of the Digestive System		Congenital Malformations		Congenital Debility		Premature Birth		Injury at Birth		Other Diseases peculiar to the First Year of Life		Other Causes	
				Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1936	9,242	407	44.04	15	1.62	14	1.51	43	4.65	46	4.97	216	23.37	19	2.05	30	3.25	24	2.60
1937	9,150	376	41.09	22	2.40	14	1.53	42	4.59	39	4.26	194	21.20	29	3.17	24	2.62	12	1.31
1938	9,146	339	37.06	16	1.75	5	0.55	55	6.01	40	4.37	155	16.95	20	2.19	30	3.28	18	1.97
1939	8,966	300	33.46	15	1.67	13	1.45	32	3.57	53	5.91	135	15.06	12	1.34	23	2.57	17	1.90
1940	8,704	350	40.21	18	2.07	15	1.72	32	3.68	27	3.10	181	20.79	22	2.53	32	3.68	23	2.64
1941	8,383	303	36.14	22	2.62	18	2.15	38	4.53	25	2.98	141	16.82	14	1.67	21	2.51	24	2.86
1942	9,659	388	40.17	39	4.04	26	2.69	53	5.49	31	3.21	180	18.64	21	2.17	21	2.17	17	1.76
1943	10,713	624	58.25	72	6.72	118	11.01	57	5.32	38	3.55	226	21.09	26	2.42	53	4.95	34	3.17
1944	10,456	505	48.30	50	4.78	51	4.88	52	4.97	26	2.49	198	18.94	21	2.01	79	7.56	28	2.68
1945	9,853	391	39.68	39	3.96	22	2.23	40	4.06	13	1.32	148	15.02	18	1.82	87	8.83	24	2.44

TABLE D

Shewing the Maternal Mortality Rate per 1,000 live births analysed according to the cause of death.

Cause of Death	No. of Deaths	Rate per 1,000 Live Births
Post-Abortion Infection	4	0.41
Abortions (not Septic)	1	0.10
Ectopic Gestation	1	0.10
Hæmorrhage of Pregnancy	0	0.00
Toxæmia of Pregnancy	3	0.30
Other Diseases and Accidents of Pregnancy	0	0.00
Hæmorrhage of Childbirth, etc.	1	0.10
Infection during Childbirth and the Puerperium	5	0.51
Puerperal Toxæmia	0	0.00
Other Accidents of Childbirth	3	0.30
Other Conditions of Childbirth and Puerperal State	0	0.00

TABLE E

Shewing the Deaths of Children under one year old per 1,000 births each year from 1926—1945.

Year	Deaths per 1,000 Births	Year	Deaths per 1,000 Births
1926	112	1936	101
1927	101	1937	94
1928	103	1938	96
1929	112	1939	85
1930	78	1940	122
1931	90	1941	91
1932	111	1942	92
1933	102	1943	111
1934	80	1944	89
1935	112	1945	84

MIDWIVES

During the year 236 midwives gave the required notice of their intention to practise ; of these, 233 were certified by examination and 3 otherwise certified.

During the year the services of Medical Practitioners were requisitioned by midwives in 196 emergency cases, and the Belfast Corporation, as the Local Supervising Authority, paid in fees £246. 12s. 6d. for attendances in 103 cases.

Notifications received by Medical Superintendent Officer of Health :—

Under Form	A.—Sending for Medical help	196
,, ,,	B.—Notification of Death	19
,, ,,	C.—Notification of Still-birth	362
,, ,,	D.—Notification of having laid out a Dead Body	1
,, ,,	E.—Source of Infection	3
,, ,,	F.—Artificial Feeding	54

NOTIFICATION OF BIRTHS ACT

11,307 births were notified pursuant to the Notification of Births Act, and in addition, 20 were either discovered by Health Visitors or notified by the Registrars of Births, making a total of 11,327 ; of these, 5,866 were males, 5,460 were females, and 1 sex undetermined ; 362 were still-births and 582 were illegitimate births.

Of the total number notified, 8,102 were selected for visitation and supervision, and during the year 58,394 visits were made.

Births :—

Attended by Medical Practitioners and Midwives ...	2,272
,, only by Midwives certified by examination ...	2,137
,, only by Dispensary Midwives	613
,, by Midwives otherwise certified	20
,, in Jubilee Maternity Hospital	1,655
,, in Royal Maternity Hospital	1,586
,, in Johnstone House	286
,, in other Maternity Hospitals	83
,, by Nurses from Maternity Hospitals	404
,, in Malone Place Home	364
,, in Thorndale Home	313
,, in Nursing Homes	1,591
,, No Information	3

5 cases of Ophthalmia Neonatorum occurred during the year

434 cases of Inflammation of Eyes were visited during the year in children under one year.

27 cases of Puerperal Pyrexia occurred during the year ; of these, one died.

ANTE-NATAL REPORTS FOR THE YEAR 1945

The Royal Maternity Hospital

Total number of new patients	2,561
Total number of re-attendances	12,304

The Ulster Hospital, Templemore Avenue

New cases in Out-patient Department	175
Return cases in Out-patient Department	548

Malone Place Home

New Patients	393
Re-attendances	1,951

Municipal Clinics.

New Patients	2,428
Re-attendances	9,264

Thorndale House, Duncairn Avenue (The Salvation Army), and The Belfast Midnight Mission and Rescue and Maternity Home, 31 Malone Place.

The above Homes, which receive grants from the Belfast Corporation, carried out their work during the year in a satisfactory manner.

The following shows the number of confinements which took place during the year in Thorndale House and Malone Place Home :—

Thorndale House	Total	City Cases	Outside City Cases
Number of Confinements (married mothers)	256	244	12
Number of Confinements (unmarried mothers)	61	12	49
Malone Place Home			
Number of Confinements (married mothers)	209	202	7
Number of Confinements (unmarried mothers)	144	63	81

MATERNITY AND CHILD WELFARE CENTRES

The following table shews the number of names on the roll of each Centre and the total number of attendances during the year, also the number of babies medically examined and the total number of examinations :—

	On Roll	Total No. of attendances by mothers	Babies medically examined	Total examinations of babies
Danube Street	283	2,995	423	1,012
Donegall Road (two sessions)	608	5,654	782	1,696
Dee Street	319	2,710	396	999
York Street	413	3,111	456	905
Spiers Place (two sessions, Thursday and Friday) ...	584	5,017	803	1,762
Falls Road	504	2,860	447	1,187
Havelock Place	354	3,288	510	980
Woodstock (Wednesday) ...	378	3,162	422	824
Woodstock (Friday) ...	436	4,143	424	1,002
Ligoniel	211	2,180	318	685
Mervue Street	373	3,269	393	1,130
Avoca Street	419	4,689	632	1,336
Divis Street	456	3,508	825	1,504
Sydenham	284	2,672	294	720
Glenard	406	3,299	490	1,223
Bloomfield	333	3,293	430	856
Greencastle	171	1,761	96	546
Susan Street	363	3,199	463	973
Seaview	220	2,434	467	879
Joanmount	218	2,030	322	579
Kimberley Street	274	2,593	482	970
Spiers Place (Tuesday) ...	308	3,299	507	1,086
	7,915	71,166	10,382	22,854

HOME HELP SCHEME.

This scheme worked very successfully during the year. The average number of Home Helps on the panel was 35, and a total of 405 cases were dealt with. The majority of these were confinement cases, but mothers of small children who were unable to carry on their household duties during periods of acute illness were also assisted.

TREATMENT OF SQUINT.

91 children were referred for examination by an ophthalmic surgeon and subsequently provided with glasses.

OTHER SCHEMES.

Other schemes in operation during the year were : Home nursing of Gastro-Enteritis and Broncho-Pneumonia in children under two years old, by arrangement with the District Nursing Society. Dental treatment for expectant mothers and toddlers, by arrangement with the Royal Victoria Hospital : Provision of meals for expectant mothers and their toddlers, by arrangement with the Education Department : Services of an Obstetrical Flying Squad in cases of hæmorrhage and obstetric shock, by arrangement with the Royal Maternity and Jubilee Hospitals.

During the year demonstrations in the preparation of meals suitable for young children were again arranged at the various centres, in conjunction with the Ministry of Food. Films on suitable topics were also displayed by the Ministry of Information. To both these Ministries we are indebted for their kind co-operation.

The Belfast Voluntary Workers' Association continued to render valuable service, both in connection with the clerical and social aspects of the work at our centres. We again take the opportunity of recording our appreciation of this most helpful assistance.

Report of the Chief Tuberculosis Officer

SUBMITTED TO

The Medical Superintendent Officer of Health

FOR

The Belfast Corporation Tuberculosis Committee

Dear Sir,

I have pleasure in forwarding the various sections of the Annual Report of the Tuberculosis Service.

In accordance with the wishes of the Belfast Corporation Tuberculosis Committee, strenuous efforts have been made to provide additional accommodation, which is urgently required for tuberculous patients. The number of patients in institutions for which your Authority is responsible has increased from 446 on 1st January, 1945, to 526 on 31st December, 1945. Further increases have been planned, and it is anticipated that more than six hundred beds for tuberculous patients will be available at the end of 1946. The actual number of available beds has increased from 323 in December, 1939, to 498 beds in December, 1945 (excluding beds in the Belfast City Hospital).

In spite of the increased accommodation, there has been a serious lengthening of the waiting-list, which now exceeds four hundred . Some of the causes of this long waiting-list may be mentioned. There is a general tendency for patients to seek hospital treatment, owing to the difficulties of home nursing under war-time conditions. The facilities for treatment in the hospitals under your control are such as to attract an increased number of patients, and the average length of stay in hospital has tended to increase. Also, the public is becoming very conscious of the dangers of tuberculosis and of the importance of early treatment. Mass Radiography is another means of swelling the waiting-list, by disclosing cases of active tuberculosis which would otherwise have remained unsuspected for many months. Perhaps the most important single factor is the provision of Treatment Allowances under Memorandum 266 T, which has encouraged and enabled many patients to stop work without delay and avail themselves of hospital treatment.

The report of the Senior Tuberculosis Officer shows a substantial increase in the work done at the Central Tuberculosis Institute. It is clear from the large number of new patients examined, a high proportion of whom fortunately prove to be non-tuberculous, that the work of the Institute has the confidence of the medical profession and of the citizens.

The first Annual Report of the Director of the Mass Radiography Unit is of the greatest interest. This work has already been valuable in disclosing unsuspected tuberculosis and in providing a great mass of exact information as to the health of persons in employment.

The Municipal Sanatorium, Whiteabbey, and the Children's Hospital, Greenisland, have been filled to capacity throughout the year.

On 1st July, 1945, the Belfast Corporation Tuberculosis Committee took over control from the Commissioners for Tuberculosis. I wish to express my thanks to the Commissioners and to the members of the Committee for their courteous consideration and unfailing encouragement in the work of the Department.

Yours faithfully,

B. R. CLARKE,

Chief Tuberculosis Officer.

Report of the Senior Tuberculosis Officer

on the work of

The Tuberculosis Institute

For the Year ended 31st December, 1945

To the Chief Tuberculosis Officer.

Dear Sir,

I have pleasure in presenting for your information my annual report on the work of the Institute for the year ended 31st December, 1945—the thirtieth Report since the scheme of the Belfast Corporation for the prevention and treatment of tuberculosis was inaugurated in April, 1914.

During the year we examined **4,162** *new* patients—the largest number of new patients examined in any year since the commencement of our work.

NEW EXAMINATIONS.

TABLE I

Shows the number of patients *examined for the first time,* in each of the years indicated, without regard to age, sex, or diagnosis.

Year Ended	No. of Examinations
31st December, 1940	2006
31st December, 1941	1765
31st December, 1942	2822
31st December, 1943	3290
31st December, 1944	3399
31st December, 1945	4162

The number of primary examinations made from the date of the opening of the Institutes in April, 1914, was **67,562.**

TABLE II

Shows the diagnostic result of examination of new patients during the years indicated.

Year Ended	Tuberculous	Primary T.B. Complex	Non-Tuberculous	Diagnosis Not Completed	Total
31/12/40	655	175	1114	197	2006
31/12/41	501	160	919	185	1765
31/12/42	627	276	1671	248	2822
31/12/43	628	250	2151	261	3290
31/12/44	762	186	2202	249	3399
31/12/45	724	246	2784	408	4162
Percentages for Year ended 31/12/45	17.4%	5.7%	67.1%	9.8%	100%

CONTACTS.

TABLE III

Shows the result of the examination of "Contacts" during the year 1945.

Contacts of—	Diagnosis								Total
	Tuberculous		Primary T.B. Complex		Non-Tuberculous		Not Diagnosed		
	Under 15	Over 15	Under 15	Over 15	Under 15	Over 15	Under 15	Over 15	
Pulmonary Cases with Positive Sputum - - -	3	17	102	...	260	262	18	31	693
Pulmonary Cases with Negative Sputum - -	...	7	19	...	116	110	8	2	262
Non-Pulmonary Cases -	...	...	...	...	...	...	...	5	5
Deceased Patients previously unknown to us -	...	5	5	...	3	19	...	...	32
Totals - -	3	29	126	...	379	391	26	38	992

Of the new patients examined during the year, 3,170 were notified as suffering, or suspected to be suffering, from tuberculosis; and 992, as shown above, were "contacts." Contacts are examined in exactly the same way as new patients, i.e., clinical examination, X-ray, and (if the examinee is a child) tuberculin test. It is to be noted that although the number of new patients examined is the largest on record, the percentage *found to be suffering* from *tuberculosis* is the lowest.

FORMS OF TUBERCULOSIS.

TABLE IV

Shows the numbers and sex of the patients found to be suffering from the different forms of Tuberculosis.

Year Ended	Pulmonary		Glandular		Osseous		Abdominal		Other Forms		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
31/12/40	298	247	15	16	28	14	13	10	8	6	362	295
31/12/41	271	165	13	10	7	5	8	13	7	2	306	195
31/12/42	276	266	14	17	14	14	8	13	2	3	314	313
31/12/43	300	261	11	15	7	10	12	7	1	4	330	298
31/12/44	348	321	10	12	17	9	14	15	7	9	396	366
31/12/45	374	313	9	7	16	11	12	10	6	4	417	345

RE-ATTENDANCES AND RE-EXAMINATIONS.

The number of re-attendances of "old" patients for examination and treatment at the Institute during the year was **14,462**. In addition, **5,721** special re-examinations were carried out. **203** patients unable to attend at the Institute, were re-examined in their homes or in hospitals, by the medical staff of the Institutes. This was exclusive of attendances of patients in their homes by Panel and Domiciliary Doctors, acting under the Scheme of the Council.

PATIENTS ON THE VARIOUS FORMS OF TREATMENT.

TABLE V

Shows the numbers of *definitely tuberculous* patients on the different forms of treatment at **31**st December, **1945**.

Institute	Domiciliary		Institutional					Total
	Insured	Non-Insured	Mun. San. W'abbey	Children's Hospital	Minnow-burn Hosp.	M.O.H. Em. Hosp.	Bel. City Hospital	
634	1893	417	307	46	20	103	50	3470

The above figures are exclusive of **376** patients not definitely diagnosed at the end of the year, but under observation on one or other form of treatment, and also of a number of cases of Primary T.B. Complex in children.

The total *definitely tuberculous* patients *treated* during the year numbered **4,374**.

TABLE VI

NEW CASES AND DEATHS IN AGE-PERIODS.

Shows the numbers of New Cases and of Deaths amongst males and females in the Age-periods set out.

Age-Periods	New Cases		Deaths			
	All Forms of Tuberculosis		Pulmonary (including Miliary)		Non-Pulmonary	
	Males	Females	Males	Females	Males	Females
0— 4 inclusive	9	9	4	4	23	14
5— 9 „	9	9	...	...	4	3
10—14 „	8	17	2	...	2	4
15—19 „	38	76	14	18	2	1
20—24 „	77	73	18	33	2	2
25—34 „	106	97	19	51	4	4
35—44 „	73	47	32	21	2	2
45—54 „	62	10	43	14	1	4
55—64 „	28	4	21	9	2	1
65 and upwards	7	3	11	12	1	2
Totals	417	345	164	162	43	37

During the year 1945—

9,819 X-ray films were taken, and screenings as required carried out.

912 Tuberculin tests were done. The total number of children tested by this method to the end of 1945 was 10,293.

2,913 Artificial Pneumothorax Refills were given.

84 Dental Examinations and Treatments.

DEATHS AND DEATH RATES.

Pulmonary Tuberculosis.—The number of deaths in Belfast in 1945, according to the return of the Registrar General for Northern Ireland, was 326, as compared with 354 in 1944, and 836 in 1914. The *death-rate* from pulmonary tuberculosis in 1945 was 74 per 100,000.

Non-pulmonary Tuberculosis.—The number of deaths from the non-pulmonary forms of tuberculosis in 1945 was 80, as compared with 89 in 1944, and 290 in the year 1914. The *death-rate* from non-pulmonary tuberculosis in 1945 was 18 per 100,000.

TABLE VII

Shows the declining trend of the death-rate from tuberculosis in Belfast during the last thirty-two years.

Year	No. of Deaths		Death Rate per 100,000		Comparison of Rate with 1914 as 100	
	Pul.	Non-Pul.	Pul.	Non-Pul.	Pul.	Non-Pul.
1914	836	290	209	73	100	100
1915	770	286	191	71	91	97
1916	792	259	203	66	97	90
1917	912	289	232	73	111	100
1918	992	265	252	67	121	92
1919	867	261	216	65	103	89
1920	783	225	189	54	90	74
1921	624	163	148	39	71	53
1922	534	158	126	37	60	51
1923	528	159	123	37	59	51
1924	615	166	142	38	68	52
1925	571	202	130	46	62	63
1926	582	141	140	34	67	47
1927	509	152	123	36	58	49
1928	493	147	119	35	57	48
1929	475	122	114	29	54	40
1930	469	129	113	31	54	42
1931	438	124	105	30	50	41
1932	427	128	103	31	49	42
1933	450	159	108	38	52	52
1934	448	122	108	29	52	40
1935	401	108	96	26	46	37
1936	406	94	97	22	46	30
1937	414	96	94	22	45	30
1938	348	107	78	24	42	37
1939	365	71	83	16	39	22
1940	412	94	94	21	45	28
1941	426	98	97	22	46	30
1942	369	79	84	18	40	25
1943	367	117	84	27	40	37
1944	354	89	81	20	40	27
1945	326	80	74	18	35	25

From the foregoing table it will be seen that for every 100 persons who died of pulmonary tuberculosis in Belfast in 1914, 35 died in 1945—a reduction in the *death-rate* of 65 per cent.; while for every 100persons who died of non-pulmonary tuberculosis in 1914, 25 died in 1945—a reduction in the *death-rate* of 75 per cent. in the same period.

In the year 1914 the Belfast City Council inaugurated the Scheme for the Prevention and Treatment of Tuberculosis in 91 King Street—an old dwelling-house converted in earlier years into an Extern for the Forster Green Hospital, by their Administrative Board. In the same year a Branch Institute was opened at 225 Albertbridge Road—an old vicarage which the Council purchased and adapted. In 1918 a new building in Durham Street was opened as the present Central Tuberculosis Institute. Owing to the 1914-18 war, the original plans of this building were not followed, and the Institute has not yet been completed. In 1945 the Branch Institute at 225 Albertbridge Road was converted into the present Mass Radiography Centre, and all the work of the Branch was transferred to the already overcrowded building in Durham Street.

On the outbreak of the World War in 1939, both the Central and Branch Institutes were kept open day and night as First-Aid Posts by the staffs of the Institutes for over two months. Later some voluntary workers were recruited, and for the greater part of the remainder of the war, the Institutes were maintained as "second-line" First-Aid Posts.

Since 1940 (with the exception of the year 1941, when we had the few air-raids experienced by this city) the numbers of new examinations have steadily increased—from 2,006 in 1940 to 4,162 in 1945. Examinations and re-examinations have thus become a major problem, considering our limited accommodation. In addition, increasing numbers are now being referred to us by the Mass Radiography Centre. Contrary to the general belief, we find little or no reluctance on the part of patients to come to the Institute for examination; and the medical practitioners of the city have shown an increasing readiness to avail themselves of the facilities for examination provided at the Institute. This is indicated by the ever-increasing percentage of new examinees found to be non-tuberculous. In other words, the percentage of new examinees found to be suffering from tubercular disease has fallen from 50 per cent. in 1935 to 18 per cent. in 1945.

About 50 per cent. of the patients suffering from tuberculosis give a family history of the disease. Amongst 992 "contacts" examined during the year, 32 (about 3 per cent.) were found to be suffering from tuberculosis. It would be unsafe to take this percentage as representing the results of examination of "contacts" in the long run, since the general experience is that about one-fifth of the "contacts" of tuberculous patients develop tuberculosis. It is our hope that in the future we may have an X-ray machine (with suitable staff and accommodation) for taking 5 in. by 4 in. films for the six-monthly re-examination of "contacts," for, as I have pointed out before, pulmonary tuberculosis is a disease in which an early diagnosis can only be made by radiography.

We have at present on our register one thousand patients who have, or have had, tubercle bacilli in their sputum. It is to be hoped that, in the near future, suitable homes, where at least partial isolation may be possible, will be made available for such patients and their families. The fact that half of our tuberculous patients have no known (or admitted) family history should not be lost sight of: if these histories are accepted as correct, the infecting agent must be outside the family. In this connection it is regrettable that, up to the present, hostels have not been provided for selected tuberculous patients, a number of whom would, without doubt, avail themselves of the accommodation—to their own comfort and to the advantage of those with whom they are living in contact.

Under the authority of the White Paper (Memorandum 266T.), Treatment Allowances were granted during the year to 449 eligible patients. Within the scope of these allowances, they have been found of very great benefit to patients and their families. At the same time, they have thrown a very large amount of additional work on the staff of the Institute.

I am,

Yours faithfully,

JAMES SHAW,

Senior Tuberculosis Officer.

PULMONARY TUBERCULOSIS

Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year 1945 from Institutions approved for the treatment of Tuberculosis.

Ministry of Health Emergency Hospital, Musgrave Park.

Admitted in 1945: 99 adult males, 54 adult females; *total admissions* 153.

Classification upon Admission	Condition upon Discharge	Duration of Residential Treatment in the Institution															Grand Totals
		Under 3 Months			3—6 Months			6—12 Months			Over 1 Year			Totals			
		M	W	C	M	W	C	M	W	C	M	W	C	M	W	C	
Class T.B. Minus	Quiescent	2	—	—	8	1	—	5	2	—	—	—	—	15	3	—	18
	Not quiescent	7	—	—	3	—	—	2	—	—	—	—	—	12	—	—	12
	Died in Instn.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Class T.B. Plus Group 1	Quiescent	—	—	—	2	—	—	—	—	—	—	—	—	2	—	—	2
	Not quiescent	—	1	—	1	1	—	—	—	—	—	—	—	1	2	—	3
	Died in Instn.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Class T.B. Plus Group 2	Quiescent	—	—	—	—	—	—	2	—	—	—	—	—	2	—	—	2
	Not quiescent	3	2	—	—	—	—	—	—	—	—	—	—	3	2	—	5
	Died in Instn.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Class T.B. Plus Group 3	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Not quiescent	1	2	—	1	1	—	2	—	—	—	—	—	4	3	—	7
	Died in Instn.	5	1	—	—	—	—	1	—	—	—	—	—	6	1	—	7
Totals (Pulmonary) - -		18	6	—	15	3	—	12	2	—	—	—	—	45	11	—	56

(*Signed*) W. A. Brown, *Medical Superintendent.*

NON-PULMONARY TUBERCULOSIS

Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year 1945 from Institutions approved for the treatment of Tuberculosis.

Ministry of Health Emergency Hospital, Musgrave Park, Belfast.

Admitted: 4 male and 9 female adults.

Classification upon Admission	Condition upon Discharge	Duration of Residential Treatment in the Institution															Grand Totals
		Under 3 Months			3—6 Months			6—12 Months			Over 1 Year			Totals			
		M	W	C	M	W	C	M	W	C	M	W	C	M	W	C	
Bones and Joints	Quiescent	—	—	—	—	—	—	2	1	—	—	—	—	2	1	—	3
	Not quiescent	1	—	—	—	1	—	—	—	—	—	—	—	1	1	—	2
	Died in Instn.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Abdominal	Quiescent	—	2	—	—	—	—	—	—	—	—	—	—	—	2	—	2
	Not quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died in Instn.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Organs	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Not quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died in Instn.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Peripheral Glands	Quiescent	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1
	Not quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died in Instn.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals (Non-pulmonary) -		1	3	—	—	1	—	2	1	—	—	—	—	3	5	—	8

(*Signed*) W. A. Brown, *Medical Superintendent.*

PULMONARY TUBERCULOSIS

Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year **1945** from Institutions approved for the treatment of Tuberculosis.

Minnowburn Chest Hospital.

Admitted in 1945: 26 adult females.

Classification upon Admission	Condition upon Discharge	Duration of Residential Treatment in the Institution •														
		Under 3 Months			3—6 Months			6—12 Months			Over 1 Year			Totals			Grand Totals
		M	W	C	M	W	C	M	W	C	M	W	C	M	W	C	
Class T.B. Minus	Quiescent	—	*1	—	—	—	—	—	—	—	—	—	—	—	*1	—	1
	Not quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died in Instn.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Class T.B. Plus Group 1	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Not quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died in Instn.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Class T.B. Plus Group 2	Quiescent	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1
	Not quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died in Instn.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Class T.B. Plus Group 3	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Not quiescent	—	2	—	—	—	—	—	—	—	—	—	—	—	2	—	2
	Died in Instn.	—	2	—	—	—	—	—	—	—	—	—	—	—	2	—	2
Totals (Pulmonary) - -		—	5	—	—	—	—	—	—	—	—	—	—	—	5	—	5
(Non-pulmonary) -		—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1

*Non-pulmonary.

(*Signed*) F. F. Kane, *Medical Superintendent.*

Report of the Medical Director

ON THE

Work of the Mass Radiography Centre

For the Year ended 31st December, 1945

To The Chief Tuberculosis Officer.

Dear Sir,

I have the honour to present to you the first Annual Report of the Mass Radiography Centre for the year ended 31st December, 1945.

The Mass Radiography Centre at 225 Albertbridge Road was officially opened on the 11th June, 1945, by the Right Honourable William Grant, M.P., Minister of Health and Local Government.

Routine work commenced on the 12th June, 1945, and during the six and a half months ended 31st December, 1945, 16,275 examinees attended the Unit.

Prior to this the staff attended a specialised training course at the British Ministry of Health Mass Radiography Centre in London.

The staff consists of a Medical Director, an Assistant (part-time) to the Medical Director, an Organising Secretary, a Senior Radiographer, two Assistant Radiographers, a Secretary to the Medical Director, four Clerks, and a Caretaker.

The Mass Radiography Scheme in Belfast operates along similar lines to those recommended in the report by the Medical Research Council (London) on Mass Miniature Radiography of Civilians (Special Report Series, No. 251), and is applied to workers and residents within the County Borough of Belfast.

In the first instance the examination was applied to workers, etc., already organised in groups, e.g., employees in large industrial concerns and staff of Government offices, university students, etc. Shortly after the scheme was launched, many requests were received from individuals not included in the above groups. Arrangements were therefore made by means of advertisements in the local press to make the examination available to all sections of the community over 14 years of age. The response to the first advertisement was so encouraging, over two thousand applications being received, that it is proposed to continue this method of organising individuals into large groups.

The examination is conducted either at the Mass Radiography Centre or on factory premises where the number employed is in the region of three thousand. During the period under review the Unit has operated in one large factory. Here the management kindly consented to allow employees of neighbouring works to be examined while the Unit was installed in their premises.

While the examination is an entirely voluntary one, the response depends mainly on intensive propaganda. Propaganda has been carried out by means of cinema shows, posters, and individual volunteer leaflets which explain the nature of the examination. In addition, talks are arranged on the factory premises, when the scheme is explained, the object of the examination fully discussed, and an opportunity to have queries answered is given. In the early months propaganda was carried out by the Medical Director and a part-time Organising Secretary. It was soon realised that a full-time Organising Secretary was necessary, and Mr. W. Jenkins of the Public Health Department carried on the work temporarily pending the appointment of a full-time Secretary. Mr. W. Orr was appointed to this post on the 1st January, 1946.

At first the response in Belfast was similar to that first obtained in Mass Radiography Units working in England, being in the region of 61 per cent. Gradually the percentage of volunteers increased, and towards the end of the year it was in the region of 90 per cent., one small factory actually producing a 100 per cent. response.

It will be seen from Tables II and III below that the large majority of volunteers completed the examination. Only 30 out of 1,103 refused to attend for large film investigation, and only 7 out of 613 for clinical examination. In one instance only did an examinee who was subsequently diagnosed as suffering from active pulmonary tuberculosis refuse to co-operate.

The task of the Medical Director in persuading patients suffering from pulmonary tuberculosis to cease work has been made easier by the introduction of Treatment Allowances under Memorandum 266T.

I give below, in Tables I to IX, the result of the examination of 16,275 individuals.

TABLE I

Miniature Radiography Examinations.

	Male	Female	Total
Total number examined by Miniature Radiography -	7,911	8,364	16,275

TABLE II

Large Film Investigations.

	Male	Female	Total
Number recalled for large film examination - - -	570	533	1,103
Percentage of examinees required to attend for large film examination -	7.2	6.4	6.8
Number who did not attend -	16	14	30
Number examined by large film -	554	519	1,073

TABLE III

Clinical Investigations.

	Male	Female	Total
Number recalled for clinical examination - - -	301	312	613
Percentage of examinees recalled for clinical examination following large film examination - - -	3.8	3.7	3.8
*Number who did not attend -	3	4	7
Number clinically examined -	298	308	606

*Six of the seven examinees who did not attend for clinical examination were classified on the large film examination. The one unclassified was in the 15-24 (female) age group.

TABLE IV

Age Groups of Examinees

(excluding thirty who did not attend for large film examination and one who was not classified).

	14 Years	15-24	25-34	35-44	45-59	60 & over	Total
Male -	129	2,664	1,684	1,545	1,664	209	7,895
Female -	279	5,007	1,774	843	417	29	8,349
Both sexes	408	7,671	3,458	2,388	2,081	238	16,244

TABLE V

Cases diagnosed Pulmonary Tuberculosis (Post Primary).

	Active	Inactive	Total
Male - - -	58	184	242
Female - - -	66	130	196
Both sexes - - -	124*	314	438

37 (7 active and 30 inactive) of the total number had been previously diagnosed.
*Of the 124 active cases, 49 (or 39.5%) were found to have tubercle bacilli in their sputum.

TABLE VI

Ultimate Disposal of 124 Cases diagnosed Active Pulmonary Tuberculosis (Post Primary).

	Sanatorium	Observation*	Referred to Doctor	No Action
Male - -	38	18	2	...
Female - -	40	23	2	1‡
Both sexes -	78†	41	4	1

*Observation at Central Tuberculosis Institute or Mass Radiography Centre.
†Of the total number examined (16,244), .48% were recommended for immediate sanatorium treatment.
‡This case, after full clinical investigation, refused to co-operate.

TABLE VII

Ultimate Disposal of 314 Cases diagnosed Inactive Pulmonary Tuberculosis (Post Primary).

	Observation*	Referred to Doctor	No Action
Male - -	56	39	89
Female - -	58	22	50
Both sexes -	114	61	139

*Observation at Central Tuberculosis Institute or Mass Radiography Centre.

TABLE VIII

Analysis of 438 Cases of Pulmonary Tuberculosis (Post Primary), showing number of cases in each age group, with corresponding percentages (percentages in brackets).

Sex	Ages	14 Years	15-24	25-34	35-44	45-59	60 & over	Totals
Male	No. of Examinees	129	2,664	1,684	1,545	1,664	209	7,895
	Active	...	17 (.64)	12 (.71)	12 (.78)	15 (.90)	2 (.96)	58 (.73)
	Inactive	...	26 (.97)	38 (2.26)	45 (2.91)	69 (4.15)	6 (2.87)	184 (2.33)
Female	No. of Examinees	279	5,007	1,774	843	417	29	8,349
	Active	1 (.36)	42 (.84)	15 (.85)	7 (.83)	1 (.24)	...	66 (.79)
	Inactive	...	43 (.86)	46 (2.59)	32 (3.80)	7 (1.68)	2 (.69)	130 (1.55)
Both Sexes	No. of Examinees	408	7,671	3,458	2,388	2,081	238	16,244
	Active	1 (.25)	59 (.77)	27 (.78)	19 (.80)	16 (.77)	2 (.84)	124 (.76)
	Inactive	...	69 (.90)	84 (2.43)	77 (3.22)	76 (3.65)	8 (3.36)	314 (1.93)

TABLE IX

Cases diagnosed Active Primary Tuberculosis (Pulmonary), with Disposal.

	Total Number	Observation*	Referred to Doctor	No Action
Male - -	1	1	...	...
Female - -	10	9	1	...
Both sexes -	11	10	1	...

*Observation at Central Tuberculosis Institute or Mass Radiography Centre.

In addition to the above cases of tuberculosis, the following abnormalities were diagnosed (excluding cases of bronchitis and emphysema) :

Bronchiectasis	36	
Atypical Pneumonia	5	
Pulmonary Fibrosis (non-tuberculous)	14	
Asbestosis	4	
Carcinoma of Bronchus	5	
Neurofibroma	1	
Spontaneous Hydropneumothorax	1	
Pleural Effusion (tuberculous)	2	
Pleural Thickening	238	
Cardio-vascular lesions (congenital)	10	(60% known)
Cardio-vascular lesions (acquired) (includes 3 Syphilitic Aneurysms)	103	(62% known)
Congenital Cystic Disease of Lung	3	
Solitary Cyst of Lung	1	
Hydatid Cyst	1	
Sarcoidosis	3	
Calcification of Pericardium	1	
Dextrocardia	1	
Substernal Thyroid	1	
Eventration of Diaphragm	3	
Diaphragmatic Hernia	1	
Fractures of First Rib	4	
Cystercicosis	1	

It has been reported that the percentage of cases of active tuberculosis of the lungs discovered by the various Mass Radiography Units operating in England and Wales up to the 31st December, 1945, was .36 out of a total of 797,314 individuals examined. It will be seen from Table VIII that the percentage of active cases discovered in Belfast was .76. While it is admitted that the total number of examinations (16,275) up to 31st December, 1945, was small compared with the total number for England and Wales, it can be assumed that the incidence of pulmonary tuberculosis is considerably greater here.

The treatment of active pulmonary tuberculosis demands the provision of sanatorium beds. It has always been known that these have been in short supply, and although extra beds have been provided during the past few years, the waiting period for admission to sanatoria is still one of months. If the maximum benefit is to be obtained from Mass Radiography, more beds will have to be provided in order that early cases so discovered can be admitted without any delay. If these beds are not provided, the 'early case' discovered by Mass Radiography will be found on admission to be no longer in the 'early' category, and so the object of the Mass Radiography Scheme will be defeated.

Mass Radiography has not made the diagnosis of active pulmonary tuberculosis, in some instances, any easier, as radiological lesions have been demonstrated in cases in which it is quite impossible to assess the degree of activity. Owing to the shortage of sanatorium beds, the only method of dealing with these cases is to keep them under constant observation, with serial radiographs, at the Centre, sometimes with unfortunate results. In view of this, it seems necessary that the Mass Radiography Unit should have at its disposal a certain number of observation beds, where this particular type of case could be admitted immediately for a short period for daily observation.

While the Mass Radiography Scheme was initiated for the detection of early pulmonary tuberculosis, it will be seen from the above résumé of the work that a considerable number of non-tuberculous conditions were detected. These cases are investigated at the Centre, and reports in every case sent to the individual's doctor.

In certain cases more than one examination was necessary before a final diagnosis was made. In this connection 179 large film examinations were necessary and 80 clinical examinations. This makes a total of 1,252 large film examinations and 686 clinical examinations for the period under review.

In all pulmonary cases in which a clinical examination was carried out, the estimation of the blood sedimentation rate is a routine measure. Other blood investigations (blood counts, Harrison and Kahn's tests, etc.) and Mantoux tests are carried out when considered necessary. Sputum is examined in all cases, when obtainable, by the direct and culture methods. During the six months 229 specimens of sputum were examined by the direct method, 71 being subsequently examined by the culture technique. Tubercle bacilli were found in 23 specimens by direct examination, and in 13 cases tubercle bacilli were isolated on culture. I am indebted to Dr. G. F. H. Tinsdale for carrying out the Harrison and Kahn tests at the Municipal Laboratory, Queen's University, and to Dr. L. V. Reilly, of the Municipal Sanatorium staff, for carrying out the examination of sputum and pleural fluid specimens at the Municipal Sanatorium Laboratory, Whiteabbey.

The success and smooth working of a Mass Radiography Department depends, in no small measure, on the co-operation of the managements of industrial concerns and other employers. I should like to record my acknowledgments for the valuable help afforded to me and the staff by the directorates and key personnel of the various firms during our first year. They have done much to help us to launch the Mass Radiography Scheme.

Our first 'outside' survey took place during the months of October and November in the factory of Messrs. Gallaher Ltd. I cannot speak too highly of the co-operation extended to us during our stay. Every effort was made to meet our requirements in the setting up of this temporary centre.

I am indebted to the General Practitioners of the City and surrounding districts for the keen support they have given me. Without this support much of our work would be of no avail.

My thanks are also due to my colleagues on the staff of the Central Tuberculosis Institute for the interest they have taken in the patients referred to them, although this has incurred much additional work.

Finally, it gives me great pleasure to place on record the team work of my own staff. Their united efforts have gone far to make the Mass Radiography Service efficient. I have to thank them for their help in making my own task lighter than it might have been.

Yours faithfully,

J. NORRIS WHYTE,
Medical Director.

The Report of the Medical Superintendent

on the working of

The Belfast Municipal Sanatorium

For the Year ended 31st December, 1945

I have the honour to present the twenty-second Annual Report upon the working and progress of this Institution.

CAPACITY.—The maximum number of beds in the Sanatorium is 330. The distribution of the accommodation is as follows :—

TABLE I

	Pulmonary Tuberculosis Beds	Surgical Beds	TOTAL
Males	170	10	180
Females	120	—	120
Children	30	—	30
TOTAL	320	10	330

PERSONNEL

General Staff:—

Medical Superintendent	1
Clinical Pathologist and Medical Officer	1
Assistant Medical Officers	3
Visiting Thoracic Surgeon	1
Visiting Orthopædic Surgeon	1
Visiting Dental Surgeon	1
Dispenser and Statistical Clerk	1
Radiographer	1
Laboratory Technician	1
Laboratory Assistant	1
Chaplains	4
School Mistresses	2

Clerical Staff:—

Administrative Assistant	1
Senior Clerk	1
Clerks	4

Nursing Staff—

Matron and Assistant Matron	2
Home Sister	1
Sisters	7
Theatre Sister	1
Staff Nurses	12
T.A. or Assistant Nurses	8
Probationer Nurses	30

Domestic Staff:—

Cooks	2
Assistant Cooks	3
Maids	28
Cleaners	6

Miscellaneous:—

Works Superintendent	1
Engineer	1
Gardener	1
Storekeeper	1
Others	20

Total Nursing Staff - - - 61

Nursing Staff per ten beds - - 1.85

TABLE II

Annual Return shewing the Extent of Treatment from 1st January, 1945, till 31st December, 1945. (Comparative figures for the year 1944 are shown in brackets).

Whiteabbey	In Institution 31/12/44		Admitted During 1945		Discharged During 1945		Died During 1945		In Institution 31/12/45	
No. of Patients	317	(272)	426	(475)	407	(384)	30	(46)	306	(317)

TABLE III

Annual Return shewing the Classification of patients admitted during 1945.

Type of Case	Men		Women		Children		Total	
Pulmonary Tuberculosis -	203	(197)	134	(191)	55	(52)	392	(440)
Surgical Tuberculosis -	10	(3)	1	(3)	4	(7)	15	(13)
Non-tuberculous - -	6	(4)	5	(2)	2	(1)	13	(7)
Unclassified - -	2	(2)	—	(—)	—	(—)	2	(2)
Re-admissions - -	4	(3)	—	(8)	—	(2)	4	(13)
Total - -	225	(209)	140	(204)	61	(62)	426	(475)

TABLE IV

Annual Return shewing the Classification of patients discharged during 1945 (excluding those indicated in Table No. V).

Type of Case	Men		Women		Children		Total	
Pulmonary Tuberculosis -	196	(156)	122	(157)	46	(45)	364	(358)
Non-pulmonary Tuberculosis	10	(4)	5	(1)	5	(3)	20	(8)
Total - -	206	(160)	127	(158)	51	(48)	384	(366)

TABLE V

Annual Return indicating patients discharged during 1945, but not included in treatment survey.

	Men		Women		Children		Total	
In residence less than one month (excluding deaths and redischarges) - -	19	(9)	12	(23)	6	(7)	37	(39)
Redischarges - -	—	(—)	—	(1)	—	(1)	—	(2)
Non-tuberculous - -	5	(5)	5	(3)	1	(1)	11	(9)
Temporary discharges of patients still in residence -	1	(2)	1	(3)	—	(2)	2	(7)
Temporary discharges of patients not included above	3	(2)	—	(3)	—	(—)	3	(5)
Doubtful - -	—	(1)	—	(1)	—	(—)	—	(2)
Total - -	28	(19)	18	(34)	7	(11)	53	(64)

TABLE VI

Annual Return indicating the duration of residence of patients in the Sanatorium during the year 1945.

PATIENTS DISCHARGED :

(1)	Suffering from Pulmonary Tuberculosis	267.0 days
(2)	Suffering from Non-Pulmonary Tuberculosis	374.2 ,,
(3)	Suffering from P.T.C.	200.3 ,,
(4)	Observation Cases	107.9 ,,

PATIENTS DIED :

(1)	Suffering from Pulmonary Tuberculosis	181.1 ,,

Not included in above :

1	Patient suffering from Coronary Thrombosis ...	298.0 ,,
1	Patient suffering from Carcinoma of Peritoneum ...	14.0 ,,

TABLE VII

Analysis of patients with Pulmonary Tuberculosis discharged during 1945.

Classification upon Admission	Condition upon Discharge	Duration of Residence in Sanatorium												Totals			Total
		Under *3 Months			3—6 Months			6—12 Months			Over 1 Year						
		M	W	C	M	W	C	M	W	C	M	W	C	M	W	C	
Class T.B. Minus	Quiescent	6	7	—	13	9	9	14	6	17	1	1	2	34	23	28	85
	Improved	3	2	1	6	—	1	2	—	5	—	—	3	11	2	10	23
	N.M. Imp.	2	—	3	3	1	1	—	—	—	1	—	—	6	1	4	11
	Died	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	1
	Total	11	9	4	23	10	11	16	6	22	2	1	5	52	26	42	120
Class T.B. Plus Group 1	Quiescent	—	—	—	1	3	—	2	2	—	—	1	—	3	6	—	9
	Improved	1	—	—	1	—	—	1	—	—	—	1	—	3	1	—	4
	N.M. Imp.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	1	—	—	2	3	—	3	2	—	—	2	—	6	7	—	13
Class T.B. Plus Group 2	Quiescent	2	—	—	2	1	—	5	3	—	10	8	—	19	12	—	31
	Improved	4	—	—	3	3	—	6	1	—	4	7	—	17	11	—	28
	N.M. Imp.	1	1	—	1	2	—	3	1	—	3	—	—	8	4	—	12
	Died	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	7	1	—	6	6	—	14	5	—	17	15	—	44	27	—	71
Class T.B. Plus Group 3	Quiescent	—	—	—	—	—	—	2	—	—	9	9	—	11	9	—	20
	Improved	1	—	—	4	1	—	4	7	—	14	7	3	23	15	3	41
	N.M. Imp.	9	4	—	15	9	—	8	3	—	17	7	—	49	23	—	72
	Died	4	8	—	—	1	—	6	5	1	1	1	—	11	15	1	27
	Total	14	12	—	19	11	—	20	15	1	41	24	3	94	62	4	160
	Grand Total	33	22	4	50	30	11	53	28	23	60	42	8	196	122	46	364

N.M. Imp. = No Marked Improvement.

TABLE VIII

Patients discharged during 1945. The following is an analysis of these cases.

Type of Disease upon Admission	Condition upon Discharge	Duration of Residence in Sanatorium												Totals			Total
		Under 3 Months			3—6 Months			6—12 Months			Over 1 Year						
		M	W	C	M	W	C	M	W	C	M	W	C	M	W	C	
Osseous	Quiescent	—	—	—	—	—	—	—	—	—	1	1	—	1	1	—	2
	Improved	—	—	—	—	—	—	2	—	—	—	1	2	2	1	2	5
	N.M. Imp.	—	1	—	1	—	—	—	—	—	2	1	—	3	2	—	5
	Died	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	—	1	—	1	—	—	2	—	—	3	3	2	6	4	2	12
Abdominal	Quiescent	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	1
	Improved	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	N.M. Imp.	1	—	—	—	—	—	—	1	—	—	—	—	1	1	—	2
	Died	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	1	—	—	—	—	—	—	1	1	—	—	—	1	1	1	3
Other Organs	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Improved	—	—	—	—	—	—	3	—	—	—	—	—	3	—	—	3
	N.M. Imp.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1
	Total	—	—	1	—	—	—	3	—	—	—	—	—	3	—	1	4
Glandular	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Improved	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	1
	N.M. Imp.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	1
	Grand Total	1	1	1	1	—	—	5	1	1	3	3	3	10	5	5	20

COMPLICATIONS.

The following complications of pulmonary tuberculosis were noted during residence in hospital.

Other forms of Tuberculosis—

Abdomen	4	Intestines	8
Ankle	1	Ischio-rectal	2
Cervical glands	6	Kidney	2
Ear	1	Knee	1
Empyema	4	Larynx	24
Epididymis	3	Sinus (discharging)	1
Fistula-in-ano	3	Spine	2
Hip	1	Tongue	1

Other Diseases—

Abscess—foot		Albuminuria	1
gluteal		Alopœcia	1
mandible		Amyloid disease—renal	1
peri-anal		Amyloid disease	3
sternal		Anæmia	1
Abortion—incomplete	1	Angina pectoris	1
Acne	1	Asbestosis	1

Asthma	2	Neurasthenia	1
Bazin's disease	2	Oedema	1
Birth palsy	1	Otitis media	6
Bronchiectasis	2	Paralysis—L. phrenic	1
Bronchitis	7	Periostitis	1
Cholecystitis	1	Pneumothorax—spontaneous	2
Conjunctivitis	2	Poliomyelitis—old	1
Dermatitis	3	Pregnancy	4
Diabetes	1	Pregnancy and incomplete abortion	1
Emphysema	14	Psychosis	1
Epiphysitis	1	Psycho-neurosis	1
Fistula—pleural	1	Pyrexia—transient	1
Hæmorrhoids	7	Pyuria	1
Herpes Zoster	1	Recent confinement	9
Hypospadias	1	Syphilis	3
Ichthyosis	1	Sinusitis—maxillary	1
Laryngitis—catarrhal	1	Thrombosis	2
Methritis	1	Tonsillitis	2
Myelitis	1	Ulcer—peptic	1

TABLE IX

	Duration of Residence Prior to Death							
	Days			Months				
	1—10	11—20	21—31	1—3	3—6	6—12	Over 12	Total
Number of Cases	1	3	1	9	—	13	2	29

1 death non-tuberculous, 14 days.

TABLE X

Classification of Patients in residence 28 days or less.

	Men	Women	Children	Total
Minus	11	4	6	21
Group 1 Plus	—	—	—	—
Group 2 Plus	4	1	—	5
Group 3 Plus	1	10	—	11
Osseous	—	—	—	—
Abdominal	—	—	—	—
Glandular	—	—	—	—
Other Organs	1	—	1	2
Doubtful	—	—	—	—
Non-tuberculous	4	1	—	5
Unclassified	2	—	—	2
Total	23	16	7	46

TABLE XI

Cause of discharge of patients in previous Table.

Against Medical Advice	Recommended	Transferred	Own Request	Death	Total
14	6	8	12	6	46

TABLE XII

Artificial Pneumothorax treatment. Results on discharge 1945.

	No. of Cases	Sputum on Admission		Sputum on Discharge		Internal Pneumolysis	Phrenic Operation	Result				
		Pos.	Neg.	Pos.	Neg.			Q.	Imp.	L.S.Q.	Worse	Died	Total
Collapse Satisfactory -	56												
Hilar - -	36	34	2	7	29	27	2	21	12	1	2	—	36
Mediastinal - -	17	15	2	2	15	9	1	12	5	—	—	—	17
Partial - -	3	2	1	—	3	2	—	2	1	—	—	—	3
Collapse Unsatisfactory -	31	29	2	18	13	11	2	7	12	7	3	2	31
No Collapse - -	15	13	2	9	6	1	2	4	6	5	—	—	15
Total - -	102	93	9	36	66	50	7	46	36	13	5	2	102

1 A.P. unclassified.

OPERATIVE TREATMENT.

A.P. Induction - -	70	Phrenic operation - -	19
A.P. Induction attempted -	28	Thoracoplasty - -	29
Pneumo-peritoneum Induction -	4	Thoracoscopy - -	7
A.P. Refills - - -	4026	Chest aspiration - -	121
Bronchoscopy - - -	3	Nephrectomy - - -	2
Lipiodol - - -	10	Orchidectomy - - -	1
Pneumolysis - - -	64		

TABLE XIII

Table shewing the average number of patients in residence per day for the past ten years.

Financial Year ending March	Number
1937	243.78
1938	237.90
1939	231.39
1940	235.89
1941	232.39
1942	230.78
1943	246.66
1944	268.33
1945	303.67
1946	317.64

REPORT OF THE WORK OF THE EAR, NOSE, AND THROAT DEPARTMENT.

By T. Kennedy Hunter, M.B., F.R.C.S., D.L.O.

Ninety-seven new cases were examined during the year and there were forty-three re-examinations. This is an increase of thirty in the number of new cases compared with the previous year.

Of the new cases, fifteen were definite cases of Tuberculous Laryngitis. There were three doubtful cases.

The sites, in order of frequency, were : inter-arytenoid space, epiglottis, true cords, false cords, arytenoids, and aryteno-epiglottic folds.

There are six cases of non-tuberculous disease of the larynx,twenty-five cases of aural disease, twelve cases of nasal disease, and eight cases of pharyngeal disease—all non-tuberculous. Lavage of maxillary sinus was carried out five times and diagnostic bronchoscopy twice. One case of Papilloma of vocal cord was operated on.

REPORT OF THE X-RAY DEPARTMENT, 1945.

X-Ray Photographs—		
Pulmonary - - -	1,459	
Surgical - - -	151	
Barium Meal - -	17	
Dental - - -	4	
Lipiodol - - -	21	
Renal - - -	14	
	1,666	
Screen Examinations - -	2,497	
Kromayer Lamp - - -	10 patients had	106 treatments.
Radiant Heat - - -	3 ,,	54 ,,
Infra Red - - -	1 ,,	2 ,,
Ultra-Violet Light (carbon arc) - -	2 ,,	50 ,,

REPORT OF THE VISITING DENTAL SURGEON

For the Year 1945.

	Sanatorium	Children's Hospital
Extractions - - -	182 ...	12
Examinations and Dressings -	238 ...	67
Scalings - - -	19 ...	5
Fillings - - -	50 ...	3

REPORT OF THE PATHOLOGICAL LABORATORY, 1945.

Total number of investigations - - - 12,847

Blood—

Cholesterol	9
Plasma protein	6
Phosphatase	5
Serum albumin	5
Serum globulin	5
Serum protein	15
Sugar	34
Urea	11
Van den Bergh	2
Complete counts	21
Grouping	30
Hæmoglobin	16
Hæmatocrit	16
Sedimentation rate	2,768
Congo red absorption tests	6
Transfusions	30

Sputum—

Direct examination—	
B. tuberculosis	5,561
Culture	3,630
Asbestosis bodies	6
Malignant cells	8
Spirilla	9
Laryngeal reflex	62

Pleural Fluid—

Bacteriological	49
Cytological	42

Cerebro-Spinal Fluid—

Complete investigation	15

Urine—

Chemical examination	100
Bacteriological	90

Pus—

Bacteriological	148

Miscellaneous—

Histological examinations	75
Post-mortem examinations	2
Vitamin C estimation in Orange Juice	2
Complete water examination	7
Phosphatase and bacteriological tests in milk	37
Preparation of tuberculin vaccines	25

During 1945 the number of patients on the waiting-list has increased further. The number was 98 in January, 1944; 216 in December, 1944; 389 in December, 1945. The causes of this very large increase have been referred to in the Chief Tuberculosis Officer's report.

The average duration of residence has also continued to increase (see Table VI), which is partly due to the extension of bilateral collapse methods of treatment. It is gratifying that only fourteen patients left the Sanatorium against medical advice during the year.

A new and larger operating theatre has been provided by the alteration of a ward on the ground floor of the main hospital building. The need for this advance is shown by the steady increase in surgical work. Several new items of surgical equipment have been provided, and delivery of other articles ordered during the year is expected soon.

Other improvements include the erection of two large "Iris" huts for recreation, occupational therapy, and workshops. When these huts are completed, the present recreation room will be converted to a ward for male patients, providing twenty additional beds. A sputum room has also been planned for the main hospital, and a lorry has been purchased from the Civil Defence Authority. Painting and maintenance of the property have been continued as far as war-time conditions allowed.

Treatment is still continued mainly on the old lines, but, in addition, the medical and surgical staff have given attention to certain new methods, which promise to be of value. Besides rest, fresh air, and a wholesome diet, the means of attack on pulmonary tuberculosis continues to be collapse therapy. The various forms of collapse treatment, which have produced good permanent results elsewhere, are proving satisfactory at Whiteabbey. The period of hospitalization is long and wearisome for the patient, the medical and nursing care involved demand the highest degree of patience and skill, but the results justify the time and effort expended on this work. From the public health point of view, the conversion of many infectious cases to the negative group is a matter of great importance. A few special points may be mentioned in connection with the development of collapse treatment in this institution.

1. The number of cases of artificial pneumothorax continues to increase, and more than half of these require the operation of adhesion-cutting.
2. Bi-lateral collapse is being used increasingly with good results. The combination of artificial pneumothorax on one side, with the modern Semb-thoracoplasty on the other side, has proved highly successful in selected patients.

3. The new method of resting the lungs indirectly by pneumo-peritoneum continues to produce encouraging results. It is particularly valuable, in that it may be applicable after artificial pneumothorax has failed.

4. Failure to collapse the lung by pneumothorax does not mean that the patient is doomed to chronic invalidism or early death. Long continued rest in bed, followed, if necessary, by thoracoplasty, may bring about sound healing in such cases.

The statistical work of classifying former patients has been continued, and a special inquiry has been begun with regard to family history of tuberculosis.

The instruction of nurses has continued for the certificate of the Tuberculosis Association and for the State Preliminary Examination. During the year six nurses passed Part 1 and six nurses passed Part 2 of the Tuberculosis Association examination, and seven nurses, a 100 per cent. of the entry, were successful in the State Preliminary Examination.

The Red Cross and St. John Organisation have continued to grant materials for handicraft work for service patients, and again our grateful thanks are due to the voluntary worker, Mrs. Crawford Browne, for unfailing assistance and encouragement.

The hospital has remained full throughout the year, and medical, nursing, administrative, domestic, and outdoor staff have spared no efforts for the well-being and comfort of the patients.

The work of the chaplains has again earned the deep appreciation of patients and staff alike. The religious services have been well attended and sick patients have been regularly visited in the wards. The religious instruction of the children has also been carried on throughout the year.

We have been very fortunate in the entertainments provided by kind friends during the year. Special mention should be made of the Excelsior Male Voice Choir and associated artists, including Mr. Samuel McComb and Mr. Reginald Patterson, and of the Toc H Organisation, which has given us a splendid series of film shows. The provision of a separate film show for orthopædic patients in Pavilion 1 was particularly welcome. Others to whom our sincere thanks are due include the undermentioned, who arranged concerts and entertainments :—

Rev. W. B. McMurray.
Rev. Father McFerran.
Mr. Freddie Sales.
Mr. Sloan.
Mr. R. McCormac.
Ohio Serenaders.
E.N.S.A. Concert, per Mr. Greer Walker.
The Red Hand Dramatic Society.
Salvation Army.
Symington Memorial Flute Band.
Agnes Street Temperance Silver Band.
Colonel Eager Silver Band.
55th Old Boys.

Gifts were received from the following during the year :—

The British Legion (Whiteabbey).
W.V.S.
Mrs. Newton.
Mr. Campbell.
Mrs. Megaw.
British Red Cross, 64th Belfast Detachment.
Unionist Association, per Mrs. Hunter.
Miss Crawford.
Portrush Hospital Supply Depot.
Mrs. Baillie.
Sir William Robinson.
British Red Cross, 50th Belfast Detachment.
The British Legion (Whitehouse).
Forces Library.

Yours faithfully,

B. R. CLARKE,
Medical Superintendent.

MUNICIPAL CHILDREN'S HOSPITAL

Greenisland

The Report of the Visiting Surgeon

For the Year ended 31st December, 1945

To the Chief Tuberculosis Officer.

Dear Dr. Clarke,

I submit my report on the clinical work of the hospital for the year 1945.

On the 1st January, 1945, there were forty-four patients in hospital, fifteen patients were admitted during the year, and twelve were discharged. Forty-seven patients remained in hospital on the 31st December.

Of the twelve patients discharged, one died from tuberculous meningitis after only thirteen days in hospital, nine were discharged with disease apparently arrested, and two were removed by the parents. The last two showed considerable improvement.

As usual, there were many cases of sore throat, thirty-six in all, but none of serious import. Twenty-nine swabs were sent for examination for diphtheria. Only two proved positive, one a nasal infection without toxæmia, and one case of tonsillar diphtheria of mild degree. Both were temporarily transferred to Purdysburn Fever Hospital. I believe the incidence of "sore throat" might be decreased by the provision of a dish steriliser.

At the Royal Victoria Hospital I had fifty-four visits from old patients or from patients sent from the Tuberculous Institute for an opinion.

Numbers of Admissions and Discharges During 1945.

Remained in hospital on 31st December, 1944	44
Admitted during 1945	15
Total	59
Discharged	9
Died	1
Removed by parents	2
Total	12
Remained in hospital on 1st January, 1946	47

Conditions for which Patients were Admitted.

Spinal caries	6
Hip-joint disease	4
Tuberculosis of knee	1
Tuberculosis of ankle	1
Tuberculosis of elbow	1
Multiple lesions, ankle, finger, and forearm	1
Abdominal, with incomplete obstruction	1
Total	15

Discharges During 1945.

Spinal caries—	
Disease arrested	1
Died	1
Hip-joint disease—	
Disease arrested	3
Knee Joint—	
Disease arrested	1
Removed C.M.A., improved	1
Hand Bones—	
Disease arrested	1
Foot Bones—	
Disease arrested	3
Multiple Lesions—	
Removed C.M.A., improved	1

Remained in Hospital on 1st January, 1946.

Spinal caries	23
Hip-joint disease	12
Tuberculosis of knee	5
Tuberculous abdominal adenitis	1
Tuberculosis of elbow-joint	1
Tuberculosis of ankle-joint	2
Tuberculosis of tarsus	1
Multiple tuberculous lesions	2
Total	47

MUNICIPAL CHILDREN'S HOSPITAL, Greenisland

Details of patients discharged during 1945.

SPINAL CARIES

Disease arrested - - - - - - 1 Died - - - - - - - - - 1

Register Number	Age on Admission	Sex	Number of Days Treated	Condition on Admission	Cause of Discharge	Condition on Discharge
497 and 564	2 years	F	(1) 1,022 (2) 837	Caries 10th and 11th thoracic vertebræ; sharp kyphos.	(1) Temporary for scarlet fever. (2) Disease arrested.	A well-developed child with no deformity.
600	2 years	M	13	Spinal caries and tuberculous meningitis.	Died.	

HIP-JOINT DISEASE

Disease arrested - - - - - - 3

544	6 years	F	824	Muscle spasm, rarefaction roof of acetabulum, left hip.	Disease arrested.	Healthy child. Full mobility in hip.
509	16 years	M	1,542	Necrosis head of femur and acetabulum, left hip. Later developed swelling right knee.	Disease arrested.	A few degrees of movement in hip. Ninety degrees of movement in knee. Health excellent.
554	12 years	M	921	Rarefaction and cavity formation in roof of acetabulum, left hip.	Disease arrested.	Cavity filled in. Joint space not lost. Full mobility.

KNEE-JOINT

Disease arrested - - - - - - 1 Removed C.M.A. - - - - - 1

457, 580, and 581	6 years	F	(1) 977 (2) 10 (3) 327	White swelling left knee.	(1) Disease arrested. (2) Mumps. (3) Disease arrested.	On first discharge was well, with ninety degrees movement. After twenty months complained of pain, and was re-admitted. On final discharge, knee quiescent, with eighty degrees of movement.
587	5 9/12 years	M	254	White swelling right knee.	Removed by mother C.M.A.	Swelling subsided and knee was quiescent, but time of treatment was insufficient. Disease may recur.

HAND BONES

Disease arrested - - - - - 1

Register Number	Age on Admission	Sex	Number of Days Treated	Condition on Admission	Cause of Discharge	Condition on Discharge
561	2 years	F	739	Tuberculous dactylitis, with sinuses in left index finger, right ring finger, and right little finger.	Disease arrested.	A healthy child. Fingers healed and mobile.

FOOT BONES

Disease arrested - - - - - 3

574	2½ years	M	675	Cavity in right oscalcis, following operation for caries.	Disease arrested.	Cavity filled in and bone consolidated. Health good.
539	3 7/12 years	F	1,242	Caries metatarso — cuneiform point. Blepharitis and corneal ulcers.	Disease arrested.	Walks well. Liable to recurrent inflammation in eyes.
489 and 524	5 years	F	580 and 1,410	Caries left astragalo-calcanean joint. Tuberculosis sheath of right tendo-achilles with sinus.	Disease arrested.	No clinical signs of disease.

MULTIPLE LESIONS

592	14 years	F	133	Was discharged on 11/6/40 after successful treatment of tuberculous right elbow and caries left frontal bone, with cavity extending into meninges. Sinuses had recurred in right elbow.	Removed by father C.M.A.	Health improved, head healed, and opening in frontal bone almost filled in. Right elbow ankylosed and two sinuses still present.

Infectious Diseases.

Diphtheria (mild)—	
Nasal	1
Faucial	1
Sore throats	36
Diarrhœa	2
Impetigo	4

Other Complications.

Otitis media	7
*Acute mastoiditis	1
Coryza	1
Epistaxis	7
Styes	4
Corneal ulcer	1
Conjunctivitis	4
Vomiting	23
Bronchitis	1
F.B swallowed and passed	1
Minor cuts and abrasions	7
Boils	6
Herpes	7
Urticaria	1
Sores of minor degree—	
Plaster	1
Pressure	1
Adhesive extensions	5

*Transferred, temporarily, to Dufferin Hospital for operation.

Illness Contracted by Members of the Staff.

Pleurisy	1
Diphtheria	1
Influenza	4
Sore throats	6
Gastro-enteritis	3
Minor sepsis of fingers	3
Minor injuries	12
Boils	1
Eczema, external auditory meatus	1
P.U.O.	1

With the exception of a probationer who had to be sent home suffering from pleurisy, none of the staff suffered from serious illness.

I am,

Your obedient Servant,

H. P. MALCOLM,
Visiting Surgeon.

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