

[Report 1959] / Medical Officer of Health, Belfast County Borough.

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Belfast (Northern Ireland). County Borough Council.

Publication/Creation

1959

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REPORT

ON THE



Health of the County Borough of Belfast for the Year 1959

WILLIAM GEORGE SWANN, M.D., B.Sc., D.P.H., D.P.A.
Medical Officer of Health





REPORT

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Health of the County Borough of Belfast

FOR THE YEAR 1959

WILLIAM GEORGE SWANN, M.D., B.Sc., D.P.H., D.P.A.

Medical Officer of Health

COUNTY BOROUGH OF BELFAST

Health Committee
1959

Chairman:

Councillor SAMUEL HAROLD WALSH

Deputy Chairman:

Councillor JAMES ROBERT CLELLAND McCLURG

Aldermen:

THOMAS GIBSON HENDERSON

ROBERT GEORGE CALDWELL KINAHAN, E.R.D., J.P.

EDWARD FITZGERALD McENTEE, M.B.

CHARLES DALEY

Major WILLIAM DUNCAN GEDDIS, J.P.

Councillors:

HERBERT JEFFERSON, J.P., M.A., Ph.D. (Died August, 1959)

JOHN SAMUEL ROLSTON HARCOURT

Miss IRENE MARGARET ELIZABETH McALERY

WILLIAM ATCHESON

WILLIAM BOUCHER, J.P.

JAMES ROBERT CLELLAND McCLURG

SAMUEL HAROLD WALSH

Mrs. MARJORIE SINCLAIR

ALBERT ERNEST QUINN

HUGH ROBERT BROWN, M.Com.Sc.

LESLIE STEWART, J.P. (in place of Councillor Jefferson)

HEALTH DEPARTMENT
STAFF AS AT 31st DECEMBER, 1959

Medical Officer of Health and Port Medical Officer:—

W. G. Swann, M.D., B.Sc., D.P.H., D.Obst. R.C.O.G., D.P.A.

Deputy Medical Officer of Health and Deputy Port Medical Officer:—

J. McA. Taggart, M.B., D.P.H., D.P.A.

HEADQUARTERS:—

Administrative Officer:— S. N. Smith, B.Com.Sc.

Administrative Branch:—

3 Receptionist/Operators.

Accounts Branch:—

1 Clerk Higher Division Grade I; 1 Clerk Higher Division Grade III; 3 Clerical Assistants.

Stores Branch:—

1 Clerk Higher Division Grade I; 1 Clerk Higher Division Grade III; 3 Clerical Assistants.

Registration Branch:—

Superintendent Registrar of Births, Deaths and Marriages — J. C. Walker.

1 Deputy Supt. Registrar; 4 Registrars; 2 Deputy Registrars; 3 Copy Typists.

Typing Branch:—

1 Clerical Officer; 4 Shorthand Typists; 3 Copy Typists.

ENVIRONMENTAL HEALTH DIVISION:—

Senior Medical Officer—W. J. McLeod, M.D., D.P.H., D.P.A., Ph.C.

Executive Officer—G. H. Davis.

Infectious Diseases Branch:—

Medical Officer—Vacant; 1 Clerk Higher Division Grade II; 8 Clerical Assistants.

Sanitary Branch:—

Chief Sanitary Officer —J. Walker.

Senior Food Inspector —W. Jenkins.

Senior Pests and Disinfecting Officer —W. Robinson

Senior Inspector of Factories and Shops —P. J. McMahon

Senior Smoke Officer —C. Ellison.

Divisional Sanitary Officer, South —Vacant

Divisional Sanitary Officer, West —F. W. Hill.

Divisional Sanitary Officer, East —T. F. Mills.

Divisional Sanitary Officer, North —J. Thompson.

7 Food and Drugs Inspectors; 2 Port Sanitary Officers; 2 Factory Inspectors; 1 Smoke Inspector; 25 Sanitary Officers; 4 Pests Officers; 14 Pupil Sanitary Officers.

1 Clerk Higher Division Grade I; 1 Clerk Higher Division Grade II; 1 Clerk Higher Division Grade III; 4 Clerical Officers; 7 Clerical Assistants; 1 Clerical Attendant; 1 Notice Server.

Meat Inspection Branch:—

City Veterinarian—A. McLean, B.Sc., M.R.C.V.S., D.V.H.

Senior Meat Inspector—G. F. Moore.

5 Meat Inspectors.

MATERNITY AND CHILD HEALTH DIVISION:—

Senior Medical Officer — H. A. Warnock, M.D., B.Sc., D.P.H.

Clinic Medical Officer — K. M. Cathcart, M.B., D.P.H.

Medical Officer — E. E. Mercer, M.B., D.P.H.

6 Part-time Medical Officers.

Superintendent Nursing Officer — Miss M. F. J. Baird, S.R.N., S.C.M., H.V. Cert.

Superintendent of District Nurses — Miss M. Watkinson, S.R.N., S.C.M., H.V. Cert., Q.N.

Supervisor of Midwives — Miss M. A. Hay, S.R.N., R.S.C.N., S.C.M.

Assistant Nursing Officers — Miss E. F. Magill, S.R.N., S.C.M., H.V. Cert.
Mrs. M. E. Duke, S.R.N., S.C.M., H.V. Cert.
Miss J. Stirling, S.R.N., S.C.M., H.V. Cert.

First Assistant Superintendent of District Nurses:—

Miss D. Ritchie, S.R.N., S.C.M., H.V. Cert., Q.N.

Second Assistant Superintendent of District Nurses:—

Miss M. Coleman, S.R.N., S.C.M., H.V. Cert., Q.N.

59 Health Visitors; 55 District Nurses; 2 Senior Midwives; 24 Midwives (Salaried); 23 Midwives (Fee-per-case).

Executive Officer—A. Watson, A.C.I.S.

1 Clerk Higher Division Grade II; 3 Clerical Officers; 2 Shorthand Typists; 16 Clerical Assistants; 3 Cook-Housekeepers.

SCHOOL HEALTH DIVISION:—

Senior Medical Officer — A. L. Walby, M.B., D.P.H.

Clinic Medical Officers:— E. H. Dowse, M.B., D.P.H.
A. D. Campbell, M.B., D.P.H.
E. A. M. McMordie, M.B., D.P.H.

Medical Officers:— A. P. Watson, M.B., D.P.H.
G. K. Moffatt, M.B., D.P.H.
P. S. Kerr, M.B., D.P.H.
D. B. Keith, M.B., D.P.H.
K. McKee, M.D., D.P.H., D.C.H.
K. M. Corbett, M.D., B.Sc., D.P.H., D.C.H.

Chief Dental Officer — A. S. Irving, L.D.S. (R.C.S.)

Clinic Dental Officers — V. M. G. Rattie, L.D.S.
H. C. Thornberry, L.D.S. (R.C.S. (I.))
S. R. Sheane, L.D.S.
P. J. R. Griffith, M.B., L.D.S.

X-Ray Dental Officer — J. R. Faulkner, L.D.S.

Dental Officers — J. H. Dougherty, L.D.S.
W. R. Morrow, L.D.S.
J. B. Hanna, L.D.S.
T. S. Brannigan, L.D.S.
J. Boyd, L.D.S.
J. A. N. Turner, L.D.S.

5 Part-time Medical Officers (Anaesthetists)

3 Senior School Nurses; 24 Health Visitors; 1 Speech Therapist (part-time); 2 Physiotherapists; 4 Senior Dental Attendants; 21 Dental Attendants.

Executive Officer — R. T. Curry.

1 Clerk Higher Division Grade II; 1 Clerical Officer; 3 Shorthand Typists; 1 Copy Typist; 11 Clerical Assistants.

COUNTY BOROUGH OF BELFAST

Summary of Vital Statistics

Area (Census 1951) (Exclusive of 1,223 acres of tidal water)	.. .. .	15,357 acres (24 sq. miles)
Population .. .. .	.. .. .	433,800 (estimate of Registrar General for N.I., June, 1959)
Marriages .. .. .	.. .. .	3,566
Marriage Rate .. .. .	.. .. .	8.2
Births Registered .. .. .	.. .. .	8,365 (4,230 males; 4,135 females)
Birth Rate .. .. .	.. .. .	19.3
Birth Rate average for the ten years 1950-1959		19.0
Illegitimate Births .. .. .	.. .. .	171 (86 males; 85 females)
Births (notified) .. .. .	.. .. .	11,072
Still Births (included in total births notified)	.. .. .	251
Deaths .. .. .	.. .. .	4,821 (2,471 males; 2,350 females)
Death Rate .. .. .	.. .. .	11.1
Death Rate average for the ten years 1950-1959		10.9
Deaths of infants under one year of age .. .. .	.. .. .	274 (148 males; 126 females)
Infant Mortality Rate .. .. .	.. .. .	33 deaths per 1,000 live births
Average for the ten years 1950-1959 .. .. .	.. .. .	38 deaths per 1,000 live births
Neo-Natal Deaths (under one month) .. .. .	.. .. .	182 (97 males; 85 females)
Neo-Natal Death Rate .. .. .	.. .. .	22 per 1,000 live births
Average for the ten years 1950-1959 .. .. .	.. .. .	22 per 1,000 live births
Maternal Deaths .. .. .	.. .. .	2
Death Rate .. .. .	.. .. .	0.24 per 1,000 births registered
Deaths from Communicable Diseases listed in Table 9 .. .. .	.. .. .	66
Death Rate from these Diseases .. .. .	.. .. .	0.15
Deaths from Measles .. .. .	.. .. .	1
Deaths from Typhoid Fever .. .. .	.. .. .	Nil
Deaths from Scarlet Fever .. .. .	.. .. .	Nil
Deaths from Whooping Cough .. .. .	.. .. .	7
Deaths from Diphtheria .. .. .	.. .. .	Nil
Deaths from Diarrhoea and Enteritis (under two years of age) .. .. .	.. .. .	12
Deaths from Dysentery .. .. .	.. .. .	3
Deaths from Influenza .. .. .	.. .. .	40
Deaths from Tuberculosis of the Respiratory System .. .. .	.. .. .	62
Death Rate from Tuberculosis of the Respiratory System .. .. .	.. .. .	0.14
Deaths from Bronchitis .. .. .	.. .. .	288
Deaths from Pneumonia .. .. .	.. .. .	329

To:

The Right Honourable The Lord Mayor and the Aldermen and Councillors of the Belfast County Borough Council, acting as the Belfast Health Authority and the Belfast Port Sanitary Authority.

My Lord Mayor, Ladies and Gentlemen,

I have the honour to submit my Annual Report for the year 1959.

Vital Statistics:

The estimated mid-year population has fallen by 2,400 to 433,800. There were 8,365 births registered, an increase of 102 compared with 1958.

There were 4,821 deaths registered, an increase of 3 compared with 1958. 802 persons died from cancer (20 fewer than in 1958). There were 167 deaths from "cancer of the lung"; 137 males, 7 less than in 1958 and 30 females, 2 more than in 1958.

The infantile mortality rate was 32.8. The rate for 1958 was 30. There has been a regrettable increase in the number of deaths from motor vehicle accidents from 25 in 1958 to 41 in 1959, as well as an increase in the number of deaths due to tuberculosis from 58 in 1958 to 68 in 1959. The number of cases of tuberculosis notified however showed a marked decrease to 379 cases, the average number of notifications for the previous four years being 471.

For the fifth successive year no cases of diphtheria were notified. The seven deaths from whooping cough in 1959 occurred in infants less than six months old.

B.C.G. Vaccination:

Responsibility for making arrangements for B.C.G. Vaccination was transferred, along with other functions, to the Health Authority on 1st April, 1959 when the Northern Ireland Tuberculosis Authority was dissolved. Subsequently routine B.C.G. vaccinations of all new born babies at Maternity Hospitals in the City were discontinued. Some babies did not receive protection against whooping cough during the early months of life as it was advised that no other inoculations be given for three months after B.C.G. vaccination. It is hoped that babies will now receive immunisation against whooping cough as early as 3 months of age. The present policy of carrying out B.C.G. vaccination in the 10 plus age group is continued.

Atmospheric Pollution:

Six new daily atmospheric pollution recording instruments were installed at the end of 1958 so that records have been obtained from nine sites situated mostly in residential parts of the City during 1959. This has been done in conjunction with the Department of Social and Preventive Medicine Queens University, so that studies could be undertaken of the relation between respiratory disease and atmospheric pollution. The records were made available to a committee set up to advise the Minister of Health and Local Government on the health aspects of atmospheric pollution in Belfast. In addition monthly recordings have been obtained from the monthly instruments as in previous years as well as from two new lead peroxide candles sited in the vicinity of Power Station West.

Health Education:

A Conference was held on 29th May in co-operation with the Central Council for Health Education. The topic was "School Health and Health Education". This proved of particular interest to the School Medical Officers and Health Visitors from Antrim, Down, and our own Department. An interesting discussion developed concerning the future use of routine medical inspection in schools.

The Health Committee in conjunction with the Education Committee participated in the Exhibition "The Challenge of the Handicapped" sponsored by the Northern Ireland Council of Social Service from 13th to 16th October. A stand demonstrated the services provided by the Committees by means of photographs and diagrams as well as technical and professional techniques employed in the special treatment of the handicapped child.

I wish to thank the Chairman and Members of the Health Committee for their co-operation in promoting the various schemes and projects undertaken.

I also appreciate the continued loyal support of the members of the staff in the work of the Department during the year.

I have the honour to be

My Lord Mayor, Ladies and Gentlemen,

Your obedient servant,

W. G. SWANN,

Medical Officer of Health and Port Medical Officer.

Number of deaths, death rates and percentage of total deaths by age groups

TABLE 2

Age Group (Years)	Deaths			Rate per 1,000 of population of age group (Based on 1951 Census figures)	Percentage of Total Deaths	
	Male	Female	Total		1959	1958
Under 1 Year	148	126	274	34.5	5.7	5.2
1—4	7	15	22	0.7	0.5	0.6
5—14	13	11	24	0.3	0.5	0.4
15—24	22	10	32	0.5	0.7	0.5
25—44	93	76	169	1.4	3.5	4.2
45—64	816	503	1,319	13.9	27.4	25.2
65—74	690	592	1,282	49.9	26.6	26.6
75 and over	682	1,017	1,699	139.5	35.2	37.3

Principal causes of death in order of importance

TABLE 3

1.	Heart Disease (B26-27)	..	..	..	..	..	1,443
2.	Cancer	..	..	..	..	..	802
3.	Vascular Lesions affecting the Central Nervous System	..	..	..	..	..	600
4.	Pneumonia	..	..	..	..	..	329
5.	Bronchitis	..	..	..	..	..	288
6.	Violent and Accidental Deaths	..	..	..	..	..	143
7.	Associated with Prematurity	..	..	..	..	..	90
8.	Senility and Ill-defined and Unknown Causes	..	..	..	..	..	72
9.	Pulmonary Tuberculosis	..	..	..	..	..	62

Comparative Statistics for Counties and County Boroughs, 1959

TABLE 4

Area	Rate per 1,000 population				Rate per 1,000 live births	
	Marriage	Birth	Death	Death rate from Tuber- culosis	Infant Mortality	Maternal Mortality
Northern Ireland ..	6.8	21.9	10.9	0.10	28	0.55
Belfast County Borough ..	8.2	19.3	11.1	0.16	33	0.24
Londonderry Co. Borough	8.6	31.4	10.7	0.11	35	1.80
County Antrim ..	6.2	23.4	10.3	0.07	23	0.50
County Armagh ..	6.1	22.9	10.8	0.09	30	—
County Down ..	5.9	20.7	11.1	0.09	25	0.95
County Fermanagh ..	5.3	21.0	12.8	0.08	27	—
County Londonderry ..	6.6	24.2	10.0	0.03	32	0.76
County Tyrone ..	6.0	23.6	11.4	0.08	25	0.64

Trend of mortality from certain principal causes of death from 1910

TABLE 5

Year	Heart Disease		Cancer		Pulmonary Tuberculosis		Bronchitis, Influenza and Pneumonia	
	Number	Rate Per 1,000	Number	Rate per 1,000	Number	Rate Per 1,000	Number	Rate Per 1,000
1910	—	—	—	—	825	2.1	1,538	3.9
1915	—	—	—	—	813	2.0	1,667	4.1
1920	—	—	—	—	762	1.8	1,566	3.8
1925	—	—	—	—	575	1.3	1,163	2.7
1930	852	2.0	466	1.12	436	1.0	839	2.0
1935	935	2.0	463	0.99	389	0.89	1,042	2.23
1940	1,387	3.1	576	1.29	412	0.93	1,001	2.25
1941	1,277	2.87	570	1.28	426	0.96	773	1.74
1942	995	2.24	633	1.42	369	0.83	564	1.27
1943	1,116	2.63	613	1.44	367	0.86	705	1.66
1944	1,098	2.54	620	1.44	354	0.82	544	1.26
1945	1,130	2.59	664	1.52	326	0.75	533	1.22
1946	1,302	2.92	682	1.53	343	0.77	692	1.55
1947	1,482	3.29	662	1.47	281	0.62	618	1.37
1948	1,281	2.81	696	1.53	269	0.59	438	0.96
1949	1,407	3.09	699	1.54	280	0.61	536	1.18
1950	1,500	3.33	717	1.59	225	0.5	565	1.26
1951	1,630	3.67	693	1.56	221	0.49	813	1.83
1952	1,416	3.18	757	1.7	151	0.34	483	1.0
1953	1,155	2.56	758	1.68	114	0.26	466	1.03
1954	1,348	3.0	777	1.7	84	0.18	482	1.07
1955	1,365	3.0	741	1.6	76	0.17	597	1.3
1956	1,297	2.9	840	1.89	74	0.16	471	1.06
1957	1,383	3.14	844	1.9	60	0.13	592	1.34
1958	1,493	3.42	822	1.88	56	0.13	549	1.25
1959	1,443	3.33	802	1.85	62	0.16	657	1.51

— Signifies information not available

Comparative Statistics; Belfast, Northern Ireland, England and Wales, Scotland and Irish Republic, 1959

TABLE 6

	Belfast	Northern Ireland	England and Wales	Scotland	Irish Republic (See Note)
1. Rates per 100,000 population:					
Marriages	8.2	6.8	7.5	7.8	5.4
Births	19.3	21.9	16.5	19.1	21.1
Deaths	11.1	10.9	11.6	12.1	12.0
2. Death Rates per 1,000 live births:					
Maternal	0.24	0.55	0.4	0.4	0.7
Infant	33	28	22	28	32
3. Death Rates per 100,000 population:					
Tuberculosis	16	10	9	11	18
Cancer	185	160	206	206	162
Heart Diseases (B25—28)	374	384	370	407	401
Coronary Disease	208	186	184	194	132
Diphtheria	Nil	Nil	Nil	1	9

Note: Figures for Irish Republic Provisional

Population, Births, Birth Rate per 1,000, Deaths, Death Rate per 1,000 and natural increase from 1890

TABLE 7

Year	Population	Births		Deaths		Natural
		Number	Rate	Number	Rate	Increase
1890	232,222	8,250	35.5	6,861	29.5	1,389
1895	295,000	9,772	33.1	7,168	24.3	2,604
1900	359,000	11,192	31.2	7,642	21.3	3,550
1905	360,000	11,395	31.8	7,178	20.0	4,217
1910	391,167	10,888	27.8	7,284	18.6	3,604
1915	403,000	10,196	25.3	7,220	17.9	2,976
1920	413,000	12,144	29.4	7,234	17.5	4,910
1925	438,000	10,234	23.4	6,131	14.0	4,103
1930	415,151	9,558	22.7	5,451	12.9	4,107
1935	415,151	8,848	21.3	6,238	15.0	2,610
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
1946	444,687	10,327	23.2	5,326	11.9	5,001
1947	450,000	10,505	23.3	5,289	11.7	5,216
1948	455,020	9,744	21.4	4,684	10.3	5,060
1949	454,340	9,185	20.2	5,226	11.5	3,959
1950	450,000	8,834	19.6	5,082	11.3	3,752
1951	444,222	8,789	19.8	5,433	12.2	3,356
1952	444,200	8,506	19.1	4,778	10.8	3,728
1953	450,800	8,527	18.9	4,653	10.3	3,874
1954	449,100	8,302	18.5	4,810	10.7	3,492
1955	453,900	8,100	17.8	4,752	10.5	3,348
1956	444,800	8,212	18.5	4,632	10.4	3,580
1957	440,100	8,459	19.2	4,899	11.1	3,560
1958	436,200	8,263	18.9	4,818	11.0	3,445
1959	433,800	8,365	19.3	4,821	11.1	3,544

Deaths from Cancer by Sex and Site

TABLE 8

Detailed List Nos.	Sites	Males	Females
Buccal Cavity and Pharynx			
140	Lip	—	—
141	Tongue	2	3
142	Salivary Gland	2	1
143—144	Mouth	—	1
145—148	Pharynx	2	4
Digestive Organs and Peritoneum			
150	Oesophagus	10	5
151	Stomach	78	51
152—153	Intestines	32	48
154	Rectum	25	17
155—156	Biliary Passages and Liver	18	19
157	Pancreas	21	19
158	Peritoneum	—	—
159	Other Digestive Organs	—	—
Respiratory System			
160	Nose, Nasal Cavities, etc.	—	1
161	Larynx	9	2
162—163	Trachea, Bronchus and Lungs	137	30
164	Mediastinum	—	—
165	Thoracic Organs (Secondary)	1	—
Breast and Genito-Urinary Organs			
170	Breast	1	62
171—174	Uterus	—	27
175	Ovary, Fallopian tube and Broad Ligament	—	13
176	Other Female Genital Organs	—	5
177	Prostate	33	—
178	Testis	1	—
179	Other Male Genital Organs	3	—
180	Kidney	8	6
181	Bladder and Other Urinary Organs	20	4
Other and Unspecified Sites			
190—191	Skin	3	3
192	Eye	—	1
193	Brain and other parts of the Nervous System	5	9
194	Thyroid Gland	—	3
195	Other Endocrine Glands	1	—
196	Bone	2	4
197	Connective Tissue	1	—
198—199	Other Sites	16	13
200—202 203, 205 }	Neoplasms of Lymphatic and Haematopoietic Tissues (exclusive of Hodgkin's disease, leukaemia, etc.)	12	8
Total ..		443	359

Deaths from certain communicable diseases from 1890

TABLE 9

Year	Meningo- coccal Infections	Diph- theria	Dysentery	Gastro* Enteritis	Measles	Polio- myelitis	Scarlet Fever	Typhoid Fever	Whooping Cough	Influenza
1890	—	37	—	247	378	—	41	177	292	—
1895	—	34	—	325	197	—	88	184	109	—
1900	—	54	—	241	42	—	14	261	115	—
1905	—	32	—	295	227	—	35	128	24	—
1910	3	27	—	241	504	—	18	18	259	—
1915	39	27	—	240	177	0	107	10	134	—
1920	4	45	1	223	132	0	94	34	84	243
1925	0	38	0	203	167	0	49	18	99	84
1930	—	22	0	116	6	—	7	2	65	38
1935	0	55	0	249	251	1	37	11	22	65
1940	22	85	0	316	150	1	10	1	54	161
1945	2	7	1	188	10	4	2	1	26	16
1948	0	4	1	77	9	0	0	1	15	10
1949	0	6	2	109	3	0	0	1	9	29
1950	5	3	0	37*	5	11	2	1	16	32
1951	4	1	4	54	3	2	1	0	4	232
1952	4	0	0	43	4	2	0	0	10	18
1953	2	0	0	70	3	1	0	0	8	24
1954	2	0	1	29	2	1	0	0	2	20
1955	5	0	3	31	2	0	0	0	10	34
1956	10	0	1	8	0	1	0	0	6	27
1957	0	0	0	12	2	2	0	0	1	63
1958	1	0	1	13	0	0	0	0	5	13
1959	3	0	3	12	1	0	0	0	7	40
Average Annual Deaths 1949-58	3.3	1	1.2	40.6	2.4	2	0.3	0.2	7.1	49.2

— Signifies information not available

* From 1950 onwards, deaths of those under 2 years of age only.

Notifications of certain communicable diseases from 1900

TABLE 10

Year	Cerebro- Spinal Fever	Diph- theria	Dysentery	Food Poison- ing	Gastro Enteritis	Infective Hypatitis	Measles	Polio- myelitis	Puer- peral Pyrexia*	Scarlet Fever	Ty- phoid Fever	Whooping Cough
1900	—	407	—	—	—	—	—	—	44	658	1,777	—
1905	—	234	—	—	—	—	—	—	19	650	631	—
1910	—	238	—	—	—	—	—	—	16	734	95	—
1915	65	179	—	—	—	—	—	1	6	1,994	49	—
1920	8	300	—	—	—	—	—	1	48	1,939	210	—
1925	5	423	—	—	—	—	—	0	5	1,657	143	—
1930	24	118	—	—	—	—	—	9	20	1,132	32	—
1935	19	1,201	—	—	—	—	6,203	22	31	3,394	117	337
1940	166	1,165	—	—	—	—	5,062	2	9	1,266	17	701
1945	39	213	—	—	—	—	1,702	20	1	768	14	603
1948	25	107	18	—	—	—	2,618	8	4	931	6	666
1949	25	107	33	34	775	62	2,025	13	1	2,931	3	1,566
1950	22	45	35	55	377	28	4,209	109	4	1,668	5	1,078
1951	34	10	170	40	560	54	3,354	36	4	349	24	834
1952	44	3	69	16	489	74	2,702	65	56	399	7	2,131
1953	29	1	112	26	614	69	3,146	47	55	612	8	945
1954	32	1	217	23	513	59	1,613	14	42	496	5	773
1955	26	0	401	29	689	65	4,328	3†	46	791	23	1,460
1956	20	0	198	31	412	166	1,797	9	37	540	8	790
1957	14	0	269	18	410	112	4,109	141	50	492	4	119
1958	9	0	310	24	430	83	280	11	29	384	2	1,132
1959	14	0	278	27	450	179	4,731	11	18	506	10	721
Average Annual Notif- ications 1949-58	26	17	181	30	527	77	2,756	45	32	866	9	1,083

— Signifies information not available

* Figures up to 1951 for Puerperal Fever only

† Diagnosis of two of these cases was subsequently amended to Diphtheria and Acute Encephalitis

NOTES:—

1. Food Poisoning notifiable only since 1949.
2. Measles—notifiable only as the first case occurring in a household within a period of 2 months.
3. Whooping Cough—notifiable only as the first case occurring in a household within a period of 3 months.

Notification of certain communicable diseases in 1959, by age periods and sexes.

TABLE II

DISEASE	Under 1 Year		1 Year and under 2 Years		2 Years and under 5 Years		5 Years and under 10 Years		10 Years and under 15 Years		15 Years and under 25 Years		25 Years and under 45 Years		45 Years and upwards		Age unknown		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Typhoid Fever ..	—	—	—	—	—	—	—	—	1	—	3	2	—	—	1	—	—	—	11
Dysentery ..	7	8	11	10	31	22	27	30	6	9	—	6	3	3	9	9	37	50	278
Scarlet Fever ..	—	—	15	15	113	104	115	113	16	15	—	—	—	—	—	—	—	—	506
Cerebro-Spinal Meningitis	2	1	—	—	3	1	2	1	2	—	—	—	—	—	2	—	—	—	14
Poliomyelitis ..	1	—	3	2	—	1	2	2	—	—	—	—	—	—	—	—	—	—	11
Infective Hepatitis ..	—	—	—	—	6	20	36	36	18	13	9	10	6	5	1	2	2	6	170

Diphtheria Immunisation

During the year 5,174 children completed a course of immunisation against Diphtheria; of these 2,508 were immunised by the Health Committee's Medical Officers at Clinics, schools, etc., and 2,666 by general practitioners. In addition, 401 children received reinforcing injections, 274 by Health Committee's Medical Officers and 127 by general practitioners.

TABLE 12 Age Grouping of Immunised Children

Age at end of Year	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	At end of 1959
0—	54	116	147	158	147	330	357	269	610	911	
1—	1,642	1,982	2,167	1,809	1,719	1,885	1,978	1,677	1,945	2,240	Age Groups 1—4 years 14,092 =47%
2—	892	1,210	937	885	920	857	791	724	746	751	
3—	381	393	413	329	301	315	356	276	275	362	
4—	248	224	196	240	198	246	258	201	150	218	
5—	612	520	690	526	522	642	668	622	179	237	Age Group 5—9 years 21,993 =58%
6—	762	669	912	782	834	999	922	749	57	155	
7—	500	441	464	398	528	509	497	373	43	106	
8—	237	193	210	177	262	227	190	112	29	71	
9—	80	81	76	45	73	68	42	17	6	36	
10+	76	102	128	92	101	63	43	45	3	87	
TOTAL	5,484	5,931	6,340	5,441	5,605	6,141	6,102	5,065	4,043	5,714	

WHOOPING COUGH IMMUNISATION

(Children Immunised with Triple Antigen; Diphtheria/Pertussis or Pertussis alone.)

TABLE 13

Age at end of Year	1953	1954	1955	1956	1957	1958	1959	Total of age Group At end of Year
0—	99	131	310	338	258	586	904	904 (12%)
1—	1,023	1,446	1,729	1,838	1,596	1,884	2,179	2,765 (36%)
2—	354	687	719	676	642	707	698	2,840 (38%)
3+	131	233	372	471	353	497	639	3,280

COMMUNICABLE DISEASES

Measles. This was the only notifiable disease to reach epidemic proportions, but the nature of the illness was usually mild: there was only one death, an infant under six months of age. In a few cases where infants were known to be exposed to infection small doses of gamma globulin were successful in producing marked attenuation of the illness.

Infective Hepatitis. The incidence of this disease was unusually high; the number of cases notified, 170, is only a proportion of the real incidence. Some outbreaks occurred in schools involving both pupils and teachers. The ages of the cases were typical of this disease, being mainly school children and young adults. Because of the absence of any known means of controlling this infection, it is likely to be the disease of the future.

Poliomyelitis. There were ten cases, all young children who were not immunised. With the help of press, radio and television this fact was well publicised, yet there are still thousands of children in Belfast not immunised.

Typhoid Fever. There were eleven cases during the year; seven of these (type C1) contracted their infection while living on an unorganised camping site at Ballyreagh, County Londonderry. During the course of the investigation into the outbreak, an appeal was broadcast for visitors to the site to report to their Medical Officer of Health. This resulted in over 100 persons presenting themselves to the Health Department; many demanded that their blood be tested; some forty blood samples were taken and reported to be negative. The co-operation of the public in investigations of this nature has greatly improved in recent years. Permission to take blood samples is more readily given except in the case of the elderly who still regard it with horror.

Two cases (type C and E1) contracted their infection from carriers living in the same house. One other case (type E1) was probably a carrier for many years. One case (type A) yielded no obvious source although it was indirectly connected with the Ballyreagh outbreak.

Food Poisoning. Again there were no outbreaks. The complete absence of large outbreaks over the past ten years reflects credit on the standards attained by the catering trades co-operating with the food inspectors; these standards of hygiene have not been reached without some resistance.

There were three family outbreaks involving 2, 2 and 3 persons respectively; one outbreak was due to salmonella enteritidis. The remaining cases were sporadic and due to a variety of salmonellae; typhimurium (5), enteritidis (2), give (2), newport, heidelberg, bredery, melgrivis (1 each). The decreasing proportion of the endemic type, typhimurium, and the constant appearance of new types suggests that imported food-stuffs are the main source of food poisoning infections.

Diphtheria was non existent in spite of an outbreak outside the city boundary.

Whooping Cough. The 1958 epidemic carried over into the early months of 1959; there were seven deaths in 1959; five of these were infants under six months of age. A comparison with previous epidemics:—

<i>Epidemic years</i>	<i>Notifications</i>	<i>Deaths</i>
1952—53	3,076	18
1955—56	2,250	16
1958—59	1,853	12

It has always been difficult to get parents to bring their infants as early as three months of age for immunisation, yet this is essential if these deaths are to be prevented.

Dysentery. Mainly of the sonne type, remained endemic among young children and naturally the mothers were frequently found to be infected. It was usually a mild illness and recovery was rapid if the child could be nursed at home. Institutional outbreaks occurred and were difficult to control.

TUBERCULOSIS

From 1st April, 1959, notifications of tuberculosis cases reverted from the Tuberculosis Authority to the local Health Authority and it is thus possible to give a more detailed analysis of the trends of tuberculosis in Belfast.

The annual number of notifications showed a marked decrease after a period of four years when they remained practically stationary.

Annual Notifications of Tuberculosis Cases

Year	1955	1956	1957	1958	1959
Cases	493	470	460	462	379

The outstanding feature was the change in the age grouping of new cases. Formerly the peak incidence was in the 15-25 year age group; in 1959 the peak was in the 55-65 age group. There was, happily, a marked decrease in the numbers of children infected; this is further confirmed by the increasing percentage of Mantoux negative children at routine medical inspection about the age of 10 years. Very few cases of tuberculosis meningitis occurred and these few were over 15 years of age. Now that the use of B.C.G. at 10 years of age is firmly established the incidence of the disease in young adults may be expected to decline further.

A study of the increasing incidence in the over 45 years group shows that it is largely due to the greater number of men affected. The factors concerned here are numerous and the degree to which they are responsible cannot be accurately assessed. These factors appear to include smoking, air pollution, chronic bronchitis, neglect of nutrition and health generally and some occupational hazards. Indeed it is possible that the male lung is more liable to breakdown under unfavourable circumstances than the female lung as also appears to be the case in chronic bronchitis and cancer.

Estimating the incidence in each ward of the City showed that there was a decrease in all wards except two near the city centre where there was a slight increase. This is probably due to the greater proportion of old people in these wards. Otherwise the incidence is roughly related to overcrowding and the resulting poorer living standards.

IMMUNISATION

Poliomyelitis Vaccination

Once again public demand, stimulated by press, radio and television caused a large proportion of time to be devoted to vaccination against poliomyelitis. As requested in a Ministry of Health and Local Government circular, "on the spot" immunisation sessions were arranged for the benefit of the 15-25 age group. These consisted of lunch hour sessions at clinics and visits to industrial establishments. It was found that a team of two doctors and two nurses could inoculate at the rate of 400 persons per hour. Good progress was being made when, during the first week of the campaign, a request was made that the effort be "soft pedalled" due to limited supplies of vaccine. Nevertheless a similar campaign proceeded in other local authority areas.

Subsequently, unfavourable comparisons were made between the percentages inoculated in Belfast and in other areas without regard to these circumstances. In addition, it should be noted that in Belfast inoculated persons are classified according to the year of birth; in other areas it appears that the age at time of inoculation is used; this latter method must in the course of time give percentages of over 100 if it is not recognised that children move from one age group to the next. In Belfast, general practitioners have been encouraged to take and have taken a large share in the immunisation schemes: there is a lapse of time before their records are received so that the published figures of inoculations are always an understatement of the true situation.

In each of the three years since poliomyelitis vaccination started, the supply of vaccine in Belfast was inadequate at times; the supply of single dose ampoules, favoured by general practitioners, was frequently inadequate. It is to be hoped that the cumbersome and lengthy chain of administration through which the vaccine is issued will be shortened.

Grateful thanks are due to the doctors, nurses and clerical staff who willingly give up their meal breaks during the limited campaign; they would equally willingly have done more.

Diphtheria, Whooping Cough and Tetanus Immunisation

All infants from three months of age are offered immunisation with triple vaccine. In spite of the general preoccupation with poliomyelitis vaccination, it was possible to increase the number of infants immunised against these diseases. General practitioners are taking an increasing part in this scheme but some still do not favour whooping cough immunisation.

The recording of these inoculations is of the utmost importance and a complete record card of immunisation is issued to each child coming to the clinics.

Smallpox Vaccination

This is still a statutory requirement for infants born in Northern Ireland and a satisfactory percentage (76%) of infants are successfully vaccinated. The multiple pressure method is used at clinics and is found to be outstandingly simple and satisfactory, particularly in the production of a small lesion and scar. The result of the scarification method, still used by some general practitioners, is still distressingly evident at school inspections: the large fibrous scars must bring the procedure into disrepute.

The requirements of other countries for visitors result in many persons receiving smallpox vaccination before leaving this country. The number of International Certificates authenticated by the Health Department in 1959 was 4,498. This approaches the figure of infant vaccinations (5,103).

B.C.G. Vaccination

This is now the responsibility of the Health Authority as the Northern Ireland Tuberculosis Authority ceased to function on the 31st March, 1959. The effort to vaccinate all new born infants is regarded as misplaced (the incidence of tuberculosis is very low in the early years of life now). All school children aged 10+ years are offered testing and vaccination (see table in School Health Section). In addition, a few industrial concerns co-operate in allowing B.C.G. to be offered to their new employees.

W. J. McLEOD, M.D., D.P.H., D.P.A., Ph.C.,
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POLIOMYELITIS VACCINATION

Table showing the age grouping of persons inoculated from May, 1957 to December, 1959.

TABLE 14

Age at End of Year	One Injection Only				Two Injections Only				Three Injections		
	1957*	1958	1959	Total in Age Group at end of 1959	1957	1958	1959	Total in Age Group at end of 1959	1958	1959	Total in Age Group at end of 1959
Under 1 year ..	112	44	101		122	232	413		17	39	
1 year ..	321	412	83		458	1,128	2,409		542	792	
2 ..	194	99	101	1,682	368	998	1,064	9,398	897	2,052	8,935
3 ..	131	142	39		233	958	662		667	1,920	
4 ..	152	100	34		116	1,061	686		662	2,009	
5 ..	140	202	39		106	1,655	613		627	2,016	
6 ..	92	182	123		61	1,863	593		555	2,000	
7 ..	84	225	104		58	1,864	640		497	1,862	
8 ..	78	214	135		50	2,031	636		510	1,736	
9 ..	88	127	113		55	2,097	542		415	1,705	
10 ..	52	141	112	3,898	42	1,997	749	27,805	405	1,617	20,930
11 ..	4	164	140		4	1,560	978		301	1,595	
12 ..	4	208	251		2	1,042	1,728		240	1,592	
13 ..	4	103	266		4	794	2,201		176	1,419	
14 ..	2	230	124		—	1,546	2,434		96	1,000	
15-25 ..	—	244	4,202	4,682	—	729	18,587	20,866	17	4,073	4,186
26-40 ..	—	21	149	170	—	354	4,133	4,487	—	841	841

REPORT OF THE CHIEF SANITARY OFFICER FOR THE YEAR 1959

Inspections and the procedural work for the clearance of areas of unfit houses, the demolition of individually unfit houses and for essential repairs to secure wind and weatherproof conditions in large numbers of unfit and sub-standard houses continued as a major part of the responsibilities of the Sanitary inspectorate.

While the description of nuisances which require to be dealt with may vary to some extent, there is little difference in the general procedure for the abatement of these. As a result of the Department's efforts, what may be regarded as the grosser types of nuisance have been eliminated and nuisances of a very offensive character are now rarely met. While that is so, the health conscience of the people has become so quickened that offences of a minor character are now much more frequently complained of. This attitude is welcomed (although many trivial matters are often reported when disputes arise between neighbours).

Smoke abatement is now rightly occupying a prominent place in our hygiene campaign. Too much tolerance has been allowed to the discharge of smoke into the atmosphere, but there is now a gratifying awakening of the public conscience in this respect. Engineering and applied science are greatly aiding our efforts, and former crude methods of stoking furnaces are rapidly being replaced by automatic fuelling.

On the domestic side the increased use of gas, electricity and smokeless fuel is playing a large part in air purification. The high cost of smokeless fuel is however, a great deterrent to its more general use. Whilst much can be done by education and persuasion, legal backing is also necessary, and in this respect legislation is needed in Northern Ireland with provisions similar to the Clean Air Act, 1956, applying to England and Wales.

Warfarin baiting now carried out in the Belfast Harbour Estate and Shipyards has reduced the rat population to such an extent that the requirements for fumigation of ships have been much reduced. The replacement of large sections of wooden jetties and sheds by newly constructed steel framed ferro-concrete structures has eliminated a considerable amount of rat harbourage and discouraged rat movement in under-jetty spaces. Extensive alterations recommended by the Port Sanitary Officers were carried out to dock side sheds leased by shipping companies, so that fish arriving at the port are now handled and stored under proper hygienic conditions. With the co-operation of the Customs Authority sampling of imported foodstuffs continued throughout the year.

During the past few years itinerants have presented the Belfast Health Authority with an ever increasing problem. In some areas of the City they have endeavoured to establish encampments and only move when compelled by the Sanitary Officer. They then merely go the rounds of all the vacant sites, depending upon the number of times they are moved. The task of removing these people is not one of the more pleasant of a Sanitary Officer's duties. He is inundated with all sorts of reasons and excuses as to why a van cannot be moved. The answer to this problem would be for the Northern Ireland Government to introduce legislation which would be effective to deal with the situation. During the year 169 Statutory Notices were served on itinerants for the abatement of public health nuisances in and adjoining shacks erected on lands in various parts of the City. 70 Summonses were subsequently served for non-compliance with notices. It was necessary to issue 6 disobedience summonses for non-compliance with Magistrate's Orders to abate public health nuisances. The fines imposed by the Courts amounted to £27 5s. 0d.

The arrangement whereby certain plans of new work submitted to the City Surveyor are forwarded to the Health Department for comment continued during the year: 402 such plans were examined and commented upon.

A severe storm in November caused widespread damage to property throughout the City. The roof of a four storey block of flats in course of erection on the Springfield Road was ripped off. Slates were torn from the roof of another block of flats in the same area and two chimney stacks were blown down. Hundreds of houses in the City suffered damage. At the height of the storm a section of the covered stand at Windsor Park Football Ground was torn from its stanchions and thrown more than 200 feet in the air, crashing on the rooftops of both sides of Olympia Drive. This left huge gaping holes in the roofs and shattered chimney stacks.

The number of defects discovered by Sanitary Officers and referred to other Departments during the year and not recorded elsewhere in the body of this Report was:—

Estates Superintendent for defects discovered in Corporation dwelling houses	477
City Surveyor for various nuisances and defects	1,835
Belfast City and District Water Commissioners for defects in water fittings	935

Sewerage and Sewage Disposal

The system of sewerage and sewage disposal is under the control of the City Engineer and Surveyor. Work on the present stage of augmenting Belfast's drainage system is almost completed. The purpose of the project is to cope with development in the north-west area of the City. A high level sewer has been laid from the out-fall works at Northern Road (off Duncrue Street) up to Limestone Road and it will eventually be extended to connect with other branch sewers. From it a branch sewer has been almost completed on the Limestone Road and will continue through the old Waterworks to Cliftonville Circus to take additional drainage from the Ballysillan Road area. The project has involved the opening of a number of roads including the Limestone Road, but there has been no serious interruption of traffic. A considerable part of the sewer from the out-fall works to Limestone Road has been laid in tunnel form. The work started nearly four years ago and the present stage is expected to be finished early in 1960. A tender has been accepted for the reconstruction of the Park Road sewer. Tenders have been invited for the reconstruction of sewers in Ormeau Road, Broadway, Iveagh Street and Quarry Road. Cleansing and repair of sewers generally was carried out during the year.

Refuse Collection and Disposal

This work is carried out by the City Surveyor's Department by direct labour under control of the Superintendent of Cleansing and has been well maintained during the year under review. House refuse collection has been expanded to include the various blocks of flats and new housing estates in the City. The average number of dustbins emptied per week is now over 159,000. This material is mainly disposed by controlled tipping on a number of tipping grounds. During the year, tipping was completed at the disused clay pits on the Springfield Road and a large area of what was formerly useless ground has now been filled and levelled. A new scheme for the reclamation of the foreshore on the Antrim side of Belfast Lough was inaugurated. It consists of tipping house refuse into tidal water, the material being retained inside a specified area by means of a floating boom. This is a novel experiment and probably the first of its kind to be attempted in Northern Ireland. Further progress has been made in connection with the siting of new Cleansing Depots. In November site works commenced at Ferndale Place for the erection of a new Depot to replace the existing one situated under Tate's Avenue Bridge. When completed this should expedite cleansing work in the adjoining areas.

A second small bulldozer was purchased for use on tipping grounds. These machines have proved very useful for this work by giving better consolidation of the tipped material. During the year Sanitary Officers made 362 inspections of private and Corporation tipping grounds within the City. In addition 14 rat destruction campaigns were carried out by the Pests Control Section in order to exterminate rats at the different tipping grounds. Special attention was also paid to the fly problem by the use of effective insecticides.

Water Supplies

The control of the public water supply is vested by Acts of Parliament in the Belfast City and District Water Commissioners. General maintenance work has been continued throughout the year. Pipes have been relaid wherever necessary and close liaison is kept with the Corporation in order that such work is carried on in advance of street reconstruction schemes. Routine bacteriological examinations of all water under the control of the Water Commissioners was continued throughout the year by the Counties Public Health Laboratories, London, and copies of the results of these examinations were sent to the Medical Officer of Health for information. During the year 995 samples of water were taken from or adjacent to the different service reservoirs for examination. These consisted of 10 samples of water before treatment, 491 samples of filtered and chlorinated water and 494 samples of chlorinated water. The results showed 6 containing both bact-coli (Type 1) and coliform organisms and 9 containing coliform organisms. 10 samples showed a low pH value of the water. 10 samples of untreated water showed coliform organisms and bact-coli (Type 1). The results of the bacteriological examination of the raw waters were typical of waters showing the normal deterioration in quality which occurs after heavy rain. In all cases the examination showed that the raw water was suitable for treatment.

The following is a summary of reports on the bacteriological examination of water samples taken from consumers' taps direct from distributing service mains throughout the City by officials of the Water Commissioners.

Samples examined during the year	..	..	..	..	671
Samples reported as highly satisfactory	..	..	..	..	645
Samples reported as showing coliform organisms	..	..	..	..	24
Samples reported as showing bact-coli (Type 1) and coliform organisms					2

The bacteriological examination of the treated waters showed that these waters were of good quality.

Testing of Samples of water collected by the Health Department Staff from Consumers' taps

Weekly samples have been submitted to the Central Laboratory, Northern Ireland Hospitals Authority for bacteriological examination. The dwelling houses from which the samples are taken are selected to cover the different sources of supply to the several areas of the City. The Belfast City and District Water Commissioners are furnished with copies of the reports of the Bacteriologist. During the year under review the total number of examinations of samples thus taken was 314. Of this number, 279 samples were reported by the Bacteriologist as highly satisfactory and the remaining 34 samples as unsatisfactory.

The results of examination of the unsatisfactory samples are classified as follows:—

TABLE B 1

Coliform Organisms (Count per 100 ml.)	Number of Samples	Coliform Organisms of Faecal Origin (Count per 100 ml.)	Number of Samples
1—3	28	—	10
4—10	6	—	2
Greater than 10	1	Greater than 10	—

12 samples contained both faecal and non-faecal coli.

In addition to the above, 12 samples taken from tenement dwellings were reported by the Bacteriologist as highly satisfactory.

Domestic Water Supplies from Private Wells, etc.

The Department continued to sample water from private supplies in the areas on the outskirts of the City where there was no public mains supply. During the year 180 samples of water were taken from private wells by Sanitary Officers and examined at the Central Laboratory. The results showed that 38 of these samples were highly satisfactory, 11 satisfactory, 1 suspicious and 130 unsatisfactory because of the presence of coliform organisms of faecal and non-faecal origin. Three existing dwelling houses were connected to the public mains supply during the year.

The results of examination of the unsatisfactory samples are classified as follows:—

TABLE B 2

Coliform Organisms (Count per 100 ml.)	Number of Samples	Coliform Organisms of Faecal Origin (Count per 100 ml.)	Number of Samples
1—3	19	1—3	23
4—10	10	4—10	13
Greater than 10	102	Greater than 10	91

127 samples contained both faecal and non-faecal coli.

Water Supplies from Artesian Wells

During the year 83 samples of water were obtained for bacteriological examination at the Central Laboratory from privately owned artesian wells. The water from these wells is used in the manufacture of food for sale for human consumption. The Bacteriologist reported 75 of the samples as highly satisfactory and the remaining 8 samples as unsatisfactory because of the presence of coliform organisms in the water. When unsatisfactory results were obtained investigations were made by the Food Inspection Staff with a view to tracing and eliminating the source of pollution.

The results of examination of the unsatisfactory samples are classified as follows:—

TABLE B 3

Coliform Organisms (Count per 100 ml.)	Number of Samples	Coliform Organisms of Faecal Origin (Count per 100 ml.)	Number of Samples
1—3	5	1—3	1
4—10	1	4—10	1
Greater than 10	2	Greater than 10	—

2 samples contained both faecal and non-faecal coli.

Samples of Water from Mineral Water Manufacturers' Premises

During the year 109 samples of water were taken by the Food Inspection Staff for bacteriological examination at the Central Laboratory. The results of the examination showed that 86 of these samples were highly satisfactory and 23 samples unsatisfactory due to the presence of coliform organisms in the water, some of faecal origin. In every instance when unsatisfactory results were received investigations were carried out in the premises concerned and suggestions were made to the management concerning precautions necessary to ensure a pure water supply.

The results of examination of the unsatisfactory samples are classified as follows:—

TABLE B 4

Coliform Organisms (Count per 100 ml)	Number of Samples	Coliform Organisms of Faecal Origin (Count per 100 ml)	Number of Samples
1—3	20	1—3	7
4—10	1	4—10	—
Greater than 10	2	Greater than 10	—

7 samples contained both faecal and non-faecal Coli.

Public Swimming Baths

Tenders have been received for the main building and engineering contracts in connection with the erection of the Grove Baths and work is expected to commence on the site early in 1960. Preliminary plans have been prepared for the renovation of the portion of Ormeau Baths not included in the previous scheme.

Work is in progress on a £75,000 alterations and renovation project at Falls Road Indoor Baths. The pond banks are being completely cleared and accommodation for spectators, pre-cleansing facilities and remote changing accommodation will be provided. Already a new £30,000 boiler and filtration plant has been installed in these baths.

Plans and specifications are in course of preparation by the City Surveyor for the supply and installation of hot water storage calorifiers at Ormeau and Peter's Hill Baths. Painting work was carried out at sections of Ormeau and Falls Road Baths and at the end of the year tenders had been invited for painting work at Peter's Hill and Templemore Avenue Baths. During the year 160 samples of baths water were taken by the Senior Food Inspector for bacteriological examination at the Central Laboratory. 158 of these samples were returned by the Bacteriologist as highly satisfactory and 2 samples were unsatisfactory because of the presence of coliform organisms in the water. 581 samples of baths water were examined at the four indoor baths by Sanitary Officers to ascertain the pH value of the water which should be approximately 7.8 and should not fall below 7.0, also the amount of free residual chlorine present. Of this number 25 were found to be unsatisfactory and action was taken by the staff to improve conditions. Where structural defects were found at the time of inspection intimation was given to the Baths Superintendent for attention.

Number of Inspections carried out by Sanitary Officers in indoor

baths

.. .. .

740

Corporation Open Air Swimming Pools

A new water filtration and chlorination plant has been provided at Falls Park Open Air Swimming Pool. All the alterations should be completed early in 1960 and the pool made ready for swimming during the summer season.

32 samples of water were taken during the season from Victoria Park Open Air Swimming Pool. 31 samples were reported by the Bacteriologist as highly satisfactory and 1 sample was unsatisfactory because of the presence of coliform organisms including faecal coli. 15 samples of water from this pond were examined by Sanitary Officers to ascertain the pH value also the amount of free residual chlorine present. 2 of the samples showed unsatisfactory results on test.

Privately owned Open Air Swimming Pools

46 samples of water were taken during the season from privately owned open-air swimming pools for bacteriological examination at the Central Laboratory. Of this number 40 were reported as highly satisfactory and 6 samples as unsatisfactory because of the presence of coliform organisms, some of faecal origin.

The results of examination of the unsatisfactory samples are classified as follows:—

TABLE B 5

Coliform Organisms (Count per 100 ml.)	Number of Samples	Coliform Organisms of Faecal Origin (Count per 100 ml.)	Number of Samples
1—3	5	1—3	4
4—10	1	4—10	1
Greater than 10	—	Greater than 10	—

5 samples contained both faecal and non-faecal Coli.

73 samples of water were examined by Sanitary Officers at the pools in order to ascertain the pH value of the water, also the amount of free residual chlorine present. 29 samples of the water showed satisfactory results and 44 samples were unsatisfactory. Action was taken by Sanitary Officers to improve either the pH value or chlorinate content of the water in the pools.

Inspections carried out by Sanitary Officers to open air swimming pools 178

Housing Acts (Northern Ireland) 1890 to 1956

Multi-storey flats and maisonettes are essential in order that the maximum number of residents may be housed in re-development areas. This was the main point in a report submitted at a meeting of Belfast Corporation Housing Committee by a deputation which in March went on a fact finding visit to slum clearance schemes in Sheffield, Newcastle-upon-Tyne and Gateshead. The report stressed that it was necessary to have an overall plan for re-development in the City to fix priorities for the various areas and to aim for completion within a specified period of years. The visits showed the problem of slum clearance to be "a vast and difficult one". Referring to the ingenious use which has been made in Sheffield of sloping sites the report says that what the deputation saw would warrant a fresh approach to the problem in Belfast. It was clear from the visits that if the slum clearance problem was to be met in Belfast it would require a very great effort on the part of all concerned. Increases would require to be made in the staff of the various Departments involved and this matter was receiving attention. The most important part of the problem was a need to ensure that houses or flats would be made available immediately the necessary formalities regarding re-development orders had taken place.

If the procedure adopted in the cities visited was to take place in Belfast the problem would be dealt with very slowly—a small number of tenants were transferred initially followed by re-building and further transfers and demolition at successive stages. In Sheffield particularly, development on the periphery had been on a very large scale involving the transfer of many people some distance from their former sites, but there was no reason why some at least of these transfers should not be dealt with on a temporary basis on the understanding that when the developed area had been completed the tenants would be permitted to return if they wished to do so. They should certainly be

given first priority. It was obvious to the deputation that the problem must be treated as a human one. As far as possible the natural desire of the people concerned to live as near the area in which they had been brought up and lived in most of their lives should be met. Whatever happened, it must mean a very substantial change in their way of living, and it was essential that the reasons for this should be explained to them. The report added that such explanations and an assurance that they will be dealt with as fairly and reasonably as circumstances permit will ensure, as it did in Sheffield and Newcastle, that the position will gradually be accepted by them.

During the year the Housing (Clearance and Re-Development) Committee authorised its officers to acquire by negotiation or vesting order nineteen sites in and around the City on which two thousand five hundred houses can be built. The biggest area comprises eighty three acres at Knocknagoney, outside the City boundary near the Holywood Road, which can be considered for development now that the way is clear for the construction of sewage disposal works at Kinnegar. The Corporation is already building about two hundred and sixty flats and houses on another site at Knocknagoney. The other sites which are now to be acquired were earlier rejected for housing purposes because of their sloping nature, but after seeing what had been achieved in Sheffield in the development of such sites, the Housing Committee had decided with new techniques they can be satisfactorily used. The Housing Architect was authorised to include both tall blocks of flats and blocks up to four storeys high in the scheme being prepared for the re-development of the Upper Library Street area. Previously the Committee had asked for alternative schemes with tall blocks in one and blocks up to four storeys in the other. The Committee decided on the change because of the experience gained through recent visits of members to cross-channel cities which are already tackling slum clearance. It was agreed to ask the Minister of Health and Local Government for an extension of time to prepare the plans for the Upper Library Street Area (they were due to be submitted to the Minister for consideration and approval in May). The Housing Architect submitted sketch plans showing the proposed conversion of four large houses acquired by the Housing Committee in Cliftonpark Avenue into twelve flats and maisonettes. With the necessary structural alterations the block of four houses would provide:

Ground Floor:—2 two-bedroom and two single bedroom flats. Access from entrance halls to yard space at rear.

First Floor:—4 two bedroom flats.

Second and Third Floors:—4 three-bedroom maisonettes.

The accommodation to be provided in each flat or maisonette would include, in addition to bedrooms, a living room, kitchen and larder, bathroom and watercloset, hot press and fuel store. The Committee approved of the plans and they were forwarded to the Ministry of Health and Local Government for their consideration. In February the Belfast City Council amended a Standing Order to transfer from the Health Committee to the Housing (Clearance and Re-Development) Committee responsibility for making demolition and Closing Orders in respect of unfit houses. The change was made because it was considered that the Housing Committee, which is obliged to re-house displaced persons, should decide which houses should be condemned.

The total number of permanent dwelling houses completed and occupied within the City during the twelve months was 782. In addition, 143 self contained flats and 33 old persons' houses were provided, 245 dwelling houses, 84 flats and 33 old persons' houses were provided by the local authority and 537 dwelling houses and 59 flats were provided by private enterprise. Table B 6 shows the sites with the number of dwelling houses and flats erected by the local authority and Table B7 shows the number of dwelling houses and flats erected by private enterprise in the four divisions of the City.

TABLE B 6

Site	Dwelling Houses	Flats	Old Persons' Dwellings
Annadale No. 2	68	72	12
Clara Park	—	—	20
Dehra Grove	—	—	1
Knocknagoney	115	8	—
Sandbrook Park	19	—	—
Springfield Parade	24	4	—
Roseleigh Street	19	—	—
TOTALS	245	84	33

TABLE B 7

Division						Dwelling Houses	Flats
North	..	..	..	..	..	53	19
South	..	..	..	..	..	52	25
East	..	..	..	..	..	286	15
West	..	..	..	..	..	146	—
Totals						537	59

Table B8 shows the sites and capacity where contracts have been placed by the Corporation for the building of dwelling houses.

TABLE B 8

Site	Capacity	Contracts Placed	Number Completed			Number to be Completed		
			Houses	Flats	Old Persons Dwellings	Houses	Flats	Old Persons Dwellings
Clara Park ..	496	496	334	116	20	—	—	26
Knocknagoney ..	316	316	193	8	—	70	45	—
Springfield Parade ..	28	28	24	4	—	—	—	—
Sylvan Street/ Roseleigh Street	37	37	19	—	—	—	18	—
Springfield Road ..	30	30	—	—	—	4	26	—
Sandbrook Park ..	33	33	33	—	—	—	—	—
Annadale No. 2 ..	242	239	68	72	12	—	87	—
Kyle Street/Lisavon Street ..	35	35	—	—	—	35	—	—
Dehra Grove ..	1	1	—	—	1	—	—	—
Turf Lodge ..	665	262	—	—	—	588	57	20
Gainsborough Drive	36	36	—	—	—	36	—	—
Carlisle Street/ Lonsdale Street/ Eglinton Street ..	35	35	—	—	—	—	35	—
Kimona Street ..	23	23	—	—	—	23	—	—
TOTALS ..	1,977	1,571	671	200	33	756	268	46

At 31st December, 1959, the total number of dwelling houses provided and owned by the Belfast Corporation since the commencement of Local Authority Housing Schemes was 11,114 comprising:

Permanent houses built and purchased prior to 1939	3,021
Permanent houses built under Belfast Improvement Order, 1910	250
Permanent houses built from 1946 to 1959	5,568
Permanent Flats built from 1946 to 1959	1,282
Temporary (Prefabricated) bungalows	993

5 Prefabricated Bungalows were demolished at Botanic Site.

The number of homeless applicants registered with the Belfast Corporation for housing at the 31st December, 1959, was 6,481.

During the year 10,324 inspections were made in order to ascertain the number of unfit dwellings. Table B9 shows the number of inspections in each of the four divisions of the City:—

TABLE B 9

North Division	South Division	East Division	West Division
4,085	3,088	1,277	1,874

The Medical Officer of Health reported to the Housing (Clearance and Re-Development) Committee 13 individual dwelling houses as unfit for human habitation and not capable at a reasonable expense of being rendered so fit. The Housing Committee made Demolition Orders or accepted undertakings in accordance with the Housing Acts (Northern Ireland) 1890—1956 in the case of 3 houses and deferred consideration of the remainder as they were situated within potential clearance areas. 7 Corporation owned dwelling houses were demolished because the site was required for the building of an extension to the College of Technology. One large derelict dwelling house was demolished in order to re-plan the site for the erection of Corporation dwelling houses. During the year 18 dwelling houses were demolished because they were considered to be dangerous.

On the 30th October, 1958, the Minister of Health and Local Government made a statement in the Northern Ireland House of Commons on the subject of compensation in certain cases of hardship in connection with slum clearance and similar operations, and warning intended purchasers of property which might fall within areas scheduled or to be scheduled by local Authorities for slum clearance or re-development, that in their own interests they should take professional advice and enquire from local council offices whether the property in question was likely to be proposed for slum clearance action, etc. It was the intention of the Government to exclude, from the scope of the examination which they intended to conduct into the problem, houses bought for owner occupation where the contract for purchase was entered into after the date of this statement. During the year the Health Department dealt with 2,711 enquiries from prospective house purchasers concerning property which might be within a potential clearance area.

HOUSES LET IN LODGINGS

It would be difficult in Belfast to assess the actual number of persons who reside in these houses-let-in-lodgings, since they are constantly changing. Again, although we have in force By-laws in respect of these houses made under Section 100 of the Public Health (Ireland) Act, 1878 and Section 20 of the Housing (Ireland) Act, 1919, requiring registration of houses used for this purpose, there are still many which are so used that remain outside the knowledge of the Health Department. These are coming to light as a result of the Housing Survey and visits by Sanitary Officers under the Corporation's discretionary points system for allocation of housing accommodation on medical grounds.

The By-laws are also concerned with natural and artificial lighting, ventilation, water supply, overcrowding, cleanliness, drainage and sanitary arrangements and facilities for the storage, preparation and cooking of food.

Inspections during the year	..	..	..	..	..	2,156
Sanitary defects discovered	..	..	..	..	..	134
Sanitary notices served on owners and occupiers	..	..	..	..	..	49
Sanitary defects remedied	..	..	..	..	..	15
Summonses issued for non-compliance with By-laws	..	..	..	..	..	200
Summonses issued for continuing offences	..	..	..	..	..	43
Number of houses registered as at 31st December, 1959	..	..	..	..	..	158
Number of families in occupation	..	..	..	..	..	648
Number of rooms	..	..	..	..	..	1,006
Number of adults	..	..	..	..	..	1,238
Number of Children	..	..	..	..	..	508
Amount of fines imposed by the Courts for non-compliance with By-laws	..	..	..	..	..	£136 9s. 6d.

During the year the Estates Committee of Belfast Corporation agreed to co-operate with the Welfare Committee in a scheme to permanently re-house a number of homeless and "problem" families accommodated in the Welfare Hostel, Lisburn Road. The Welfare Committee had decided that the Welfare Hostel should be vacated as soon as possible as it was entirely unsuitable for the provision of temporary accommodation. The Welfare Committee suggested that the housing of the families concerned should be by way of an annual quota or otherwise. In regard to this proposal the Estates Superintendent informed the Estates Committee that it was important that re-housing should take place, otherwise the temporary accommodation might easily become full and the intention behind the scheme would be frustrated. He anticipated that a number of families provided with temporary accommodation would, apart from unsatisfactory reports as to suitability, be eligible for permanent re-housing under the Corporation's existing "points" system. The Estates Superintendent was not in favour of families who have had to be accommodated due to emergency measures, apart from suitability,

being re-housed, unless under the ordinary "points" system. To decide otherwise would result in the waiting list being jumped. In his view a flexible arrangement which would take into account the supply of houses for letting was to be preferred to a system of a fixed quota of houses per year. In regard to "problem" families, the Estates Superintendent said a specially trained Welfare Officer concerned with tenants who gave trouble because of irregular rent payments, badly-kept houses and generally with homeless families who are unsuitable for permanent housing accommodation through unsuitability, could perform useful work. He recommended that the Estates Committee should co-operate fully with the Welfare Committee in the proposed scheme.

Rent and Mortgage Interest (Restrictions) Acts (Northern Ireland) 1920 to 1956

The Acts specify the function of the Sanitary Authority in regard to the issue to tenants of certificates of disrepair and to landlords of reports as to the satisfactory completion of necessary repair works. Both landlord and tenant have the right of appeal to the County Court. A landlord's right relates to the reasonableness of the requirements of the Sanitary Authority with regard to work of repair. A tenant's right relates to the refusal of the Authority to grant a certificate. The following table shows the total number of applications received for certificates and reports issued and refused from 1st September, 1951 until 31st December, 1959.

(a) During 1959:—

Certificates and reports outstanding at 31st December, 1958	14
Applications for certificates and reports	1,461
Certificates issued to tenants	892
Reports issued to landlords	293
Refusal of certificates to tenants as the dwelling houses were found to be in good and tenantable repair	7
Refusal of reports to landlords as all the works specified in certificates had not been completed	243
Number of applications for certificates and reports cancelled	23
Certificates and reports to be dealt with at 31st December	17

(b) Totals from 1st September, 1951 till 31st December, 1959:—

Applications for certificates and reports	39,093
Certificates and reports issued	27,337
Reports issued to landlords	6,690
Certificates refused	497
Reports refused	4,322
Certificates and reports cancelled	230

Discretionary Points System for Allocation of Housing Accommodation on Medical Grounds

In the points system adopted by the Council for the allocation of Corporation dwelling houses, provision is made for priority to be given in cases of urgent necessity on medical grounds. Claims for such priority were investigated by Sanitary Officers and special recommendations were made by the Medical Officer of Health.

Number of dwelling houses inspected for over-crowding or insanitary conditions	102
Rooms in dwelling houses inspected	436
Families occupying the dwelling houses	233
Adults	509
Children	321
Houses found to be over-crowded	64
Houses found to be in an insanitary condition	22
Houses where no recommendations were made	16

Planning (General Interim Development) Order Northern Ireland 1944

During the year 88 applications and enquiries were received from the City Surveyor's Town Planning Section for proposed development of various properties in the City such as the conversion of dwelling houses into shops, offices, second hand clothes dealers, hairdressing, cafes and snack bars, showrooms, preparation of fried fish and fried potatoes, football pools receiving depots, boot repairs, home bakery, preparation and sale of foodstuffs, preparation and storage of chemicals clothing manufacturer, book-makers premises and other premises proposed to be used as factories, motor repair workshop, scrap metal merchants, coach painting, storage of offensive materials, etc. The Department furnished reports to the City Surveyor on all the above applications. In 25 instances appeals were made to the Ministry of Health and Local Government (Northern Ireland) against the Corporation's planning decisions. The Town Planning Officer was responsible for the preparation of reports and giving of evidence in connection with all the appeals. One case is worthy of note. The Corporation's Improvement Committee refused an application of the occupier for permission to use land at the rear of dwelling houses as a yard for the storage and repair of machine tools and the storage and sale of steel and scrap metal. The applicant appealed to the Ministry of Health and Local Government against the Committee's decision and the Ministry dismissed the appeal. The final decision was of particular interest from a public health viewpoint as serious nuisances were created in the premises by the burning of parts of old motor bodies and waste rubber.

Improvement and Conversion Grants for Older Houses

During the year the Minister of Health and Local Government made reference to the recently completed survey carried out by Health Authorities in accordance with the Housing (Miscellaneous Provisions) and Rent Restriction Law (Amendment) Act (Northern Ireland) 1956. The information submitted to the Ministry contained proposals for dealing with houses which were unfit for human habitation. The job of getting rid of old, unfit houses would take some time, but local authorities should do it as quickly as possible. It is unfortunate that so many of our old houses were beyond repair and must be demolished, but there are many which could provide housing accommodation for some years by doing some repairs and improvements. Bringing these repairable houses up to modern standards and giving them modern amenities was a matter of priority. The Ministry of Health and Local Government has a scheme for helping people to improve and modernise old houses which were structurally sound. This conversion and improvement scheme which is operated through the local authority could make a most valuable positive contribution towards improving housing standards and providing housing standards and living accommodation which are going to be urgently needed as the clearance programme gathers momentum. Applications for grants are dealt with by the City Surveyor and in each case he seeks the views of the Health Department as to suitability of the premises for conversion or improvement prior to the application being considered by the Housing (Clearance and Re-Development) Committee.

Number of applications for improvement and conversion grants for older houses	.. .. .	200
Number of applications refused	.. .. .	10
Number of applications approved	.. .. .	190
Number of improvements or conversions completed or in progress	..	47

**Public Health nuisances discovered and complained of in dwelling
Houses, etc., by District Sanitary Officers during 1959**

TABLE B 10

Nature of Nuisance	Divisions				Total
	North	South	East	West	
Drains, traps, etc., foul or defective	1,089	578	594	1,194	3,455
Tiling, paving or flooring defective	726	530	637	802	2,695
Sinks defective, or want of; waste pipes foul or defective	158	116	77	113	464
Water closets foul or defective; no water closet accommodation; soil or ventilation pipes defective, or want of	1,042	925	773	1,210	3,950
Dustbins defective, or want of	468	175	91	211	945
Roofs defective	2,368	1,721	1,461	2,522	8,072
Spouting defective or want of	1,298	1,156	924	1,421	4,799
Damp state	3,416	2,374	2,015	3,594	11,399
Plaster on walls and ceilings defective	598	599	497	712	2,406
Domestic water supply: want of, or unsuitable	92	9	16	19	136
Lighting or ventilation insufficient, or want of	38	116	63	91	308
Schools overcrowded	—	4	7	1	12
Dwelling houses overcrowded	14	11	16	6	47
Accumulation of manure or offensive matter; offensive smells; premises or passages dirty	361	190	113	346	1,010
Fowl or animals kept so as to be a nuisance	6	3	6	13	28
Schools dirty	—	—	—	—	—
Miscellaneous	1,303	851	860	1,731	4,745
	Grand Total ..				44,471

Public Health nuisances abated in dwelling houses, etc., during 1959

TABLE B 11

Abatement of Nuisance	Divisions				Total
	North	South	East	West	
House drains cleansed	704	262	438	841	2,245
House drains repaired and relaid	240	143	171	190	745
Houses had tiling, paving, flooring, etc., repaired ..	644	466	563	596	2,269
Houses had water closets cleansed or repaired	913	677	681	920	3,191
Number of dustbins provided	391	48	45	123	607
Houses provided with new sinks	4	6	2	4	16
Houses had roofs repaired	1,814	1,284	1,123	1,806	6,027
Houses had spouting repaired	1,162	876	779	1,196	4,013
Passages cleansed	8	24	20	34	86
Houses cleansed	9	5	11	4	29
Houses had minor repairs effected	1,448	1,422	1,115	1,608	5,593
Miscellaneous nuisances	107	47	27	127	308
	Grand Total ..				25,129
Length in feet of drain pipes laid	547	918	800	683	2,948
Gully and disconnecting traps provided	22	23	12	13	70

Summary for 1959 in connection with dwelling houses

Complaints received and discovered	44,471
Inspections made	112,801
Statutory notices issued	19,157
Sanitary improvements carried out	25,129
Summonses issued for non-compliance with notices	1,718
Court Orders obtained for the abatement of nuisances	184
Summonses for disobedience of Magistrates' Orders	23
Disobedience convictions	23
Amount of fines imposed by the Courts	£345 10s. 4d.

By-laws made under Section 23 of the Public Health Acts (Amendment) Act, 1890, (Relating to keeping water closets supplied with sufficient water for flushing).

Inspections during the year	..	..	..	..	..	2,079
Notices issued under the By-Laws	..	..	..	..	..	693
Summonses issued for non-compliance with notices	..	..	..	..	..	84
Summonses for continuing offences	..	..	..	..	..	1

KEEPING OF ANIMALS

Action by the Department against the common house-fly continued throughout the season with the treating of stables and manure pits with a water solution of insecticide which was found to be very effective.

Number of treatments carried out by Pest Control Section	475
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Stabling Yards

Number on Register	156
Inspections during the year	1,336

Piggeries

Inspections during the year	146
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On 16th January, 1958, the Ministry of Health and Local Government confirmed the By-Laws for the keeping of swine within the Belfast City Boundary. The By-Laws were adopted by the City Council on 3rd December, 1956.

At the end of the year no premises were being used in the City for the keeping of pigs. The Belfast Corporation (Blackstaff River Improvement, etc.) Act (Northern Ireland) 1956, provided for compensation to be paid to pigkeepers who were unable to comply with the provisions of the By-Laws.

If by reason of the making by the Corporation of by-laws in pursuance of Section 54 of the Public Health (Ireland) Act, 1878, for the regulation of the keeping of swine on any premises in the City, any person who prior to the making of such by-laws had been keeping swine on premises in the City shall or would be put to expense in adapting such premises so as to make them comply with the requirements of any such by-laws or shall be precluded from continuing so to keep swine on such premises, the Corporation may pay compensation to such person in accordance with the following provisions:—

- (1) If the cost of adapting the said premises so as to make them comply with the requirements of any such by-laws shall or would be less than the appropriate maximum sum provided for under paragraph (2) the compensation shall not exceed the reasonable amount of such cost;
- (2) If the reasonable cost of so adapting the said premises shall be greater than the appropriate maximum sum hereinafter in this paragraph provided then—
 - (a) If the profits of keeping the swine have for each of the three years ending of the fifth day of April preceding the making of any such by-laws been brought into charge for assessment under the Income Tax Act, 1952, compensation may be paid to an amount not exceeding three times the average of the annual profits for the said three years so brought into charge.
 - (b) If the profits of keeping the swine have not for any year of the three years ending on the fifth day of April preceding the making of any such by-laws been brought into charge for assessment under the Income Tax Act, 1952, compensation may be paid to such amount not exceeding three hundred pounds as the Corporation may determine.
 - (c) If the profits of keeping the swine have for one year only, or for two years only of the three years ending on the fifth day of April preceding the making of any such by-laws been brought into charge for assessment under the Income Tax Act, 1952, compensation may be paid to an amount not exceeding three times the profits made during the year or three times the average annual profits made during the two years, as the case may be, in respect of which the profits have been so brought into charge.

The total amount of compensation paid by the Corporation in 71 claims during the year was £66,032, in amounts ranging from £300 to £5,219.

Burial Grounds and Crematorium

Work has begun on the building of Belfast's £100,000 crematorium at Roseland Cemetery, Castlereagh—a project first mooted about 25 years ago. It is expected to be ready for use by the end of 1960. It will be the first crematorium in Ireland. The Director of Parks and Cemeteries said the crematorium would offer a much cheaper style of funeral than burial. In Great Britain 28.36 per cent—more than one in every four of the total number of funerals—went to crematoria. The proportion is increasing by two per cent. every year and when the figures are available for 1959, it is expected that cremations will account for something in the region of 30 per cent. of funerals. Cremation is unlikely to reach this level here at first because it is a new venture, but it is assumed that the proportion of one in four will be achieved eventually. Since an average of 2,500 persons are buried each year in the Corporation's cemeteries, this would mean that the crematorium could expect to deal with about 625 funerals a year. The Corporation has already purchased two gas cremators for the building at a cost of almost £6,000. Provision has been made in the plans for another two cremators. This, it is considered, will meet the demands of the future. The Crematorium, of rustic brick with artificial stone dressings and natural stone facings, will have a chapel seating 100 people, a secluded garden of rest where cremated remains may be scattered, waiting rooms, etc.

During the year three exhumations and re-interments took place at different cemeteries in the City in accordance with licences issued by the Ministry of Health and Local Government. In all cases the exhumation and re-interment was conducted with proper regard for public health and decency.

Number of burial grounds in the city	10
Number of inspections during the year	104

Places of Public Entertainment

The main purpose of inspecting places of public entertainment is to see that the premises and sanitary arrangements are maintained in a thoroughly clean state, and that the air in cinemas, theatres and dance halls is kept as pure as possible. In Belfast the condition of the air in places of entertainment was regularly tested throughout the year.

Cinemas and Theatres

During the year 159 tests were carried out by means of the Kata Thermometer and Hygrometer. The number of readings recorded in these tests was 795. In 12 cinemas and theatres the dry Kata readings and rate of air movement were unsatisfactory. It was found necessary in the interest of public health and the comfort of the patrons to serve statutory notices on the management of the cinemas concerned after detailed inspections. Defects complained of were subsequently remedied. At the end of the year extensive alterations were being carried out to the heating and ventilating systems in two cinemas.

Number of cinemas and theatres in city	40
Inspections by Sanitary Officers (including evening inspections) ..	732
Number of sanitary defects discovered during the year	34
Number of sanitary defects remedied during the year	27
Number of cinemas closed during the year	3

Dance Halls, etc.

During the year 72 evening inspections were made and 63 air tests carried out. The tests showed unsatisfactory conditions existing in 7 dance halls, and necessitated the service of 9 statutory notices on the occupiers concerned to carry out works to improve the ventilating systems.

Number of inspections (including evening inspections)	533
Number of defects discovered during the year	60
Number of defects remedied during the year	58
Number of Kata Thermometer readings	310

The following is a summary of defective conditions found in licensed and private dance halls, etc., inspected by Sanitary Officers of the Factories and Shops Section.

TABLE B 12

Nature of Defects	Instances	Notices Served	Remedied	Outstanding
Insufficient ventilation	9	5	8	3
Damp or defective conditions	3	3	5	1
Dirty Conditions	10	7	8	3
Sanitary Conveniences:				
Not provided with proper intervening ventilated spaces	3	3	2	1
Not provided for each sex	1	1	3	—
Not properly screened	—	—	2	—
Not properly lighted	5	3	6	1
Not properly ventilated	1	1	1	1
In a dirty state	3	2	3	—
In a defective condition	3	2	3	2
Insufficient accommodation	3	3	2	1
Insufficient or defective urinal accommodation	3	3	2	2
Unsuitable or want of washing facilities	3	2	3	1
Other defects	13	6	10	5
TOTALS	60	41	58*	21

* Defects remedied include outstanding defects from previous year.

During the year, Sanitary Officers discovered five additional premises being used for public entertainment.

PUBLIC SANITARY CONVENIENCES

Preliminary plans have been prepared for a £56,000 scheme for a new set of public conveniences in Donegall Square East to replace those in Donegall Square North, which are interfering with the smooth running of the one-way traffic scheme. It is also considered dangerous for people to have to negotiate the heavy traffic to get to them. The new conveniences will be approached through a subway at the north end of Donegall Square East. There will be stairways to the lower level from Chichester Street and Donegall Square North, which as well as giving access to the conveniences will be useful as pedestrian subways. The accommodation in each section will include five wash-hand basins and a left-parcel office. Sites have been investigated in the Donegall Road area for the erection of a new public convenience. A tender has been accepted for male and female public conveniences in Falls Park and work should commence early in 1960. Sketch plans have been prepared for attendant's room and lavatories at the Gallagher Playcentre, Severn Street.

Inspections by Sanitary Officers during the year 1,598

TESTING OF DRAINAGE SYSTEMS

During the year 472 drain tests were carried out by District Sanitary Officers, Pest Control Officer, Factories and Shops Officers and Food and Drugs Officers. 252 tests were made as a result of complaints of the ingress of rats into buildings. 231 drains showed defects by smoke machine test: of this number 136 had been tested by reason of complaint of rats and the remaining 95 because of complaints of offensive odours and other causes. A Statutory Notice under the Public Health (Ireland) Acts was served on the owner in each case where defects were discovered and repairs were subsequently carried out. New drains laid in place of those found to be defective were tested by the water test.

House drains completely re-laid 295
 House drains repaired 450
 Drain pipes, bends, traps, gullies, etc., used in repair of drains .. 3,018

PROVISION OF DUSTBINS

Notices served under Section 44, Belfast Corporation Act, 1930 .. 139
 Summonses issued for non-compliance with notices 3
 Dustbins provided during the year 607

MARINE STORES

Inspections during the year	347
Number of defects discovered	54
Number of notices served	31
Number of defects remedied	56

The periodical treatment of all rag stores to eradicate vermin continued throughout the year. The Pest Officers carried out 178 treatments and the cost was charged to the respective proprietors. The following is a summary of defective conditions found in Marine Stores by Sanitary Officers of the Factories Section:—

TABLE B 13

Nature of Defect	Instances	Notices Served	Remedied	Outstanding
Walls in rooms not rendered vermin proof	2	2	2	1
Rooms not enclosed or provided with a proper roof or ceiling	2	1	2	—
Rooms not properly lighted	2	2	2	—
Rooms not properly ventilated	2	1	—	2
Rooms not provided with suitable floor	1	1	2	1
Materials stored so as to obstruct lighting or ventilation	2	1	2	—
Dustbins not provided or trade refuse not removed weekly	4	3	2	2
Premises not kept in a clean state	7	4	8	1
Walls, ceilings, partitions, etc., require re-decoration ..	6	3	5	2
Premises, apparatus, utensils not kept in a state of repair	2	1	1	1
Yards, loading bays, etc., not properly surfaced ..	1	1	—	1
Other defects	2	2	2	2
Sanitary Conveniences				
Not provided with proper intervening ventilated space ..	—	—	2	—
Not provided for each sex	2	2	2	—
Not properly screened	1	1	3	1
Not properly lighted	3	1	3	—
Not properly ventilated	—	—	2	—
In a dirty state	5	2	7	—
In a defective condition	10	3	9	2
Totals	54	31	56*	16

* Defects remedied include outstanding defects from previous year.

Offensive Trades

The following trades prescribed as offensive trades under the Public Health (Ireland) Acts, 1878 to 1946, were carried on at 17 registered premises within the City:—six hide and skin merchants, three fat melters, two bone boilers, three gut scrapers and three tripe cleaners and boilers.

It was not found necessary to take any formal action under the By-laws, but in eleven instances notices were served on occupiers, the defects being subsequently remedied.

Number of inspections during the year	170
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PRIMARY AND SECONDARY SCHOOL BUILDINGS

The Belfast City Council is the Education Authority for the City, the powers and duties of the Authority being exercised and performed through the Education Committee. Two new County Primary Schools were opened (1) Robert Bell, which will serve the Clara Park Housing Estate and (2) Springhill, which has provided much needed relief to the overcrowded Forth River and Springfield Schools. Five old buildings used as Primary Schools were closed. Megain Memorial Primary School was reduced to an Infant School by the termination of the lease of the Church premises which had been used for school purposes for many years. Strand and Mersey Street Primary Schools became reorganised primary schools by the transfer of senior girls to Ashfield Secondary Intermediate School. In the Sandy Row area, Mabel Street and Workman Primary Schools became Infant Schools and the building formerly occupied by Linfield Secondary Intermediate School, renamed Blythefield, supplied the remaining primary school places required for the area. Three new secondary school buildings and extensions to three other secondary schools came into use. Grosvenor High School transferred to

its new premises at Orangefield; Ashfield Girls' Grammar School, renamed Carolan, transferred to the new school building at Carolan Road, thereby freeing the whole of Ashfield Girls' School for the Girls' Secondary Intermediate School.

The Prime Minister of Northern Ireland opened Dunlambert Secondary Intermediate School for Boys, Fortwilliam Park, Antrim Road. The school buildings cost £250,000 and have accommodation for 840 boys. The school on a ten acre site, has a main three-storey teaching block and a two-storey block containing art and craft rooms. In all there are fifteen general classrooms, two music rooms, two social study rooms, assembly hall, administration block, gymnasium, showers and changing rooms, dining room to seat 250, kitchen, library, fine science laboratories, four woodwork rooms, metalwork rooms and modern sanitary facilities.

Linfield Secondary Intermediate School transferred to the former Grosvenor High School building in Roden Street and the new practical block erected at this school was completed and occupied. This school was renamed Kelvin Secondary School. Holy Cross Catholic Boys' School was opened in November. The building which cost £86,000 has twenty classrooms with accommodation for 700 pupils. A new school kitchen and dining rooms, which are sited at Orangefield, were opened. The kitchen is capable of producing over 2,000 meals per day, of which approximately 650 are despatched to other schools. The kitchen is fitted with the most modern steam-heated equipment and can deal with every type of menu.

Nursery County Primary Schools	..	..	..	..	7
Nursery Voluntary Schools	..	..	..	..	1
County Primary Schools	..	..	..	..	73
Additional Accommodation provided for Primary Schools:—					
(a) Premises rented for additional teaching space	..	..	..	..	12
(b) Premises rented for Physical Education	..	..	..	..	12
Voluntary Primary Schools under School Committees	..	..	..	..	1
Voluntary Primary Schools under Lay Management	..	..	..	..	1
Voluntary Primary Schools under Roman Catholic Management	..	..	..	..	64
Approved schools for children requiring special educational treatment					18
Special County Schools	..	..	..	..	6
Special Voluntary Schools	..	..	..	..	2
County Secondary Schools	..	..	..	..	18
Additional accommodation provided for Secondary Schools:—					
Premises rented for Physical Education	..	..	..	..	1
Voluntary Secondary Schools	..	..	..	..	21
Inspections by Sanitary Officers during the year	..	..	..	..	670
Defects notified by School Health Services	..	..	..	..	5
Defects discovered by Sanitary Officers	..	..	..	..	26
Intimations concerning defects sent to Director of Education	..	..	..	..	7
Intimations concerning defects sent to Managers of Voluntary Schools	..	..	..	..	18
Sanitary improvements effected	..	..	..	..	9

Rivers Pollution Prevention Acts 1878—1893

Urban Drainage Act (Northern Ireland) 1957

Number of rivers in City	..	..	..	..	..	22
Inspections by Sanitary Officers during the year	..	..	..	..	..	1,088
Nuisances discovered and abated	..	..	..	..	..	34

During the year the City Surveyor reported to the Improvement Committee that, in view of flooding which had occurred in areas adjoining the Loop River (notably at Tierney's Lane and Knock Eden Crescent) and to provide for a greater discharge of storm water following proposed drainage works to the upper stretches of the river to be carried out by Castlereagh Rural District Council, a scheme for the improvement of the Loop River from Abetta Parade to Mount Merrion Avenue had been prepared, at a total estimated cost of £31,580. Part of the Loop River affected by these improvements forms the boundary between the City and Castlereagh Rural District and part was entirely

in the Rural District Council's area. In order to lower the water level during periods of storm, it would be necessary to lower the weir at Abetta Parade by 18 inches. The Belfast Flax and Jute Company, who own the weir, do not now use any water from the river but were anxious to retain their water rights. It was proposed that, if at any future date the mill required water from the river, the Corporation would deepen the intake channel and mill pond by 18 inches and the Company confirmed that such an undertaking would absolve the Corporation from any future claim in respect of water rights. The City Surveyor stated that, under the terms of the Urban Drainage Act (Northern Ireland) 1957, this scheme might rank for grant not exceeding one-half of the expenses incurred in carrying out the work. The necessary authority was given to negotiate with the Castlereagh Rural District Council in respect of the parts of the river within their boundaries and to approach the Ministry of Agriculture (Northern Ireland) to obtain such approval as might be necessary. The Ministry subsequently authorised the Corporation to prepare, in co-operation with the Castlereagh Rural District Council, a draft Urban Drainage Scheme for the execution of the necessary improvement works.

Belfast Corporation Finance Committee approved the raising of a loan of £460,000 to meet the Corporation's share of the cost of the Blackstaff River Improvement Scheme. The other half of the cost is expected to be borne by the Ministry of Finance. The work involves construction of a culvert from the junction of Broadway and Donegall Road to the River Lagan and the improvement of the Blackstaff River from Roden Street to a point near the Clarence Engineering Works (off Donegall Road). Subsequently the Improvement Committee accepted a tender of £857,455 for the carrying out of this project.

The Ministry of Agriculture authorised the preparation of an improvement scheme for the drainage of the Knock district of Belfast, following the heavy flooding. The main cause of the flooding in the Summerhill estate area was the Knock river. Some time ago the Belfast Corporation put forward proposals for the widening of this river and this is part of the Scheme now in progress. The Corporation's share of the cost of the works is approximately £16,000.

On two occasions the Glenwood River was blocked by large quantities of debris. The City Surveyor's Department cleansed a stretch of the river bed between Alliance Avenue and Brompton Park. Sections of the Mount Vernon and Deerpark Rivers were cleared of obstructions to relieve flooding. The Ministry of Health and Local Government contacted the Local Authority concerning the dangerous and offensive state of a mill dam at the rear of Brompton Park. The City Surveyor's Department endeavoured to trace the owners of the dam with a view to improving conditions.

During the year samples of water were taken from the following rivers for bacteriological examination at the Central Laboratory, Northern Ireland Hospitals Authority:—

Ballygomartin 1, Blackstaff 14, Carr's Glen 13, Clowney 7, Connswater 14, Downview 6, Falls 5, Farset 4, Forth 8, Glen 1, Glenwood 12, Greencastle 4, Knock 12, Lagan 11, Loop 9, Milewater 6, Moat 3, Mount Vernon 3, Parkmount 4, Pound Burn 5, Seaview 3.

The result of the examination of the water showed from 25 to 180+ coliform organisms present in 100 ml., from 0 to 180+ faecal coli present in 100 ml. and from 30 to 100,000 cl. welchii present in 100 ml. indicating that the rivers and streams are subject to pollution.

BARBERS AND HAIRDRESSERS

The Hairdressers Act (Northern Ireland), 1939, requires that every person carrying on the trade or business of a barber or hairdresser shall be registered with the Corporation and the Council have made by-laws under this Act for securing cleanliness of premises and of instruments, towels and equipment used therein. Generally speaking, the majority of the proprietors endeavoured to maintain a good standard of hygiene. Several contraventions of the by-laws were observed during the visits, mostly of a minor character. Occupiers were warned, and upon re-inspection conditions were found to be satisfactory.

Inspections of barbers' and hairdressers' premises during the year	..	1,774
Registered at 1st January, 1959..	.. .. .	433
Registered during the year	.. .. .	26
Deleted during the year	.. .. .	20
Registered at 31st December, 1959	.. .. .	439

COMMON LODGING HOUSES

Sanitary Officers are concerned with the housing of casual workers which is provided in what are known as "common lodging-houses". In recent years a vast improvement has been effected in the accommodation provided in these places, and the less satisfactory houses have been gradually terminated. In Belfast there are five registered common lodging-houses, providing accommodation for 766 males. The Health Committee is responsible for ensuring the provision and maintenance of sanitary accommodation, the abatement of public health nuisances, and precautions against the spread of infectious diseases. There is a tendency, however, these days, for certain persons to use ordinary dwelling-houses or groups of them as lodging-houses. Those who provide the accommodation do so at rates a little higher than those charged in common lodging-houses without being registered. In most cases the premises are quite unsuitable for occupation by numbers of lodgers.

Inspections by Sanitary Officers during the year 123

ATMOSPHERIC POLLUTION

In the investigation of air pollution consideration must be given to the effects of the weather as this plays a large part in measurements taken at or near ground level. Winds cause turbulence and eddies which may bring down to ground level unpleasant or dangerous concentrations of gases emitted from chimneys of industrial and domestic buildings, especially during winter months and which interferes with the normal dispersal of air pollutants. Concentrations of such pollutants may reach toxic levels, producing undesirable effects—even death—in susceptible subjects. Not only does weather affect air pollution but local pollutants may affect weather as can be clearly seen in the difference between town and country during the winter. One of the effects of atmospheric pollution is to exclude health-giving ultra-violet rays of the sun and it is estimated that cities the size of Belfast receive only one-third of the ultra-violet radiation of that received in the clear open countryside. In regard to illumination it is found that the centre of a city receives only half the illumination received outside and that in really foggy weather London loses nine-tenths of the daylight because of smoke. The effects of pollution on visibility and the combination of fog and pollutants to form "smog" is obvious to all with its harmful effects on health and transport, increased cost of lighting and time lost at work.

It is rarely that Northern Ireland gets fog so dense as that experienced in London and the Midlands of England, but the severe "smogs" experienced in Belfast in the latter months of 1958 show that the high degree of local pollution in combination with fog can be as startling in its effects as that found in other parts of the United Kingdom. The news that air pollution is the subject of a Ministry of Health study is a welcome development as the seriousness of the local smog menace has been evident for many years and the measurements first started by the Health Department in 1954 show that the degree of pollution is much more severe than was previously considered. It is hoped, therefore, that this investigation of the problem will lead to an introduction of the long awaited legislation on similar lines to that of the Clean Air Act operating in Great Britain.

There is the question of whether an Act is necessary for Northern Ireland as a whole, but a general Act which leaves the initiative to local authorities should, however, be sufficiently flexible to meet every case. Legislation to clean the air should not be regarded as a further burden to industry and householders should be considered in the light of health and financial saving through greater efficiency, as there is no doubt that smoke abatement and fuel efficiency go hand in hand. Even with legislation it is not until fuel users and others of their own accord regard the avoidable discharge of impurities into the air as unthinkable (as they have for a long time regarded the disposal of sewage into open street gutters) that fully effective means of preventing or diminishing pollution will be found.

While we still look for legislation to enable effective control measures to be taken, local authorities in Great Britain are pressing ahead with existing powers and the total number of smoke control areas established and submitted for confirmation now approaches 500. This is an encouraging response on the part of local authorities in endeavouring to clean up the areas, but the Minister of Housing and Local Government is asking for faster progress, especially with regard to the domestic smoke problem, as it is recognised that half of the smoke in the atmosphere comes from domestic stoves and fireplaces where the discharge is at a low level and the establishment of a smoke control area in residential districts brings about improvements in the daily living of the residents never hitherto imagined.

A Clean Air Act in Northern Ireland would not put an end to pollution within a short time and it is obvious that the work and expense involved in the making of necessary surveys, installing or replacing appliances in both domestic and industrial premises, ensuring the supply of suitable fuels and the eventual supervision of control could cause local authorities to proceed cautiously.

In the mounting world-wide concern at the ever increasing problem of air pollution, the diesel engine has come under heavy fire and it is gratifying to note that the Traffic Control Branch of the City

Police Force are alive to the hazards created, even if only to the point of danger, through reduced visibility, to other road users. More knowledge on the cause and prevention of objectionable engine exhaust is badly wanted. This nuisance is a challenge to the oil and motor manufacturing industries to step up their researches as they are best qualified for the task and will reap the benefit of any improvement effected. Smoke in a diesel engine is a sign of inefficiency. Only an efficient engine will give the maximum advantages which the more efficient fuel combustion has to offer in the form of greater power, longer engine life and more miles per gallon. By eliminating the wastage of unburnt fuel, bills are automatically reduced.

During the past year coal merchants have been carrying out an advertising campaign in favour of the raw coal fire for domestic heating and this is to be deplored by those seeking to clean the air of pollution. Coal still has an important part to play in the fuel requirements of this country, and while industry can equip itself with means for burning coal efficiently and smokelessly, the use of "raw" coal for domestic heating should not be stimulated. Where an open fire is preferred there is no reason why, with a few simple modifications, such fires could not be converted to burning solid smokeless fuel such as coke. Much of the difficulty in burning solid smokeless fuels satisfactorily in open fires arise from too narrow bar spacing of the grate. Effective conversion of the appliance may be secured by the simple replacement of the bottom grate at very low cost with one having five-eighths inch firebar spacing. With such replacements it is desirable to add gas ignition in order to secure simple and smokeless lighting of the fire and this may be accomplished easily and cheaply, where a gas point is available, by the use of a gas poker. Generally speaking, more heat is obtained when burning solid smokeless fuels than when burning the same weight of house coal. This difference, stated in the Report of the Committee on Air Pollution and confirmed by field experience, is such that the appliance efficiency when burning solid smokeless fuel is approximately one third higher than when burning house coal. Suitably installed open fires give their highest efficiency when burning solid smokeless fuels; 16 cwt. of these fuels give the same heat as 20 cwt. of coal.

The Belfast Corporation Estates Department has given a lead in constructing dwelling houses at Annadale Estate No 2. and have installed electric appliances for heating and cooking purposes. In the estate there are 247 units comprising 85 single and two-storey dwellings, 107 flats and 55 maisonettes in addition to 3 shops. From experience gained since the houses were occupied, it would appear that the weekly electricity charge, exclusive of hire, for a two bedroom dwelling, is in the region of 20/- for space and water heating, cooking, lighting and general purpose usage. It is to be expected that when the tenants become more proficient in the use of power this charge will show a slight drop, and it is gratifying to note that there is 95% satisfaction from the tenants who are finding that, apart from freedom from smoke, they are free from the drudgery of fetching coal, ash removal, fire lighting, chimney cleaning and the dust and dirt which goes with the use of solid fuel.

Records of atmospheric pollution continue to be kept by means of the standard deposit gauges and lead peroxide and daily volumetric recording instruments, the number of the daily instruments having been increased at the beginning of this year from one to seven. The solid matter deposited at the ten collecting stations shows a steady fall out between January and September with the average over the period at 15 tons per square mile per month. There was a sharp rise during October when the total amount collected was 290 tons with the monthly average of 29 tons per square mile. There was a slight reduction in November, but the last three months proved to have the heaviest fall out in the period under review. The overall picture as compared with 1958 shows a reduction in the amount collected and the figures for the summer months have dropped to a level never hitherto recorded. This could possibly be accounted for by the good weather experienced this year. The highest individual recording by the deposit gauges was noted at York Road during November when 41.19 tons per square mile were recorded.

There is little material change in the amount of sulphur trioxide collected by the lead peroxide instruments in comparison with the previous year, but the two extra sites set up at Northern Road and Grove are throwing more light on the pollution from the Municipal Power Station West. It is obvious that the station is making a large contribution to the gaseous pollution of the City's atmosphere and, during March when the wind was south/east, the Grove recording site showed 9.5 milligrammes of SO_3 per day, which (on information received from the Department of Scientific and Industrial Research) proved to be one of the highest recordings made for that month at any point in the United Kingdom. This comparison is made against approximately 950 similar instruments maintained by various bodies. The responsibility for such a high degree of pollution does not lie with the Electricity Department but is mainly due to lack of knowledge on methods of prevention and the remedy for this problem is receiving much time and consideration, particularly from the Central Electricity Authority.

With the setting up of six additional daily volumetric recording points at Templemore Avenue, North Road, Balmoral Avenue, Falls Road, Mountcollyer Street and Lowwood Park the position

becomes more interesting as the one recording instrument sited at College Street offered no comparison on a daily basis with suburban areas of the city. These sites were selected after careful consideration and it will be observed that each instrument is sited at a point which, while distant from individual sources of pollution, could be representative of the area as a whole and covers centres of high and relatively low population. The site at Templemore Avenue, set in a densely populated area and within three quarters of a mile from the shipyards and large engineering works, is recording the highest degree of smoke pollution, while the instrument first installed at College Street in 1955 shows air in the central area of the city to have a slightly higher degree of sulphur pollution than any of the other six sites. Daily records obtained from Balmoral Avenue show this area to be the least polluted by smoke and sulphur when compared with any other area of the city, but, after a period of fog, recordings from this point can be as heavy as or heavier than those from constantly bad areas, demonstrating strongly the impurities which are thrown into the air by domestic dwellings in a strictly residential area.

The following table shows the work done in connection with smoke abatement during 1959:—

Timed observations (each over a continuous period of 30 minutes)	771
Number of minutes of black smoke observed	702
Average number of minutes black smoke per 30 minute observation	1
Statutory notices served	25
Verbal notices given	58
Plant inspections and advisory visits	618
Complaints investigated	75
Prosecutions	1
Number of factory chimneys (approximately)	350

Location of Atmospheric Pollution Recording Sites

Health Department

- | | |
|---------------------------|-------------------------|
| 1. Ormeau Avenue | 11. College Street |
| 2. Blythe Street | 12. Templemore Avenue |
| 3. City Cemetery | 13. North Road |
| 4. North Howard Street | 14. Balmoral Avenue |
| 5. Tennent Street | 15. Falls Road |
| 6. York Road Station | 16. Mountcollyer Street |
| 7. Bryson Street | 17. Lowwood Park |
| 8. Ravenscroft Avenue | 18. Grove |
| 9. Station Street | 19. Northern Road |
| 10. Musgrave Channel Road | |

Queen's University, Belfast

- | | |
|-----------------------------|----------------------|
| 20. Royal Victoria Hospital | 21. Stranmillis Road |
|-----------------------------|----------------------|

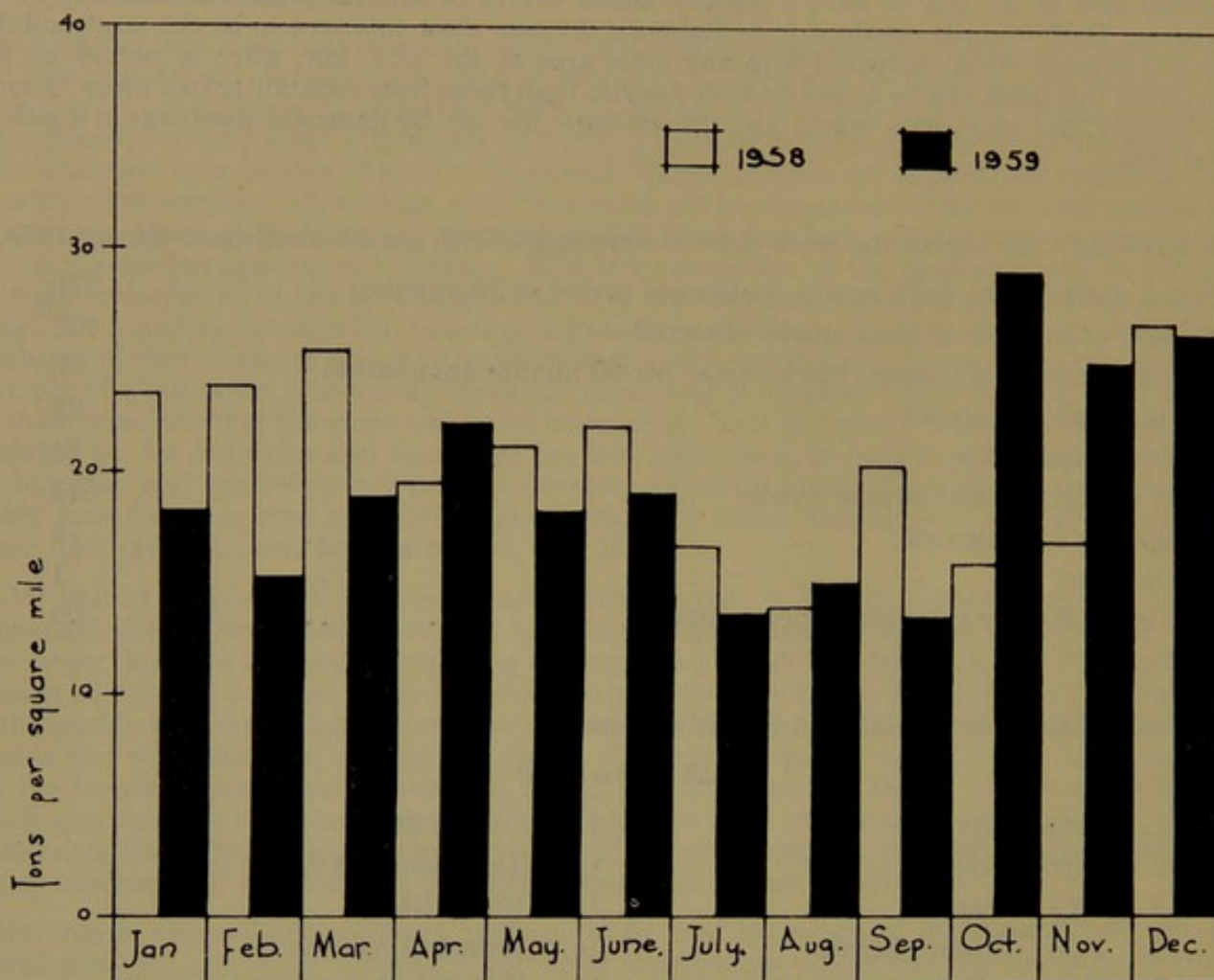
Belfast Corporation Electricity Department

- | | |
|--------------------------|----------------------------------|
| 22. Sydenham Airport | 27. Templemore Avenue |
| 23. Duncrue Street | 28. East Bridge Street |
| 24. Great Patrick Street | 29. Victoria Works, Queen's Road |
| 25. Skegoneill Street | 30. Thompson Dock, Queen's Road |
| 26. Park Avenue | 31. East Twin Lighthouse |

Deposit Gauges

GRAPH 1.

Monthly averages of solid matter deposited in tons per square mile.



Solid matter deposited in tons per square mile at collecting stations during 1959 — (see also graph 1)

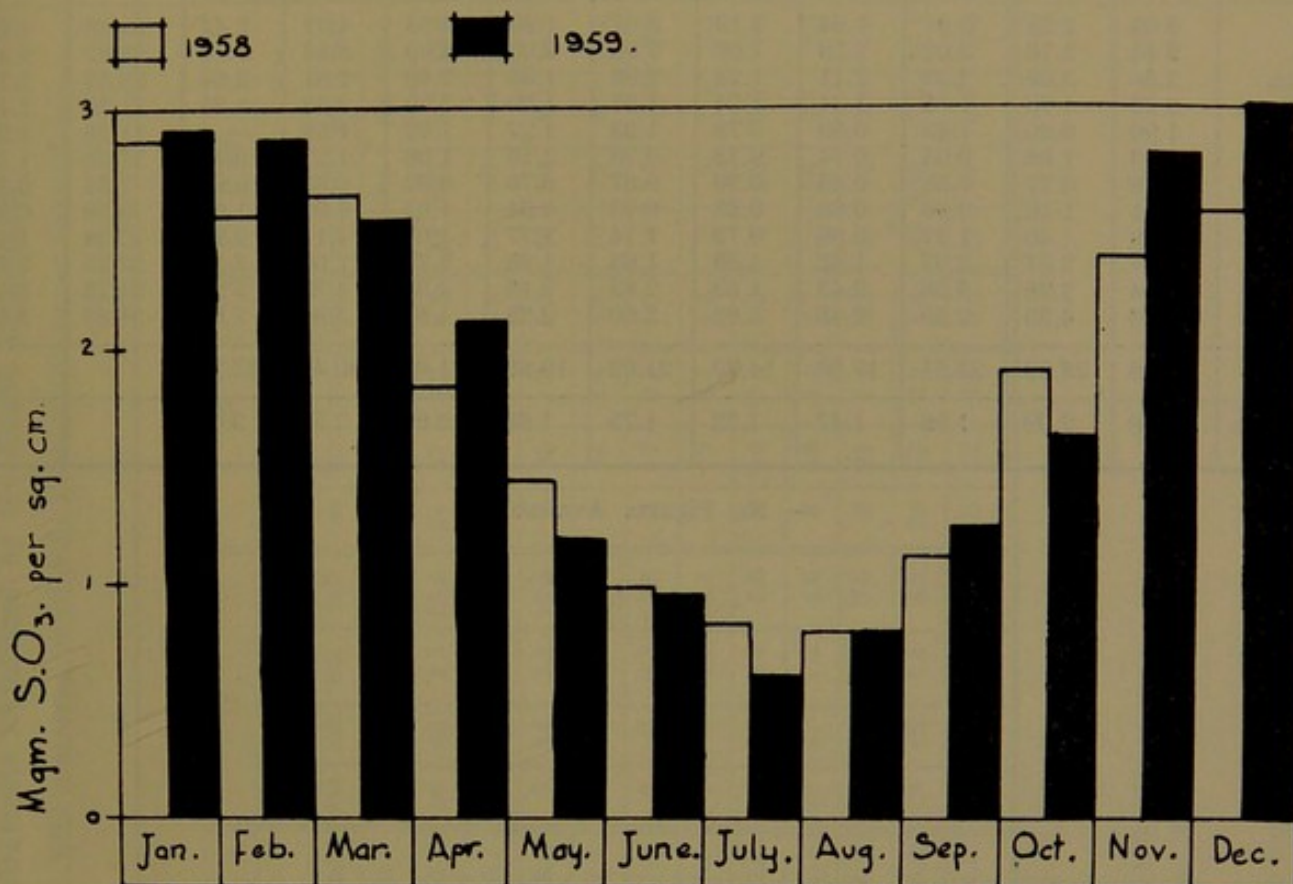
TABLE B 14

MONTH	STATIONS										Totals	Monthly Averages
	1	2	3	4	5	6	7	8	9	10		
Jan.	27.84	13.25	8.52	17.94	14.66	23.34	22.22	10.81	19.10	21.74	179.42	17.94
Feb.	27.43	11.01	5.81	17.91	12.47	27.25	13.46	8.73	20.44	12.90	157.41	15.74
Mar.	36.01	12.96	10.30	17.07	15.68	27.38	14.83	12.35	27.15	14.27	188.00	18.80
April	34.22	18.46	11.38	19.14	15.67	33.35	21.27	18.02	30.57	21.88	223.96	22.39
May	33.98	16.61	13.86	14.87	13.68	22.41	16.38	9.93	27.28	14.64	183.64	18.36
June	29.90	13.22	10.04	16.94	20.70	27.85	14.13	16.21	26.31	15.87	191.17	19.11
July	18.41	12.55	8.86	13.44	10.13	26.18	11.72	8.99	19.84	10.51	140.63	14.06
August	25.08	11.71	6.81	11.54	13.01	23.64	13.52	11.71	23.76	13.10	153.88	15.38
Sept.	25.30	10.97	7.99	12.20	15.81	16.54	11.75	6.04	16.07	10.44	133.11	13.31
October	38.71	22.48	14.03	26.78	29.29	37.69	27.01	21.18	34.23	39.08	290.48	29.04
Nov.	28.58	19.83	10.77	22.98	24.62	41.19	25.84	19.03	32.08	26.61	251.53	25.15
Dec.	29.69	21.54	14.56	27.95	34.90	36.59	23.43	18.35	33.39	34.41	264.81	26.48
Totals	355.15	184.59	122.93	218.76	220.62	343.41	215.56	161.35	310.22	235.45		
Averages	29.59	15.38	10.24	18.23	18.22	28.45	17.96	13.44	25.85	19.62		

Sulphur Pollution

GRAPH 2.

Monthly average weight of $S.O_3$ per 100 square centimetres exposed surface per day. (Lead peroxide method).



Sulphur determination by the lead-peroxide method at the twelve stations during 1959—(see also graph 2)

TABLE B 15

MONTH	STATIONS												Totals	Monthly Averages
	1	2	3	4	5	6	7	8	9	10	18	19		
January	2.5	2.1	1.1	5.7	2.5	3.2	3.6	2.7	3.2	2.9	3.2	1.9	34.60	2.88
February	2.2	2.1	0.8	4.5	2.4	3.0	2.8	2.2	3.6	2.3	5.8	2.6	34.30	2.86
March	1.5	0.9	0.12	3.2	2.3	2.4	2.3	1.5	2.8	1.6	9.5	2.3	30.42	2.53
April	1.5	3.4	0.45	2.5	1.4	2.0	2.2	1.4	2.2	2.5	5.0	1.4	25.95	2.16
May	1.9	1.1	0.9	1.3	0.9	1.5	1.5	1.2	1.6	1.1	1.0	0.7	14.70	1.22
June	1.1	0.55	0.27	1.0	0.55	0.9	1.0	0.9	1.1	1.9	1.7	0.7	11.67	0.97
July	0.6	0.45	0.09	0.54	0.36	0.8	0.7	0.54	0.8	0.7	1.7	0.45	7.73	0.64
August	0.9	—	0.23	0.8	0.5	0.9	0.8	0.6	1.0	1.9	1.1	0.5	9.23	0.84
Sept.	1.0	1.0	0.3	1.3	1.0	1.3	1.3	0.9	1.3	1.0	3.7	1.1	15.20	1.27
October	1.3	1.3	0.5	2.3	1.5	1.9	2.0	1.6	2.1	2.1	2.0	1.2	19.80	1.65
Nov.	2.5	2.2	0.8	3.6	2.3	3.6	3.3	2.3	3.7	2.3	3.0	3.7	33.30	2.78
Dec.	2.9	2.0	0.9	3.7	3.5	2.3	3.0	2.5	4.6	2.8	4.5	4.9	37.60	3.13
Totals	19.9	17.1	6.46	30.4	19.2	23.8	24.5	18.3	28.0	23.1	42.2	21.4		
Averages	1.6	1.5	0.54	2.5	1.6	2.0	2.0	1.5	2.3	1.9	3.5	1.8		

— No Figures Available

SO₃ per 100 sq. centimetres as recorded by instruments maintained by Belfast Corporation Electricity Department

TABLE B 16

MONTH	STATIONS										Totals	Monthly Averages
	22	23	24	25	26	27	28	29	30	31		
Jan.	3.09	2.25	2.91	1.94	2.19	3.07	1.89	4.53	4.37	2.42	28.66	2.86
Feb.	3.44	2.76	3.02	2.18	1.66	2.56	2.08	3.99	3.88	3.10	28.67	2.86
March	2.39	3.08	2.33	2.11	1.28	2.05	1.35	2.48	2.81	2.64	22.52	2.25
April	3.02	1.76	1.85	1.34	1.24	1.85	1.29	3.60	3.08	2.25	21.28	2.12
May	1.90	0.80	1.43	0.56	0.78	1.23	1.27	1.62	1.59	—	11.18	1.24
June	2.03	1.06	0.98	0.74	0.73	0.76	2.15	1.06	1.27	0.75	11.53	1.15
July	1.58	0.77	0.68	0.45	0.36	0.57	0.78	0.62	0.83	0.90	7.54	0.75
August	1.41	1.16	0.90	0.68	0.53	0.73	0.94	1.03	0.91	1.09	9.38	0.93
Sept.	1.79	1.40	1.37	0.96	0.72	1.14	1.77	1.04	1.11	0.99	12.29	1.22
October	3.71	2.67	2.07	1.82	1.56	1.63	1.88	2.76	2.04	2.13	22.28	2.22
Nov.	3.74	2.99	3.08	2.43	1.83	2.83	2.15	4.38	4.79	3.56	31.78	3.17
Dec.	4.26	4.33	2.89	2.45	1.82	2.60	2.25	4.54	3.80	2.89	31.83	3.18
Totals	32.36	25.03	23.51	17.66	14.70	21.02	19.80	31.65	30.48	22.72		
Averages	2.69	2.09	1.96	1.47	1.22	1.75	1.65	2.64	2.54	2.06		

— No Figures Available

TABLE B 17

Rainfall at ten deposit gauge stations for 1959

STATION	RAINFALL IN INCHES											
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
No. 1 ..	1.81	0.99	2.60	2.40	1.22	2.21	3.35	0.83	1.26	3.66	3.15	5.36
No. 2 ..	1.81	1.10	2.68	2.64	1.22	2.32	4.22	0.87	1.30	3.51	3.39	5.79
No. 3 ..	2.09	1.30	2.48	2.99	1.26	2.60	5.04	0.83	1.54	3.74	3.15	2.28
No. 4 ..	1.89	1.02	2.56	2.36	1.38	2.05	4.33	0.83	1.50	3.62	3.19	5.67
No. 5 ..	1.89	1.14	2.84	2.21	1.34	1.81	4.61	0.83	1.58	3.35	3.35	5.63
No. 6 ..	1.65	0.87	2.29	2.17	1.34	2.21	3.32	0.79	1.30	3.35	2.99	5.16
No. 7 ..	1.69	0.83	2.44	2.32	1.42	2.32	2.84	0.95	1.14	3.94	3.11	5.59
No. 8 ..	1.50	0.79	2.29	1.93	1.30	2.60	2.09	0.95	1.02	3.47	3.07	5.40
No. 9 ..	1.65	0.99	2.48	2.17	1.34	2.09	2.92	0.95	1.18	3.59	3.31	5.40
No. 10 ..	1.38	0.83	1.85	1.85	1.18	2.29	2.88	0.79	1.10	3.19	2.36	3.70
Monthly Average	1.73	0.98	2.45	2.30	1.30	2.25	3.56	0.86	1.29	3.54	3.10	4.99

Results of the Daily Volumetric Instruments maintained by the Health Department

(Concentration of Smoke (Milligrams per 100 cubic metres) and Sulphur Dioxide (parts per 100 million))

TABLE B 18

Month	STATIONS																																									
	11						12						13						14						15						16						17					
	Smoke			SO ₂			Smoke			SO ₂			Smoke			SO ₂			Smoke			SO ₂			Smoke			SO ₂			Smoke			SO ₂								
	ma	hdr		ma	hdr		ma	hdr		ma	hdr		ma	hdr		ma	hdr		ma	hdr		ma	hdr		ma	hdr		ma	hdr		ma	hdr		ma	hdr							
January	45	98	11.8	9.2	33.9	25.2	53	120	10.1	36.6	27	57	5.6	20.1	22.3	28	78	5.0	4.8	16.7	4.8	28	73	28	41	110	8.6	8.6	28.0	8.6	25	70	4.5	4.5	15.1	4.5						
February	37	133	9.2	33.9	25.7	9.1	45	142	9.1	25.7	24	116	4.2	20.9	10.5	21	88	3.3	3.2	8.8	3.2	24	67	24	44	105	9.1	18.9	18.9	18.9	26	79	4.2	4.2	12.2	4.2						
March	20	43	6.9	13.0	9.4	4.4	24	59	4.4	9.4	11	33	2.5	6.7	5.6	9	26	2.5	3.2	8.9	3.2	10	25	10	24	40	6.4	21.4	21.4	21.4	11	26	3.5	3.5	9.9	3.5						
April ..	16	37	6.0	11.9	6.3	11.1	19	39	6.3	11.1	8	23	3.5	8.6	14.8	6	24	3.1	2.7	5.3	2.7	7	23	7	16	50	5.2	14.8	14.8	14.8	8	33	3.6	3.6	9.1	3.6						
May ..	13	27	4.4	11.4	3.6	14.4	14	37	3.6	14.4	6	15	2.0	7.2	7.7	8	30	2.7	2.4	5.8	2.4	8	24	8	10	28	3.0	10.5	10.5	10.5	6	14	2.5	2.5	7.0	2.5						
June ..	5	13	1.9	3.6	1.8	5.6	5	13	1.8	5.6	3	6	1.0	1.9	1.5	2	6	0.7	0.7	1.7	0.7	3	7	3	6	16	1.6	3.3	3.3	3.3	2	5	1.1	1.1	2.5	1.1						
July ..	3	7	1.3	2.4	1.1	2.6	3	7	1.1	2.6	1	3	0.8	1.5	2.1	1	8	0.7	0.7	1.5	0.7	2	5	2	3	6	1.1	2.1	2.1	2.1	1	5	0.7	0.7	1.6	0.7						
August ..	6	16	1.3	2.6	1.2	2.6	4	12	1.2	2.6	2	7	0.7	2.8	1.8	2	10	0.4	0.4	1.5	0.4	3	10	3	4	10	0.9	1.9	1.9	1.9	2	5	0.5	0.5	1.6	0.5						
September	15	41	2.9	6.4	2.5	6.6	14	41	2.5	6.6	6	26	1.1	2.7	4.0	10	27	1.2	1.1	2.7	1.1	8	18	8	13	28	2.6	3.8	3.8	3.8	7	18	1.5	1.5	2.9	1.5						
October	15	43	3.2	7.5	2.6	6.4	15	38	2.6	6.4	8	17	1.7	4.3	3.0	7	33	1.2	1.1	2.6	1.1	8	21	15	15	42	2.9	7.4	7.4	7.4	9	34	2.1	2.1	5.3	2.1						
November	33	94	2.7	18.3	4.6	16.3	30	93	4.6	16.3	18	68	2.9	10.3	8.0	13	55	1.8	2.2	8.4	2.2	19	58	30	106	5.3	20.1	20.1	20.1	24	106	3.1	3.1	14.8	3.1							
December	20	62	3.0	11.0	4.4	10.6	29	83	4.4	10.6	14	52	2.4	4.5	7.2	13	74	2.1	2.1	5.6	2.1	18	52	18	27	51	6.5	16.3	16.3	16.3	18	63	3.0	3.0	7.1	3.0						

ma—Monthly Average. hdr—Highest Daily Reading.

Heaviest Pollution—

Smoke—Templemore Avenue 3rd February, 142 Mg. per 100 cubic metres.

SO₂ .. 16th January, 36.6 parts per 100 million.

Lightest Pollution—

Smoke—Balmoral Avenue and North Road 7th July. No Smoke Recorded.

SO₂ — Balmoral Avenue and Falls Road 25th August. No SO₂ Recorded.

Results of Daily Volumetric Instruments Maintained by Queen's University, Belfast

TABLE B 19

MONTH	STATION							
	20				21			
	Smoke		SO ₂		Smoke		SO ₂	
	ma	hdr	ma	hdr	ma	hdr	ma	hdr
January ..	41	109	9.5	23.0	—	—	—	—
February ..	28	102	6.8	20.3	—	—	—	—
March ..	20	42	4.5	8.8	23	52	5.0	9.0
April ..	12	36	3.1	7.7	16	34	4.3	7.6
May ..	14	32	3.8	8.4	13	30	3.9	10.1
June ..	4	11	0.9	1.9	5	13	1.0	2.0
July ..	3	12	0.5	1.9	3	5	0.3	1.1
August ..	5	16	0.9	2.1	4	6	0.6	1.9
September ..	15	37	3.5	7.2	11	21	2.4	4.6
October ..	13	31	2.8	6.5	14	41	2.7	7.2
November ..	25	86	3.2	11.5	23	81	2.9	13.2
December ..	22	84	2.5	10.7	22	69	2.7	9.5

— No Figures Available

PORT SANITARY

The Corporation of Belfast as the Sanitary Authority was permanently constituted the Port Sanitary Authority for the Port of Belfast by the Local Government Board (Ireland) Provisional Orders Confirmation (No. 4) Act, 1900.

The expenses of the Port Sanitary Authority are contributed by the Urban and Rural Sanitary Authorities in the following proportions:—

The Corporation of Belfast	92 per cent.
The Carrickfergus Urban District Council	1 per cent.
The Holywood Urban District Council	1 per cent.
The Bangor Borough Council	1 per cent.
The Newtownabbey Urban District Council	1½ per cent.
The Castlereagh Rural District Council	1½ per cent.
The Larne Rural District Council	1 per cent.
The North Down Rural District Council	1 per cent.

I. Amount of Shipping entering the Port during the year 1959

TABLE B 20

	Number	Tonnage	Number Inspected		Number recorded as defective	Ships on which defects have been remedied	Ships reported as having had, during the voyage, infectious disease on board
			By Medical Officer	By Sanitary Officer			
FOREIGN: Steamers } Motors }	931	1,416,818	93	931	115	101	13
COASTWISE: Steamers } Motors }	6,687	4,575,187	17	1,037	171	160	7
TOTAL	7,618	5,992,005	110	1,968	286	261	20

II. Character of Trade of Port

(a) Passenger Traffic (other than coastwise) during the year

TABLE B 21

Passengers	Aliens		British		Total		Refused leave to land
	Forces	Civilians	Forces	Civilians	Forces	Civilians	
Inwards by ship	—	97+ 199 granted T.S.L. not landing	—	301	—	398+ 199 T.S.L.	2
Inwards by Aircraft	83	232	—	787	83	1,019	—
TOTAL	83	329+ 199	—	1,088	83	1,417+ 199	2
Outwards by ship	—	55	—	195	—	250	Refused leave to embark Nil
Outwards by Aircraft	69	192	—	725	69	917	Nil
TOTAL	69	247	—	920	69	1,167	Nil

T.S.L.—Temporary Shore Leave.

(b) Cargo Traffic:

Principal Imports: Maize, Wheat, Barley, Oats, Flour, Butter, Fresh, dried and canned Fruits, Meat and Meat Products, Tea, Fish, Vegetables, Eggs (Frozen and powder), Wines, Ales, Cordials, Carobs, Grain, Offals, Cattle, Pig and Poultry Fodder, Hides (cured), Timber, Wood-pulp, Paper, Flax, Hemp, Coir, Rayon Fibre, Chemicals, Fertilizers, Oil, Coal, Coke, Duralium, Tinplate, Steel, Cement, Building materials, Tar, Vehicles, Tobacco.

Principal Exports: Machinery, Ropes and Twine, Linen, Thread, Tobacco, Cigarettes, Potatoes, Eggs, Grass-seed, Poultry, Fresh Fish, Shellfish, Apples, Whiskey, Live Cattle, Sheep and Pigs, Hides (wet), Pork, Steel and Iron scrap.

(c) Foreign Ports from which ships arrived:

Abo 2; Abidjan 1; Adelaide 2; Albany 1; Algiers 3; Alicante 3; Almeria 1; Amsterdam 8; Antwerp 40; Ards 1; Archangel 8; Arklow 1; Askarshamn 1; Aveina 1; Ballina 5; Baltimore 6; Baei Comeau 1; Bathurst 1; Bay Bull 2; Bayonne 5; Beira 10; Beirut 1; Bona 1; Boston 1; Bremen 3; Bremerhaven 1; Bridgewater 1; Brisbane 2; Buenos Aires 2; Bunbury 1; Caen 1; Calcutta 3; Capella 2; Capetown 10; Cartagena 11; Casablanca 8; Ceuta 1; Chittagong 1; Civita Vecchia 2; Cobh 2; Cochin 1; Colombo 4; Constanza 3; Copenhagen 21; Cork 6; Corpus Christi 1; Curaco 4; Dakar 18; Dar-es-Salaam 4; Demerara 1; Detroit 1; Dieppe 2; Douranenez 1; Dublin 82; Dundalk 4; Dunkirk 9; Durban 7; Duluth 6; Drammen 1; Drogheda 4; Esbjerg 6; Emden 1; Famagusta 6; Frederiksund 5; Freetown 5; Fremantle 5; Galveston 3; Geelong 1; Genoa 5; Geraldton 2; Ghent 45; Gothenburg 11; Guernsey 37; Gydnia 1; Haifa 4; Halmstead 1; Hamburg 30; Hamina 2; Haukapudis 2; Helsinki 6; Huelva 4; Horta 1; Houston 3; Husavic 1; Istanbul 3; Izmir 1; Kalamata 1; Kalmas 1; Kotka 11; Lagos 1; Larvik 5; Las Palmas 4; Le Guildo 1; Le Havre 2; Le Leque 2; Le Treport 1; Leghorn 1; Leixoes 1; Letterkenny 4; Libau 1; Liepae 1; Limasol 1; Lisbon 1; Lobito 1; Lourenco Marques 1; Los Angeles 1; Lyndiane 1; Madras 1; Malaga 1; Mantyluto 3; Marseilles 2; Matadi 1; Melbourne 2; Messina 2; Mobile 2; Moirana 1; Mombasa 8; Montreal 19; Mostaganem 6; Merville 1; Naples 2; Nemours 1; New Orleans 5; Newport News 4; New Westminster 1; New York 1; Nordenham 1; Norfolk, Va. 7; Norrkoping 2; Odessa 1; Oporto 1; Oslo 7; Oran 10; Palmero 1; Patras 1; Philippeville 2; Philadelphia 3; Piraeus 3; Pondicherry 1; Port Albernie 1; Port Alfred 8; Port Arthur 3; Port Churchill 2; Port Lincoln 1; Port Pine 1; Port Sudan 1; Port of Spain 1; Prince Rupert 11; Rangoon 2; Randers 1; Reykjavik 1; Rosslare 1; Rosario 2; Rostock 1; Rotterdam 66; Rouen 24; Salerno 1; San Lorenzo 1; Sapele 1; Sindrishamn 1; Skagen 4; Skien 2; Sligo 2; Sorel 1; South Nelson 1; Split 1; St. John, N.B. 19; St. Johns, N.S. 1; Stettin 5; Stenshaven 1; Suez 1; Sourabaya 1; Sydney 6; Tahses 1; Takoradi 2; Tallin 2; Tangier 1; Toledo 1; Toronto 3; Tors-haven 1; Torreveija 1; Three Rivers 1; Trinidad 1; Tunis 3; Valencia 7; Vancouver 11; Venice 1; Walvis Bay 3; Waterford 18; Westport 1; Wexford 1; Weymouth 3; Wilmington 7; Windsor, N.S. 1; Wismar 4; Wormerveer 3; Zyghi 3.

The nationality of the ships which arrived at the Port and were inspected was as follows:—

Belgian 8; British 1,258; Costa Rican 2; Chilean 1; Danish 36; Dutch 431; Finnish 4; French 4; German 76; Greek 6; Icelandic 2; Israeli 1; Italian 7; Japanese 1; Liberian 12; Moroccan 1; Norwegian 34; Panamanian 5; Polish 6; Republic of Ireland 23; Roumanian 2; Russian 5; Spanish 12; Swedish 30; Yugo-Slavian 1.

The Aliens Order 1953: (S.I.1671/1953)

Under Articles 30 and 33 of the above Order, Dr. W. G. Swann, Dr. J. McA. Taggart, Dr. W. J. McLeod and Dr. A. L. Walby have been appointed by the Ministry of Health and Local Government as Medical Inspectors for the Port of Belfast for purposes of the Order.

Ships carrying aliens including those granted T.S.L.	125 inwards; 33 outwards
Aircraft carrying Aliens	.. .. . 17 inwards; 14 outwards

III. Water Supply

(a) and (b) for Port and Shipping:—

The water supply for the port and shipping is taken from the mains which supply the City and the surrounding districts of Belfast.

The supply is controlled by the Belfast City and District Water Commissioners who have hydrants on all quays and wharves.

(c) Water Boats:—

There are no waterboats at the port.

Water Sampling

42 samples of water were taken on board ships and submitted to the Public Health Laboratory for bacteriological examination. 30 of these samples were reported as highly satisfactory and 12 samples as unsatisfactory because of the presence of coliform organisms which in 2 cases were of faecal origin. Where analysis revealed contamination the ships water supply, tanks, pumps and systems were thoroughly cleansed, flushed and chlorinated with effective results in every case.

IV. Public Health (Ships) Regulations (Northern Ireland), 1954

1. Arrangements for dealing with Declaration of Health Forms:—

Declaration of Health Forms as recommended by the Association of Sea and Air Port Health Authorities of the British Isles are in use at the Port. Special instructions relative to the Port of Belfast are given on the fourth page and a supply of these forms is distributed to H.M. Customs Officers and the Belfast Harbour Commissioners for the use of the Pilotage service.

A Declaration of Health Form signed by the master and countersigned by the Ship's Surgeon (where one is carried) is received from each ship arriving at the port from a foreign port. The Declaration of Health Form is received by the Customs Officer or the Port Sanitary Officer on the arrival of the ship. The answers to the questions contained in the Declaration are scrutinised and supplementary questions asked.

In cases where the Customs Officer first boards the ship and the Declaration of Health is satisfactory, pratique is granted. If the Declaration of Health is not satisfactory, the circumstances are immediately reported to the Port Medical Officer, who makes investigations before passengers or crew are allowed to land.

Ships arriving at the port are required to display the appropriate quarantine signals as laid down in the regulations.

2. Boarding of ships on arrival:—

All ships arriving from a foreign port are boarded on arrival by an officer of H.M. Customs and an officer of the Port Sanitary Authority.

3. Notification to the Authority of Inward Ships requiring special attention (Wireless messages, land signal stations, information from pilots, Customs Officers, etc.):—

Arrangements for the transmission of wireless messages from inward bound ships requiring special attention under the Regulations have been made with the various shipping companies and

agents in Belfast. Under the arrangements the Shipping Companies receive the wireless message required under Regulation 13 and forward the information to the Port Medical Officer.

Alternatively, or in addition, wireless messages are received direct by the Port Sanitary Authority, the telegraphic address "Portelth Belfast" having been registered for this purpose. (Regulation 14 (1) and (2)).

No land signalling system is in operation.

Close co-operation exists between the Port Sanitary Authority and the Officers of H.M. Customs and notifications of ships requiring special attention are received from the latter.

4. Mooring Stations designated under Regulations 22 to 30:—

(a) Within the Docks:—With the concurrence of H.M. Customs and the Belfast Harbour Commissioners, the ordinary places of mooring, discharge or loading, in relation to inward ships from foreign ports, have been designated "Mooring Stations" within the docks.

(b) Outside the Docks:—The outside mooring station is situated at Carrick Roads, about three-and-a-half miles from the nearest point of the docks. Infected or suspected ships or other ships which may be unhealthy are required to proceed to established mooring stations.

5. Particulars of any standing exemptions from the provisions of Regulation 6:—

Standing exemptions from detention under Regulation 6 are granted:—

(a) In the case of ships arriving from a port or seaboard included in the list referred to in Regulation 6, unless such port or seaboard has been specially referred to in the weekly list, or special instructions have been issued in regard to same

(b) In the case of vessels having on board one of the common infectious diseases such as Scarlet Fever, Measles, Tuberculosis, Mumps, Diphtheria, Whooping Cough, Influenza, or Malaria.

During the year 4 contacts of Small-Pox, 1 contact of Dysentery and 1 contact of Gastro-Enteritis whose arrival in Belfast had been advised by other Sea and Air Port Health Authorities, were kept under surveillance for the requisite periods.

6. Experience of Working of Regulation 18: restriction on boarding or leaving ships:—

In carrying out the provisions of this Regulation during the year no difficulty arose and it was not necessary to require passengers to furnish names and destinations, etc., as there was no case of infectious disease on board any ship arriving at the port which required this procedure.

7. Arrangements made for:—

Regulation 5 (c) (i): Premises or Waiting Rooms for Medical Inspection:—There are at present no premises set apart as a Customs Examination Hall, waiting rooms and rooms for medical inspection of passengers, as there are no direct passenger sailings between this port and foreign ports. Passengers who arrive by direct cargo ships from foreign ports are examined, if necessary, on board the particular ship.

Regulation 5 (c) (ii): Premises for temporary isolation of persons as required by the Regulations:—None provided.

Regulation 5 (c) (iii): Cleansing, Disinfecting or disinfestation of ships, persons or clothing:—After the removal of a case or cases of infectious disease, disinfection of the ship is carried out by the Port Sanitary Officers. Clothing and other effects are removed to the Health Committee's Disinfecting Station, Laganbank Road, where they are subjected to steam pressure disinfection. The cleansing of persons is also carried out at this station at which suitable facilities have been provided for this purpose.

Regulation 5 (d): Arrangements for reception into hospital of persons as required by the Regulations:—The Northern Ireland Hospitals Authority make provision for the reception of cases of infectious diseases at the Northern Ireland Fever Hospital at Purdysburn. Separate premises situated in the hospital grounds, but self-contained and isolated from the other hospital buildings, are available for the reception of cases of smallpox.

Regulation 5 (e): Ambulance Transport:—The port makes use of the facilities provided for ambulance transport in the City by the N.I. Hospitals Authority.

Regulation 5 (f): Supervision of Contacts:—When contacts of infectious disease are members of the crew they are kept under supervision by the Port Medical Officer. In the case of passengers or crew landing, their destinations are ascertained. Should they proceed to a place outside Belfast, the Medical Officer of the relevant district is notified.

During the year 1 contact of chickenpox, 1 contact of gastro-enteritis, 1 contact of typhoid fever and 1 contact of German measles, whose arrival in Belfast had been advised by other Sea and Airport Health Authorities, were kept under surveillance for the requisite periods.

8. Arrangements for Bacteriological or Pathological Examination of Rats for Plague:—

Bacteriological and Pathological examination of rats for Plague is carried out by arrangement with the Director of Laboratory Services, Northern Ireland Hospitals Authority.

9. Arrangements for other Bacteriological and Pathological Examinations:—

All other bacteriological and pathological examinations are carried out by arrangement with the Director of Laboratory Services, Northern Ireland Hospitals Authority.

10. Arrangements for the Diagnosis and Treatment of Venereal Diseases among Sailors under International Agreement:—

Upon the arrival of ships in the port, information is given to the master as to arrangements for the diagnosis and treatment of venereal disease amongst sailors. Pamphlets are left on board which give the location and time of V.D. clinics. The pamphlets give warning of the danger of the disease. Every encouragement is given for attendance at the following clinics:—

The Royal Victoria Hospital
The Mater Infirmorum Hospital.

When continuation of treatment at other ports is necessary, the Sailor's Form V.44 is filled in by the Medical Officer in charge of the V.D. clinic, giving full particulars of the treatment received by the sailor.

The Belfast Harbour Commissioners have permitted the permanent display of posters issued by the Health Department containing similar warning and information regarding Treatment Centres in the dock side lavatories and urinals.

11. Arrangements for Interment of the Dead:—

All arrangements for the interment of the dead are attended to by the shipping companies.

Cases of infectious sickness landed from ships (including coastwise ships)

TABLE B 22

Disease	Cases during 1959		Ships Concerned	Average Cases for previous five years
	Passengers	Crew		
Dysentery	—	3	2	1
Influenza	—	2	2	4
Tonsillitis	4	2	2	1
Tuberculosis ..	4	—	4	11

Cases of infectious sickness occurring on ships during the voyage but disposed of prior to arrival

TABLE B 23

Disease	Cases during 1959		Ships Concerned	Average cases for previous five years
	Passengers	Crew		
Chicken Pox	—	1	1	1
Dysentery	—	5	2	—
Impetigo	—	1	1	—
Influenza	—	6	3	7
Malaria	—	2	2	—
Tonsillitis	—	1	1	—

No cases of Plague, Cholera, Yellow Fever, Smallpox, Typhus Fever, or Relapsing Fever occurred, and no plague-infected rats were discovered during the year.

V. Measures Against Rodents.

1. Steps taken for detection of rodent plague:—

In Ships in Port:—All ships arriving from ports where plague is endemic are boarded by the Port Sanitary Officer as soon as possible after berthing. Enquiries are made as to the prevalence of rats on board, and as to whether any sick or dead rats were found during the voyage. The ships are then inspected to ascertain the degree of rat infestation, and are periodically inspected during the time they remain in port in order to ascertain if any dead rats have been found in the cargo.

2. Measures taken to prevent the passage of rats between ship and shore:—

All ships arriving from foreign ports are required to affix rat-guards to all moorings and maintain them so fixed during the time they are in port. It is also recommended that the gangway or other communication with the shore should be raised at least eighteen inches from the ground.

3. Methods of Deratting of Ships, etc.:—

(a) Ships: Deratting of ships is carried out by fumigation with hydrogen cyanide. The fumigation is carried out by contractors under the supervision of the Port Sanitary Officers, the minimum concentration being two ounces per thousand cubic feet with a minimum of two hours exposure.

(b) Premises in the vicinity of docks, quays, etc.:—The various shipping companies and occupiers of premises in the vicinity of the docks carry out at the request of the Port Medical Officer, such works as may be necessary for the extermination of rats. Notices are issued, if necessary, under the Rats and Mice (Destruction) Act, 1919, and are served on the occupiers of the premises.

4. Measures taken for Detection of Rats in Ships and on Shore:—

(a) In Ships:—Ships arriving in the Port are inspected by the Port Sanitary Officers who ascertain whether or not they are infested with rats.

(b) On Shore:—Stores in the vicinity of the docks are inspected regularly for the detection of rats.

5. Rat Proofing:—

(a) Extent to which docks, wharves, warehouses, etc., are ratproof:—

The docks and wharves on the County Antrim side of the Port are so constructed as to be as nearly ratproof as possible. The floors of the sheds and warehouses and the roadways leading thereto are constructed of concrete or granite setts laid on concrete.

On the County Down side the wharves are mostly erected on piles and these afford a certain amount of harbourage, but as these are used principally for the discharge of coal, ores, steel, etc., they are not so attractive to rats as those where grain and foodstuffs are landed.

(b) Action to extend ratproofing:—

(1) In Ships:—Efforts are directed toward sealing vulnerable places such as provision stores and pantries where food is kept. This is generally done by encasing with sheet metal and closing the means of access for rats between one apartment and another so as to make them as ratproof as possible.

(2) On Shore:—Periodical inspections are made by the Port Sanitary Officers to see that the various premises in the vicinity of the docks are kept in good condition.

Most owners and occupiers of the premises are aware of the damage caused by rats to merchandise and take every precaution to prevent the access of rats to their premises.

Number of Rats Destroyed during the year

(1) On Ships:—

TABLE B 24

Species	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Black..	2	2	1	2	—	—	3	—	4	—	2	—	16
Brown	—	—	1	—	2	—	—	2	—	1	—	—	6

Note: In addition to above, 24 mice were destroyed.

(2) In Docks, Quays, Wharves, Warehouses:—

TABLE B 25

Species	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Black.. ..	2	2	—	—	—	—	3	—	1	—	3	—	11
Brown	3	4	9	3	8	5	15	8	5	2	—	1	63

In addition to above 65 mice were destroyed. Number of rats destroyed, as recorded in above table, were only those which came to the notice of the Port Sanitary Officers.

The sheds and stores on the Belfast Harbour Commissioners estates, the shops, stores, building and fitting out berths of the Ship Building and Ship Repairing Companies also the Belfast Corporation Power Stations are baited regularly by experienced operators, using chiefly warfarin, with effective results and considerable reduction in recent infestation.

Measures of rat destruction on plague "infested" or "suspected" ships or ships from plague-infected ports arriving during the year:—

No plague "infested" or "suspected" ships arrived in the Port of Belfast during the year.

Deratting Certificates and Deratting Exemption Certificates issued during the year:—

TABLE B 26

Net Tonnage	Ships	Deratting Certificates Issued					Deratting Exemption Certificates Issued	Total
		After Fumigation with			After Trapping, Poisoning, etc.	Total		
		HCN	Sulphur	HCN and Sulphur				
Up to 300 tons	18	—	—	—	—	—	18	18
From 301 tons to 1,000 tons	21	—	—	—	—	—	21	21
From 1,001 to 3,000 tons	8	—	—	—	—	—	8	8
From 3,001 to 10,000 tons	25	3	—	—	—	3	22	25
Over 10,000 tons	4	1	—	—	—	1	3	4
TOTALS	76	4	—	—	—	4	72	76

VI. Hygiene of Crews Spaces:

Classification of Nuisances:—

TABLE B 27

Nationality of Ship	Inspected during 1959	Defects of Original Construction	Structural Defects through wear and tear	Dirt, vermin, and other conditions prejudicial to health
British	1,528	—	86	251
Other Nationalities	710	—	20	115

The defects found consisted of:—

TABLE B 29

	British	Other Nationalities
Defects due to wear and tear:		
W. C. joints	1	—
W.C. Flushing Valves	3	1
Urinal Flushing Valves	1	—
W.C. Basins	5	—
W.C. Seats	3	—
Wash Basins	4	—
Galley Stoves	5	—
Flue pipes to stoves	7	—
Heating stoves	1	—
Soil discharges (W.C. and Urinal)	6	—
Portlights	14	6
Decks	15	8
Waste Pipes	2	1
Tiling	1	—
Refrigerators (overhauled)	5	—
Service pipe	—	1
Ventilators	2	1
Coffee, milk and water boilers (overhauled)	1	—
Urinal Stalls	1	—
Heating system (overhauled)	2	—
Slop Shute	1	—
Ventilation system (overhauled)	3	—
Sinks	1	—
Tables (recovered)	1	—
Scupper pipe	1	—
Deck-head insulation	1	1
Drinking water filters (overhauled)	2	—
Doors	—	1
Other Conditions:		
Quarters, washplaces, galleys, messrooms, storerooms and alleyways required cleansing	52	27
Water closet compartments required cleansing	32	29
Quarters, washplaces, galleys, messrooms, storerooms and alleyways required painting	31	2
W.C. compartments required painting	2	—
Passenger accommodation required painting	1	—
Urinal stalls required cleansing	1	—
Refuse on deck (removed)	—	1
Scuppers required cleansing	32	19
Tanks required cleansing (attended to during refit)	30	4
Bilges required cleansing (attended to during refit)	27	4
Swill bins provided	1	2
Dock-side nuisance (soil discharge from ships)	12	4
Vermin; Bugs, weevils, cockroaches, beetles, ants, etc.	30	23
TOTALS	340	135

VII. Food Inspection:

(1) Action taken under the Public Health (Imported Food) Regulations 1937-1948, the Public Health (Imported Milk) Regulations 1926, and the Public Health (Preservatives, etc., in Food) Regulations 1927-1953.

During the year all sheds and warehouses where food is landed or stored were inspected regularly for the detection of unsound food.

Unsound food seized or surrendered:—

TABLE B 29

Description	Tons	Cwts.	Qrs.	Lbs.
Apricot Pulp	—	11	3	14
Apple Concentrate 10 gallons	—	—	—	—
Beef Dripping	—	—	—	24
Cheese	—	—	1	26
Cherries in Water	—	—	3	26
Chocolate Mallow Creams	—	—	—	16
Cling Peaches	—	—	—	13½
Cornflakes	—	—	—	12
Fillets of Cod and Haddock	—	4	2	—
Fruit Salad	—	—	1	12
Grape Fruit Juice 108 Fluid Ounces	—	—	—	—
Green Grapes	—	—	—	20
Margarine	—	—	—	14
Peaches in Syrup	—	5	3	26
Pears in Syrup	—	15	2	17
Sultanas	1	13	0	21
Toasties (Biscuits)	—	—	—	22½

The following informal samples taken under the above Acts were submitted to the Public Analyst for chemical analysis:—

Asparagus soup 1; Baked Beans 1; Beef and Liver Soup 1; Barley 1; Brown Sugar 1; Cheese Spread 1; Cream 1; Creamed Pudding 1; English Mustard; Grapefruit Sections 1; Ground Almonds 1; Gingerbread Mix 1; Instant Coffee 1; Jelly Mixture 1; Lentils 1; Mixed Dried Fruit 1; Pickled Red Cabbage 1; Processed Peas 1; Salmon Spread 1; Tapioca 1; Vegetable Salad 1; Vegetable Soup 1; Whole Rice 1; Yeastless Rusk 1.

No milk was imported.

(2) Shellfish:—Information respecting any shellfish beds or layings within the jurisdiction of the Port Sanitary Authority, stating whether they are, in the opinion of the Port Medical Officer, liable to pollution:—

There are no layings of shellfish within the jurisdiction of the Port Sanitary Authority.

Report of any action under the Public Health (Shellfish) N.I. Regulations 1936 or the Sale of Food and Drugs Acts, 1875 to 1954:—

Under the Belfast Corporation Act, 1930 it is an offence to gather any shellfish within the jurisdiction of the Port Area. Posters are exhibited in the vicinity of the Port area during the summer months, warning the public against the gathering of shellfish.

Smoke observations of ships' funnels

Number of observations made during the year—80 (each of 30 minutes' duration). Number observed discharging black smoke over 2 minutes in a continuous period of 30 minutes—2. Number of Statutory Notices served—2. Verbal notice was given to 16 masters, chief engineers and ships' managers regarding the volume of dark brown smoke being emitted.

Routine and other inspections not included in main report:—

986 Visits to cross-channel (passenger) ships.

328 re-inspections regarding defects, etc.

109 inspections regarding deratting and deratting exemption certificates.

FACTORIES

The Factories Act (Northern Ireland), 1938, is the legislation to ensure as far as practicable that the conditions under which workers are employed in factories are reasonably healthy and safe. The term factory is defined by the Act and covers all manufacturing establishments and a wide field of workplaces where persons are employed by way of trade or for the purposes of gain and includes, under certain conditions, warehouses, which normally are regarded as outside the scope of the term factory.

The district council within its own boundary is responsible for the administration of Section 7 with respect to sanitary arrangements in all types of factories; Sections 1 to 6 in non-power factories with respect to cleanliness, overcrowding, temperature, ventilation and the drainage of floors in work-rooms; Section 35 with respect to means of escape in the case of fire; Section 44 with respect to the approval of drinking water; Sections 55 and 56 which cover, under certain circumstances, the issue or withdrawal of Certificates of Suitability for basement bakehouses and the special conditions for sanitary and unsanitary bakehouses; Sections 111 and 112 with respect to sanitary arrangements in works of building or engineering construction and Sections 114 to 117 with respect to the conditions under which "outwork" is carried on. The Factories Act (N.I.), 1949, extends the powers, amends certain sections and makes additional provisions to the principal Act of 1938.

A new enactment concerned with Factories has just been introduced in Northern Ireland, cited as the Factories Act (Northern Ireland), 1959, and this, together with the 1949 and 1938 Acts, will be known in the future as the Factories Acts (Northern Ireland), 1938 to 1959. This new Act amends the Factories Acts (Northern Ireland), 1938 and 1949, making further provision for the health, safety and welfare of persons employed in factories or in premises or operations to which those Acts apply, and for the application to certain premises of the enactments relating to Mines and the Quarries Act (Northern Ireland) 1927. The new Act is dated the 8th December, 1959 and, apart from Section 23 relating to the employment in factories of young persons, will not come into operation until such day as the Minister of Labour and National Insurance may order.

The following tables give details of the work carried out during the year 1959 in connection with the Factories Acts (Northern Ireland), 1938 and 1949.

Inspections for Health Provisions of the Factories Acts

TABLE B 30

PREMISES	Inspections	Notices Issued	Occupiers Prosecuted
Factories with mechanical power	3,060	82	3
Factories without mechanical power	158	8	—
*Other premises under the Act (including works of building and engineering construction, but not including outworkers' premises) ..	662	14	2
TOTALS	3,880	104	5

*Electrical stations reckoned as factories.

CONDITIONS FOUND

TABLE B 31

PARTICULARS	Instances	Remedied	Referred to Chief Factory Inspector	Prosecutions Instituted	Outstanding at end of year
Want of Cleanliness (S.1)	5	6	2	—	—
Overcrowding (S.2)	—	1	—	—	—
Unreasonable temperature (S.3)	—	—	2	—	—
Inadequate ventilation (S.4)	9	7	2	—	3
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary Conveniences (S.7):					
Insufficient	35	33	—	1	3
Unsuitable or Defective	393	399	—	4	48
Not separate for sexes	3	3	—	—	2
Other Offences (excluding offences relating to Homework which are reported in Table B 33)	61	15	46	—	6
Breaches of special sanitary requirements for bakehouses (S.56 to S.59)	2	2	—	—	—
TOTALS	508	466*	52	5	62

* Defects remedied include outstanding defects from previous year

In addition to the work outlined in the above tables, surveys are made of the office accommodation attached to factories (which is outside the provisions of the Factories Acts (Northern Ireland) 1938) and these are included in the tables under the heading "Non Industrial Premises".

Nuisances of a public health nature discovered during the inspections of factories were dealt with under the provisions of the Public Health (Ireland) Acts, 1878 to 1946, and the Belfast Corporation Acts, 1845 to 1956, details of which are as follows:—

Inspection of Factories and Workplaces under Public Health (Ireland) Acts 1878 to 1946 and Belfast Corporation Acts 1845 to 1956

Nuisances discovered	95
Statutory Notices issued	43
Nuisances abated	56
Dangerous structures, risk of fire, etc., reported to City Surveyor for action	12
Special Surveys and reports to City Surveyor under Planning Acts ..	88
Plans examined concerning new works and alterations	117

FACTORY OUTWORKERS (HOMEWORK)

The Local Authority under part 8 of the Factories Act (Northern Ireland) 1938 (Sections 114 to 117) is responsible for enforcement of the provisions with respect to "homework". Factories who manufacture handkerchiefs, bed linens, table linens, etc. often send such articles to the homes of former employees or other experienced persons for finishing, hemstitching, smoothing, altering and repair and it is necessary from a public health point of view that such work is carried on in homes free from infectious disease and in reasonably hygienic conditions, consequently it is necessary to make periodical visits to these houses and to examine the daily returns of infectious diseases.

It is obligatory under this part of the Act for the owners or occupiers of factories to send, to the local authority of their area in the months of February and August of each year, a list showing the name, address and class of work carried on by outworkers employed by them from these lists the local authority compiles the statutory register. It is also obligatory on the local authority who receive lists of outworkers who reside outside their area to notify the local authority within whose area the outwork is carried on.

When a case of infectious disease occurs in an outworkers' premises, or when outwork is being carried on in unwholesome premises, the local authority is required to send a notice to the owner or occupier of the factory employing such outworker, prohibiting the sending of further outwork until the house or part thereof liable to be infected is disinfected to the satisfaction of the Medical Officer of Health, or other reasonable precautions have been adopted. The notice also prohibits the removal of any outwork from the house in which a case of infectious disease has occurred until it has been disinfected by an officer of the Health Department.

INSPECTION OF OUTWORKERS' PREMISES

TABLE B 32

Nature of Work	Inspections	Unwholesome premises (Section 115)			Infected premises (Sections 116/117)		
		Instances	Statutory Notices Served	Prose- cutions	Instances	Orders made	Prosecutions (Sections 116/117)
1. Making, cleaning, washing, altering, ornamenting, finishing and repairing of wearing apparel ..	41	1	1	—	1	1	—
2. Making-up, ornamenting, finishing and repairing of table linen, or other household linen (including in the term "linen" articles of cotton and linen mixtures)	499	3	3	—	7	7	—
3. Textile weaving and any process incidental thereto	—	—	—	—	—	—	—
4. Others	—	—	—	—	—	—	—
TOTALS	540	4	4	—	8	8	—

Outworkers' premises within the City, notified during the year ..	653
Notices sent to factories employing outworkers	94
Notices for failing to keep or send list of outworkers	6
Outworkers' returns received	958
Outworkers notified from other districts	6
Outworkers notified to districts outside City	308

BAKEHOUSES

The Factories Acts make bakehouses subject to the provisions for factories generally and, whilst there are special provisions relating to bakehouses which enable control of insanitary and "basement" bakehouses, the provisions generally are concerned with the protection of the health of employees. The protection of the public in regard to soundness of foodstuffs or materials used and hygienic practices employed in bakehouses is obtained from the Public Health (Prevention of Contamination of Food) (N.I.) Regulations, 1948. Table B 33 gives particulars of conditions found in bakehouses and action taken by the Department.

Bakehouses on register at 1st January, 1959	230
Inspections during the year	970

Conditions discovered during year.

TABLE B 33

Nature of Defects	Instances	Notices Served	Remedied	Out-standing
Want of cleanliness in food rooms	22	5	20	2
Cleanliness of persons handling foodstuffs not observed	6	—	6	—
Unreasonable temperature (or ventilation inadequate or not being maintained)	15	9	16	3
Inadequate provisions for rendering fumes, etc., harmless	4	3	2	4
Inadequate provisions for drainage of floors	—	—	—	—
Drain inlets within food rooms	7	3	6	2
Sanitary conveniences communicating directly with food rooms	1	1	1	—
Ceilings, walls, floors, doors, etc., in disrepair	27	17	58	10
Ceilings, walls, floors, doors, windows, etc., requiring cleansing	17	6	14	3
Preparation or cooking rooms structurally defective	18	11	30	9
Suitable and sufficient washing facilities not provided	6	3	7	4
Suitable cloakroom accommodation not provided	4	4	3	1
Cleanliness of utensils, machinery, benches, etc., not observed	5	3	5	—
Suitable and sufficient lighting not provided or not maintained	—	—	1	—
Preparation rooms overcrowded	4	2	4	—
Other defects	16	7	14	5
TOTALS	152	74	187*	43

* Defects remedied include outstanding defects from the previous year.

During the year it was found necessary in sixteen instances to institute legal proceedings against occupiers and owners of bakehouses for breaches of the Public Health (Prevention of Contamination of Food) Regulations (Northern Ireland), 1948, and the Public Health (Ireland) Acts, 1878 to 1946, as follows:—

- Failing to observe due cleanliness of the rooms, benches, tables and machinery where food was prepared and stored for the purpose of sale for human consumption.
- Having sold food containing foreign matter which rendered the food unsound, unwholesome and unfit for the food of man.
- Failing to keep in a proper state of repair the ceilings, walls and floors of the rooms in which food was prepared or stored.
- Failing to provide and maintain in proper order suitable and sufficient washing facilities.
- It was also found necessary in one case to institute legal proceedings against an employee of a bakehouse for failing to take all reasonable precautions to prevent contamination of foodstuffs under his control.

INSANITARY BAKEHOUSES

During the year five bakehouses were found to be in such a defective condition structurally as to render them unfit for the preparation of food under the provisions of the Public Health (Prevention of Contamination of Food) Regulations (Northern Ireland) 1948 and on representation by the Department the premises ceased to be used for that purpose. In two instances the volume of business carried on had increased to such an extent as to result in overcrowded conditions in food preparation rooms consequently proper hygiene could not be controlled; the firms concerned moved to larger and more up-to-date premises. 9 new bakeries were established during the year under the supervision of Sanitary Officers and four new bakehouses were in course of construction or modernization at the end of the year.

BREAD DELIVERY VEHICLES

The inspection of bread delivery vehicles and food containers for cleanliness and defective conditions likely to cause breaches of the Public Health (Prevention of Contamination of Food) Regulations (Northern Ireland) 1948, continued during the year and a reasonably good standard continues to exist. The older type of bread delivery vehicles, with no proper inside lining and with ledges and metal straps capable of retaining dirt and dust which are very difficult to cleanse properly, are disappearing and newer vehicles, lined with plastics and other suitable hard smooth surfaces easily maintained and kept clean and less likely to become defective, are taking their places. In the case of the older vehicles representations have been made to managements, resulting, in addition to the regular cleansing and washing, periodical re-painting of the inside of the vehicles with hard gloss paint. Many firms are co-operating. One of the large bakery concerns in the City has fitted out sixteen of their bread delivery vehicles which are used on long journeys with reasonably good washing facilities. These washing facilities include a small plastic wash-hand basin, towels and soap and supplied with hot water from insulated hot water containers fitted inside the vehicles. The firm hopes to extend these washing facilities to other vehicles and are to be commended for their efforts to promote good hygienic practice among their employees.

It was found necessary in three cases to issue warnings to bakery managements to give more care to the cleansing of the inside of their bread delivery vehicles and action had to be taken against one bakery for delivering pastry in a private car without due care being taken to prevent possible contamination.

Bread Shops

Bread shops on register at 1st January, 1959	..	..	..	254
Inspections during the year	..	..	..	595

Conditions discovered during the year:—

TABLE B 34

Nature of Defects	Instances	Notices Served	Remedied	Out-standing
Want of cleanliness in food rooms	5	3	5	—
Want of cleanliness of persons handling foodstuffs	2	1	2	—
Unreasonable temperature (ventilation inadequate or not being maintained)	6	4	4	2
Drain inlets within food rooms	1	1	3	—
Sanitary conveniences communicating directly with food rooms	3	3	5	—
Ceilings, walls, floors, windows, doors, etc., in disrepair	7	4	3	4
Ceilings, walls, floors, windows, doors, etc., required cleansing	7	3	7	—
Suitable and sufficient washing facilities not provided	3	3	4	1
Cleanliness of utensils, benches, food containers, etc., not observed	—	—	2	—
Suitable and sufficient lighting not provided or maintained	—	—	1	—
Other defects	47	45	43	6
Totals	81	67	79*	13

* Defects remedied include outstanding defects from the previous year.

It was found necessary in one instance to institute legal proceedings against the occupier of a breadshop for failing to provide adequate washing facilities under the Public Health (Prevention of Contamination of Food) Regulations (Northern Ireland), 1948.

THE BETTING AND LOTTERIES ACT (NORTHERN IRELAND), 1957

As reported last year, the coming into operation in March, 1958, of the Betting and Lotteries Act (Northern Ireland), 1957, had the effect of securing many improvements of a public health nature in bookmakers' establishments. "Notices of intention" are served on the Police and local authority in whose area the premises are situated, that an application has been made to the Courts for a certificate of suitability, after which the premises are inspected by Sanitary Officers and reports are made to the Health Committee on the conditions found. The Committee may authorise the issue of notices by the Town Solicitor of the Corporation's intention to object to the application and setting out the reasons for their action. At the subsequent hearing of the applications evidence is heard from the Police and local authority inspectors before a decision is made by the Court.

The chief objections raised by the Health Department to the granting of certificates of suitability are concerned with overcrowded conditions, insufficient natural lighting and ventilation, structural defects or alterations, damp conditions, sanitary accommodation, etc. The Courts upheld all these objections except for the provision of sanitary accommodation for patrons and in every case refused to grant a certificate until the work specified by the Department was carried out or until the applicant gave the Court an undertaking that the premises would be put in order.

There are approximately 28 bookmakers' offices operating in the City whose owners or occupiers did not comply with the provisions laid down in the Betting and Lotteries Act (Northern Ireland), 1957, with respect to the date when the business was established and whose applications for certificates of suitability have been adjourned pending appeals to the Higher Courts as to the validity of the Act, with the result that the owners or occupiers of such premises, until a decision is given, are unwilling to effect improvements of a public health nature where structural or other alterations are necessary and where the business may or may not be prohibited by the Act.

Quite a few of these premises are unsuitable and cannot be made suitable unless re-building takes place or because of restricted space available, while the larger number of the premises require structural alterations to a greater or lesser extent. As these premises are held to be illegal under the Act until a decision is given by the Higher Courts, no action can be taken by the Health Department.

The following summary concerning bookmakers' offices in the City in connection with the Betting and Lotteries Act (Northern Ireland), 1957, does not include inspections by Sanitary Officers or particulars of any improvements carried out in such premises as the result of action taken under the Public Health Acts and Local Acts as these are included in the section under the heading of "Non Industrial Premises".

1. Number of Bookmaking Offices operating in the City	138
2. Number of applications made to the Courts with respect to premises for certificates of suitability	116
3. Number of applications adjourned from last year and still pending decision of the Courts	30
4. Number of certificates of suitability granted	108
5. Number of certificates of suitability refused	8
6. Number of intimation notices sent of intention to object to the grant of certificates on public health grounds	114
7. Number of undertakings given to the Courts that the premises would be altered to comply with public health requirements ..	21
8. Number of appeals pending the Recorder's decision against refusals from the lower Court.. .. .	9
9. Number of bookmakers' offices closed as the result of inability to comply with public health requirements	2

NON-INDUSTRIAL PREMISES

Office buildings inspected	1,003
Office suites inspected	1,425
Inspections during the year	1,265

TABLE B 35

Nature of conditions	Instances	Remedied	Out-standing
Offices overcrowded	32	30	12
Offices inadequately ventilated	56	104	20
Offices inadequately lighted	39	34	24
Offices inadequately heated	10	11	1
Offices dirty	5	7	2
Stairways and passages dirty	6	20	1
Offices, etc., requiring re-decoration	10	10	2
Offices not free from noxious fumes	1	1	—
Offices in a damp state	7	12	3
Offices in a defective condition	25	38	10
Unsuitable provision for taking of meals	2	4	—
Unsuitable or no drinking water	5	5	6
Unsuitable or no washing facilities	11	20	6
Other Defects	29	46	20
<i>Sanitary accommodation—</i>			
Insufficient	7	8	9
Not separate for the sexes	3	4	—
Dirty state	10	20	1
No intervening ventilated spaces, screening, etc.	4	21	3
Defective conditions, etc.	20	38	10
Unsuitable urinals	36	99	10
Separate means of approach not provided	1	—	1
TOTALS	319	532*	141

* Defects remedied include outstanding defects from the previous year.

Medicines, Pharmacy and Poisons Acts (Northern Ireland), 1925 to 1955

The inspection of shops and traders engaged in the sale of poisons included in part 2 of the Poisons Schedule of the Medicines, Pharmacy and Poisons Acts (Northern Ireland), 1925 to 1955, continued during the year. The confusion encountered early in 1958 on the introduction of the new regulations has been smoothed out and traders are much more conversant with their responsibilities under the Acts and Regulations. The types of household goods covered by the Part II Schedule of the Act include household ammonia, sheep dips, hair dyes, paint removers, horticultural sprays, insecticides, preparations for household fumigation, carbolic disinfectants, sanitary fluids, etc., with the result that a large percentage of traders are covered.

Under the Act the local authority is obliged to keep and maintain a register of all persons engaged in the sale of Part II poisons and each year (at least 21 days before the expiry of the date of registration) a notice is sent out informing the person concerned of the expiration of the old registration together with an application for renewal and particulars of the fees involved, etc. The premises are then inspected to ascertain if the provisions of the Poisons Acts and Regulations are being complied with and a written report is made to the Health Committee who authorise the registration or otherwise.

The following summary gives particulars of the work carried out:—

Inspections	447
Applications for registration received	403
Reports to Health Committee	405
Premises registered	402
Refusal of registration on grounds of unsuitability	1
Contraventions of the regulations discovered	12

During the year it was found necessary in one instance to report, to the Inspector appointed by the Ministry of Home Affairs, a trader who was using easily recognised and accepted food containers for re-filling with poisons included in the Poisons Schedule and offering these for sale to the public. The Inspector took immediate action to have the practice stopped.

There were 28 persons' names removed from the Register during the year, as 20 traders had ceased keeping poisons for sale to the public, two premises had closed down and one had changed ownership.

RAG FLOCK ACT 1911

The visiting of premises in the City where rag flock is stored or sold or in possession for the purpose of making up upholstery goods, the stuffing of furniture, cushions, bedding, etc., continued during the year. In addition to the inspection of the premises for cleanliness, heating, ventilation, etc., under the Factories Acts and for nuisances under the Public Health Acts, samples of the rag flock found on the premises are taken under the Rag Flock Act, 1911, and the Rag Flock Regulations, 1912, for the purpose of determining if the rag flock is in compliance with the prescribed standard of cleanliness, which is that the amount of soluble chlorine (in the form of chlorides removed by the thorough washing of the flock with distilled water at a temperature not exceeding 25 degrees centigrade from not less than 40 grammes of well mixed flock) shall not exceed 30 parts of chlorine in 100,000 parts of flock.

The standard of cleanliness from the returns of the analysis of the samples taken shows a decided improvement over the last few years, indicating the results of the improved methods of washing of the raw materials before the manufacture into flock.

The following is a summary of the work carried on during the year in connection with the above Act and the Regulations made thereunder:—

Premises on register where rag flock is used	40
Inspections of premises	53
Samples of rag flock submitted to Public Analyst	37
Samples certified as not being in compliance with the Rag Flock Regulations, 1912	Nil
Cautionary letters sent	Nil
Prosecutions instituted	Nil

SHOPS ACT (NORTHERN IRELAND), 1946

The Shops Act (Northern Ireland) 1946 is divided into three parts: the first part deals with the closing hours of shops, the second part with the hours of employment and the health and welfare of employees and the third part with miscellaneous matters, general duties of local authorities, definitions, offences and penalties. While it is the duty of a local authority to administer all the provisions contained in the Shops Act within its own boundaries, it is only with the second part of the Act, particularly with the health and welfare section and those sections of the miscellaneous part dealing with administration, that the Health Department is concerned, as the closing hours of shops and the hours of employment are the responsibility of the Police Department of the Corporation.

The requirements of the welfare sections of the Shops Act are in the main somewhat similar to the provisions of the Factories Act (Northern Ireland) 1938, in that they were designed to safeguard and protect the health and promote the general well being of the persons employed. The provisions of the Shops Acts include that suitable and sufficient ventilation, heating facilities, lighting, washing facilities and sanitary accommodation shall be provided and maintained. It also requires, where employees take meals on the premises, that suitable facilities shall be provided, but omits some very important provisions contained in the Factories Acts, such as the cleanliness and overcrowding provisions. The Shops Act also lacks the definitions and standards prescribed by Regulations under the Factories Acts. Each local authority is left to determine what would be a reasonable standard for "suitable and sufficient", with the result that varying standards are enforced and this causes confusion among traders, particularly the managements of multiple stores, who have shops in different areas under different local authorities. It is appreciated from a practical point of view that the fixing of specific standards with regard to some of the provisions would be difficult and in some cases impossible: what would be considered a reasonable degree of heat or adequate means of ventilation in say a hardware shop would be out of place and not meet the needs of a fish or butcher's shop, but, on the other hand, the lack of a standard on the provision of sanitary accommodation and washing facilities has resulted in different standards being enforced in various parts of Northern Ireland. Again, under the Shops Act, powers are given to local authorities to grant "Exemption Certificates" from the provision of sanitary accommodation and washing facilities where in the opinion of the local authority special conditions prevail in the shop concerned and this too has led to confusion by the different interpretations and different standards being operated.

Apart from food shops, which are covered by the Food Regulations, there is no direct provision for the keeping of non-food shops in a cleanly state and the requirements of the Factories Act relating to workrooms would, with modifications, be a welcome addition to the Shops Act. There is also the question of the provision of first aid boxes in shops as required in factories. Admittedly, the danger

of accidents in shops is not so great as in factories, but accidents do occur, particularly cuts of minor and major natures and, as first aid boxes are inexpensive, every trader should consider it his duty to provide a readily accessible cabinet or special drawer containing a suitable first aid kit and in the large stores employing over fifty of a staff a person with some first aid training should be put in charge of the first aid cabinet.

The following are details of the work carried out during the year in connection with the administration of the Shops Act (Northern Ireland) 1946:—

Number of shops on the register	6,667
Complete surveys made during the year	1,015
Inspections during the year	2,630
Contraventions discovered	200
Statutory notices served	112
Exemption certificates issued since 1946 with respect to alternative sanitary accommodation	27
Exemption certificates issued since 1946 with respect to washing facilities	17
Summonses issued during the year	2
Number of applications for exemption refused by the Health Committee with respect to sanitary accommodation or washing facilities	2

Conditions Found:—

TABLE B 36

Nature of conditions	Instances	Remedied	Out-standing
Suitable and sufficient ventilation not provided	3	4	3
Suitable and sufficient ventilation not maintained	4	6	2
Efficient means for securing a reasonable temperature not provided	7	5	3
Suitable temperature not maintained	2	2	—
Suitable and sufficient means of lighting not provided or maintained	1	1	—
Insufficient and unsuitable washing facilities	32	20	17
Unsuitable facilities for the taking of meals	—	—	—
<i>Sanitary Accommodation—</i>			
Insufficient	9	6	3
Not provided separately for sexes	3	8	1
Ventilation inadequate	9	8	3
Lighting inadequate	3	4	3
Floors, walls, basins, seats, cisterns, etc., defective or dirty	128	109	36
Screening, doors, fasteners, etc., defective or not provided	2	6	2
Absence of an intervening ventilated space	7	6	3
Separate means of approach not provided	3	2	2
TOTALS	213	187*	78

* Defects remedied include outstanding defects from the previous year.

Inspection of shops under the Public Health (Ireland) Acts, 1878 to 1946

Public health nuisances discovered during the year	82
Statutory Notices served	45
Nuisances abated	58
Notices outstanding at 31st December, 1959	14

FOOD AND DRUGS

Report on the administration of the Food and Drugs Acts in relation to sampling to check the nature, substance and quality of food sold within the City:—

The Sale of Food and Drugs Acts impose a duty on local authorities to sample food for chemical analysis as to its nature, substance and quality. The Food and Drugs Inspectors, being authorised officers under the Acts, purchase samples of food of as wide a variety as possible in order to make a comprehensive check on all food sold in the City.

During the year ended 31st December, 1959, the Inspectors purchased 1,406 samples; 24 of these samples were reported by the Public Analyst as not being genuine and not of the nature, substance and quality demanded by the purchaser. This gives a percentage adulteration figure of 1.71 and can be regarded as highly satisfactory and indicative of a high standard of quality of food sold in the City. Of the 24 adulterations found, 19 were what can be conveniently described as "butchers' products" i.e. sausages, sausage meat, minced beef and steak. These adulterations were due to the excessive use of preservatives where permitted, and the addition of preservatives to food where it was prohibited. In 17 convictions in the Courts for the misuse of preservatives fines amounting to £60 were imposed. Thus another chapter in the story of preservatives has been enacted and as in previous years the excuses and explanations offered to the Courts are many and varied. The Food Inspectors advise butchers to exercise care in the use of preservatives where it is permitted and also point out the folly of using it in meat when it is prohibited. It is obvious that the advice given goes unheeded in certain instances. There were few other adulterations. One was of buttermilk which had a very high water content, two of jams deficient in solids, and a sample of bread and butter which was certified to be bread and margarine.

In the latter part of the year, resulting from a chemical analysis of a nationally sold meat product, it was found necessary to take issue with the manufacturers on the labelling of the product as compared with the contents in the tin. This matter was at the end of the year still the subject of correspondence between the Department and the Medical Officer of Health of the City in England where the manufacturer's premises are situated.

The following table shows the number of the samples procured and examined in the past five years, and the percentage of adulterated samples:—

TABLE B 37

Year	Number taken			Number adulterated			Percentage adulterated		
	Formal	Informal	Total	Formal	Informal	Total	Formal	Informal	Total
1955	1,410	9	1,419	24	1	25	1.70	11.11	1.76
1956	1,400	3	1,403	53	2	54	3.79	33.33	3.85
1957	1,398	9	1,407	52	7	54	3.72	22.22	3.84
1958	1,376	10	1,386	28	2	35	2.03	70.00	2.53
1959	1,401	5	1,406	23	1	24	1.64	20.00	1.71

Description of samples of Food and Drugs analysed.

TABLE B 38

Article	Number Analysed	Article	Number Analysed
Almonds, Ground	4	Coconut, desiccated	4
Angelica	1	Coffee	2
Aspirin	1	Coffee, Chicory and Sugar	1
Balsam, Cough	2	Complan	1
Barley	10	Condiment, non-brewed	26
Beef, Corned	2	Confectionery	1
Beef, Minced	50	Cornflour	11
Beer	3	Cream	10
Bemax	1	Cream of Tartar	3
Brandy	3	Cream, Whipping	2
Bread and Butter	12	Crystals, Foam	2
Breadcrumbs, Golden	1	Crystals, Lemon	1
Browning	4	Crystals, Monosodium Glutamate	1
Butter	32	Crystals, Orange	1
Butter, Peanut	2	Curd, Banana	1
Buttermilk	21	Curd, Lemon	9
Cakes, Fish	3	Curd, Orange	1
Cascara	1	Cyder	1
Cereals	1	Drink, Orange	3
Cheese	1	Dripping	3
Cheese, Lemon	4	Ducks, Savoury	2
Cherries, Glace	1	Essence, Coffee and Chicory	12
Chocolate, Drinking	7	Essence, Ginger Wine	1
Chutney	6	Essence of Rennett	3
Cinnamon	3	Farola	10
Cloves	2	Fat, Cooking	13
Cockles	2	Figs, Syrup of	6
Cocoa	8	Flour	4

TABLE B 38 (continued)

Article	Number Analysed	Article	Number Analysed
Flour, Self Raising	8	Pepper	11
Food, Malted	1	Piccalilli	3
Fruit	2	Pickles	4
Fruit, Dried	22	Pie, Steak and Kidney	2
Gelatine	1	Pork Steak and Onion	1
Gin	1	Powder, Baking	6
Ginger	5	Powder, Boracic	1
Glucose	2	Powder, Curry	5
Glycerine	1	Powder, Custard	7
Glycerine, Lemon and Honey	3	Powder, Dessert	1
Herbs, Mixed	1	Powder, Seidlitz	1
Honey	5	Protein, Hydrolysed	1
Horseradish Relish	1	Prunes	2
Ice-Cream	74	Pudding, Black	4
Ice-Cream and Fruit Juice	1	Quinine, Tincture of	2
Jam	17	Rice	7
Jelly, Table	16	Rolls, Meat and Onion	2
Juice, Fruit	8	Roll, Pork with Stuffing	1
Ketchup, Tomato	3	Sage, Dried	2
Lard	12	Salad Cream	11
Lentils	4	Salts, Fruit	1
Linctus, Cough	1	Salts, Health	2
Lollipops	19	Sal Volatile	2
Lucozade	1	Sauce	16
Macaroni	3	Sausages and Sausage Meat	214
Magnesia, Carbonate of	4	Sausage, Liver	3
Magnesia, Hydroxide	1	Seeds, Carraway	1
Magnesia, Tablets of	1	Semolina	4
Mallows, Coconut	1	Soda, Bicarbonate of	17
Margarine	27	Soft Drinks	39
Marmalade	7	Soup, Cream of Mushroom	2
Marzipan	1	Spice, Mixed	8
Mayonnaise	3	Spread, Chocolate	1
Meat, Luncheon	9	Spread, Orange	1
Milk, Evaporated	3	Spread, Sandwich	5
Mincemeat, Sweet	7	Steak, Minced	57
Mix, Cake	2	Steak, Stewed	1
Mixture, Cough	2	Stuffing, Sage and Onion	3
Mix, Pastry	2	Suet, Shredded	13
Mix, Soda Bread	2	Sugar, Demerara	2
Mix, Soup	28	Sugar, Icing	1
Mustard	13	Sweetmilk	159
Nutmegs, Ground	2	Syrup, Blackcurrant	1
Oats, Porage	1	Syrup, Flavouring	1
Oil, Almond	2	Syrup, Glucose	2
Oil, Castor	2	Syrup, Maple	1
Oil, Cooking	1	Syrup of Irish Moss	2
Oil, Eucalyptus	1	Syrup, Rose Hip	1
Oil, Olive	10	Tapioca	5
Ointment, Boric acid	1	Tea	17
Ointment, Zinc	1	Thyme, Dried	1
Onions, Pickled	1	Vinegar	23
Oxo	1	Whip, Instant	1
Paraffin, Liquid	6	Whiskey	11
Paste, Fish	2	Wine	6
Paste, Meat	9	Yeast	1
Pastry, Cream	4	Yorkshire Relish	4
Peas	1		
Pectin, Fruit	1		
Peel, Mixed	9		
		Total	1,406

Legal proceedings in respect of adulterated foods

TABLE B 39

Nature of Sample	Total No. of Samples Taken	Adulterations	Prosecutions	Convictions	Fines
Bread and Butter	12	1	—	—	—
Buttermilk	21	1	1	1	£1 0 0
Jam	17	2	2	2	£1 0 0
Minced Beef	50	2	2	2	£7 0 0
Minced Steak	57	4	4	4	£11 0 0
Sausages and Sausage Meat	214	13	11	11	£42 0 0
Soup Mix	28	1	—	—	—

Cases of adulteration in which no legal proceedings were instituted, but the owner was cautioned.

Bread and Butter 1; Sausage Meat 2; Soup Mix 1

Particulars of samples specially reported by the Public Analyst during the year:—

Apple Jelly. One sample of apple jelly was deficient in soluble solids. The soluble solid content was 56 per cent against the required minimum of 68½ per cent.

Beef Sausages. Three samples of beef sausages contained respectively 730, 980 and 1,300 parts per million of sulphur dioxide as a preservative while two samples which were not declared contained respectively 380 and 410 parts per million. Beef sausages may contain 450 parts per million of sulphur dioxide when declared in accordance with the Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927.

Bread and Butter. The butter on a sample of bread and butter consisted of margarine and not butter.

Buttermilk. One sample contained added water in excess of the accepted maximum.

Canned Minced Beef and Onions. Exception was taken to the description accorded to one sample.

Ice-Cream. Two samples were slightly low in fat content and were reported as of inferior composition.

Minced Beef. Two samples of minced beef contained respectively 60 and 260 parts per million of sulphur dioxide. Minced beef, according to the Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927 must not contain preservatives.

Minced Steak. Four samples of minced steak contained respectively 180, 220, 640 and 1,200 parts per million of sulphur dioxide as a preservative. Minced Steak must be entirely free from preservatives (Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927).

Rhubarb and Ginger Jam. One sample of rhubarb and ginger jam was deficient in soluble solids. The soluble solid content was 63 per cent against the required minimum of 68½ per cent.

Sausage Meat. Five samples of sausage meat contained respectively 560, 580, 590, 920 and 940 parts per million and one sample which was not declared contained 100 parts per million of sulphur dioxide as a preservative. Sausage meat may contain a maximum of 450 parts per million of sulphur dioxide, when declared (Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927). Two samples of sausage meat each contained 96 per cent of meat and 70 and 150 parts per million of sulphur dioxide as preservative, both samples contained abnormally high meat content and were not, therefore, genuine samples of sausage meat.

Soup Mix. One sample contained dead acari or meal mites and was marked inferior. One sample contained live acari or meal mites and was reported as unfit for human consumption.

MILK CONTROL

Control is exercised by weekly sampling for chemical analysis and bacteriological and biological examinations. The premises in the City in which milk is produced, processed, distributed or sold and the vehicles used for transporting the milk are subjected to frequent inspections. Thus a high

degree of control is exercised and maintained over the milk sold within the City. Such control is necessary because of the food value of milk and its potentiality as a medium for the growth and development of bacteria.

Licensed Producers of milk	..	..	..	..	6
Cows on licensed producers premises (average)	..	..	..	..	163
Dairies where milk is pasteurised	..	..	..	..	4
Gallons of milk pasteurised per day (approx.)	..	..	..	..	44,290
Wholesale distributors of milk	..	..	..	..	27
Retail distributors of pasteurised milk	..	..	..	..	1,183
Retail distributors of grade A (T.T.) milk	..	..	..	..	32
Inspections of dairies, cowsheds and milkshops	..	..	..	..	890
Samples of sweet milk taken under Sale of Food and Drugs Acts	..	..	..	..	159

Particulars of Sweetmilk Samples taken for Chemical Analysis during the five years 1955—1959

A high standard of quality was again maintained during the year. All the samples taken for chemical analysis were in compliance with the prescribed standards as to fat and solids not fat.

TABLE B 40

Year	Number Taken	Number adulterated	Percentage adulterated
1955	174	1	0.57
1956	168	1	0.60
1957	143	—	—
1958	167	—	—
1959	159	—	—

Average monthly composition of milk samples submitted and examined by the Public Analyst

TABLE B 41

MONTH	Number	Total Solids per cent	Fat per cent	Solids not Fat per cent
January	11	12.26	3.75	8.51
February	3	12.21	3.70	8.51
March	25	12.09	3.56	8.53
April	14	12.09	3.54	8.55
May	5	11.99	3.40	8.59
June	16	12.12	3.48	8.64
July	5	12.17	3.52	8.65
August	5	12.44	3.76	8.68
September	12	12.32	3.64	8.68
October	6	12.40	3.68	8.72
November	38	12.53	3.84	8.69
December	19	12.21	3.60	8.61

BACTERIOLOGICAL AND BIOLOGICAL EXAMINATION OF MILK

986 samples of sweetmilk for bacteriological examination were purchased by the Food and Drugs Inspectors and delivered to the Central Laboratory, Northern Ireland Hospitals Authority. Plate count, coliform and phosphatase tests were carried out to ascertain if the milk complied with the prescribed bacteriological standards as laid down in Statutory Rules and Orders (Northern Ireland) 1951, No. 189. The results of the examinations carried out show a considerable increase in the number of unsatisfactory samples reported. All these cases were followed up by the food Inspectors and recommendations where necessary were made and subsequent sampling carried out.

Samples of Grade A (T.T.) milk were also procured during the year for biological examination as to the presence of tubercle bacilli. A positive result obtained in one of the samples and subsequent investigations in the matter revealed a rather unsatisfactory state of affairs which was reported by

the Medical Officer of Health to the Health Committee. On representations from the Medical Officer of Health to the Ministry of Agriculture (Northern Ireland) the Grade "A" producers licence was withdrawn and all milk produced on the farm was diverted for pasteurisation. The dairy farm was regularly inspected to see that the conditions imposed were being carried out.

Particulars of Bacteriological Examinations

TABLE B 42

Test	Grade of Milk	Samples Examined	Satisfactory		Unsatisfactory	
			Number	Percentage	Number	Percentage
Plate Count ..	"A" (TT)	98	97	98.98	1	1.02
	Pasteurised	—	—	—	—	—
Coliform ..	"A" (TT)	98	76	77.55	22	22.45
	Pasteurised	888	826	93.02	62	6.98
Phosphatase ..	Pasteurised	888	888	100.00	—	—
Biological* ..	"A" (TT)	178	173	97.74	1	0.56

* In four instances the guinea pig died before the test was completed.

PROVISION OF MILK IN SCHOOLS

During the year 135 samples of sweetmilk delivered to schools were taken by Food Inspectors for bacteriological examination. 117 samples were in compliance with prescribed standards and 18 samples were unsatisfactory due to the presence of coliform organisms.

TABLE B 43

Test	Grade of Milk	Samples Examined	Satisfactory		Unsatisfactory	
			Number	Percentage	Number	Percentage
Plate Count ..	Pasteurised	—	—	—	—	—
Coliform ..	Pasteurised	135	117	86.67	18	13.33
Phosphatase ..	Pasteurised	135	135	100.00	—	—

MINERAL WATERS

All mineral water manufacturers' premises were frequently inspected during the year and twice weekly sampling of products was carried out. 359 samples were obtained for bacteriological examination and submitted to the Central Laboratory, Northern Ireland Hospitals Authority. 358 samples were reported upon as being highly satisfactory and one sample as being unsatisfactory due to the presence of coliform organisms. These results show a high standard of purity and reflect the precautions taken by the trade to produce a wholesome article. The one adverse result was followed up by visits by the Food Inspector and subsequent sampling.

FROZEN CONFECTIONERY

Iced lollipops of either fruit juices and water composition or milk with flavouring matter are a very popular commodity particularly with young persons. The methods of production, storage and sale require close supervision in order that a pure article is sold to the public. This close supervision is obtained by frequent inspection of manufacturers' premises, weekly sampling and follow up in cases where adverse results on samples are reported.

224 samples were taken during the year of which 30 were reported as unsatisfactory. These figures indicate the necessity for close surveillance over the production of this commodity of food.

TABLE B 44

Number examined	Number satisfactory	Number unsatisfactory because of the presence of coliform organisms	Number unsatisfactory because of the presence of coliform organisms of faecal origin
224	194	25	5

BACTERIOLOGICAL EXAMINATION OF IMPORTED EGGS, EGG POWDER AND EGG ALBUMEN

Number of samples taken for examination	.. .. .	131
Samples of frozen eggs	.. .. .	64
Samples of dried eggs	.. .. .	65
Samples of egg albumen	.. .. .	2
Number of samples in which <i>S. thompson</i> were isolated	.. .. .	1
Number of samples in which <i>S. daytona</i> were isolated	.. .. .	1
Number of samples in which <i>S. montevideo</i> were isolated	.. .. .	9
Number of samples in which <i>S. pullorum</i> were isolated	.. .. .	1

The instances referred to above in which salmonella organisms were isolated necessitated serial sampling being carried out on the whole consignment of dried eggs. By means of the serial sampling further salmonella organisms were isolated and as there was an obvious risk to public health the consignment (of 10 cwt.) was seized and a Magistrate's Order obtained for condemnation and destruction. The seizure was followed by steam sterilisation of all containers, utensils, etc., with which the dried eggs had been in contact. The Food Inspectors supervised the procedure throughout.

MERCHANDISE MARKS ACTS, 1887 TO 1953

Merchandise Marks (Imported Goods) Orders, made under Section 2 of the Merchandise Marks Act, 1926

To protect the general public and United Kingdom growers and producers, traders are required to indicate by conspicuous labels the country of origin when exposing for sale certain imported goods. The Food Inspectors are principally concerned with imported fruits, etc., and certain traders require constant reminders to compel them to comply with the various Orders made under the 1926 Act. In two instances the Department had to resort to legal proceedings where traders applied a false trade description to imported goods. The Courts imposed fines amounting to £18.

Margarine Factories and Wholesale Dealers

Number of premises on the register	.. .. .	79
Number of inspections of registered premises	.. .. .	90
Number of contraventions discovered and remedied	.. .. .	6

CITRUS FRUITS

The Public Health (Preservatives, etc. in Food) (N.I.) Regulations, 1927, were amended by Statutory Rules and Orders of Northern Ireland 1958, No. 161, to permit the importation and sale of citrus fruits which contain not more than 100 parts per million of diphenyl or not more than 70 parts per million of ortho-phenylphenol or mixtures of the two substances, such that if the concentrations of each in parts per million are expressed as percentages of 100 or 70 parts per million respectively, the sum of these percentages shall not exceed 100 per cent. The regulations also provide for the carrying over of proportionate quantities of diphenyl or ortho-phenylphenol to articles of food in the preparation of which citrus fruits are used. During the year samples of citrus fruits were examined by the Public Analyst; these were found to be in compliance with the above regulations.

THE CONTROL OF FOOD UNFIT FOR HUMAN CONSUMPTION

Reference was made in the 1958 Annual Report to the large and increasing volume of unsound foodstuffs which the Food Inspectors had been called upon to deal with. During the year under review a further large increase in volume can be reported. Condemnation certificates issued in respect of unsound food voluntarily surrendered increased in number from 6,234 in 1958 to 7,133 in 1959. When compared with 5,158 certificates issued in 1954, it can be seen that the demands on the Food Inspectors' time to deal with this class of foodstuffs is ever increasing.

The increase in certificates issued for unsound food does not indicate any lowering in the standards of foodstuffs being sold for human consumption. The actual cause, in fact, is due to the almost generally established practice of manufacturers and wholesalers refusing to credit or exchange any unsound food unless it has first been examined by the Department's Food Inspectors. This practice has now led, in certain instances, to individual shopkeepers calling in the Inspectors to examine one or two "blown" tins, whereas formerly the tins would have been returned to the wholesaler and after several days' returns had been allowed to accumulate only then would the Inspector have been called. A further example is the case of the wholesaler who sends the Department a list of customers requesting examination of suspected unsound foodstuffs and requests the Food Inspector to call at these individual premises. It is difficult to deny or discourage these requests but unless some satisfactory means is found to control the practice, it is obvious a great amount of time will be expended by the Food Inspectors answering widely scattered calls to deal with a few "blown" tins.

The very large amount of unsound food seized and destroyed in pursuance of Magistrates' Orders as shown in Table B 46 (a) is the result of fire damage. In order to indicate the problems and difficulties which arise from time to time the instance of a fire involving a confectionery business may be quoted. Over two tons of confectionery were damaged by heat, smoke and dirt. The confectionery consisted of 922 different types and brands which all had to be listed separately in order to prepare the consignment for examination by a Resident Magistrate with a view to obtaining an Order for condemnation and destruction. The fire referred to also involved a wholesale chemist's premises and the disposal of unidentified chemicals and drugs presented a problem also.

Table B 46 (b) also shows that a Magistrate's Order was obtained for the destruction of 10 cwt. of dried egg powder, an explanation regarding which is found in that part of the Report dealing with the bacteriological examination of imported eggs, egg powder and egg albumen.

Unsound foodstuffs surrendered by traders after inspection and destroyed or disposed of otherwise than for the food of man

TABLE B 45 (a)

Article	Tins, Jars, Packets, Bottles	Articles	Tins, Jars, Packets, Bottles
Asparagus	38	Miscellaneous	54
Baby Food	18	Mustard	10
Beans	3,362	Paste	84
Beetroot	108	Peas	4,559
Cereal	38	Pickles	191
Cheese	54	Potato Crisps	55
Cheese Spread	928	Puddings	22
Coffee	112	Rice	617
Cordial	265	Salad Cream	67
Corn	98	Salt	3
Cream	200	Sandwich Spread	11
Fish	1,630	Sauce	22
Fruit	8,603	Soup and Broth	3,491
Fruit Juice	571	Soup Mixture	5
Ham	301	Spaghetti	135
Honey	156	Spinach	6
Jam	486	Stew	7
Jellies	18	Syrup	40
Macaroni	7	Tomatoes	1,301
Marmalade	249	Tomato Juice	201
Mayonnaise	4	Treacle	3
Meat, Brawn, Veal and Pork	3,952	Vegetables	735
Meat Extract	42	Vinegar	6
Milk	1,044		

TABLE B 45 (b)

Articles	Tons	Cwt.	Qrs.	Lbs.	Articles	Tons	Cwt.	Qrs.	Lbs.
Bacon	—	—	1	14	Fruit (large tins) ..	2	15	—	14
Bananas	—	7	—	15	Ham	2	5	1	21
Beans	—	—	—	21	Lard	—	—	—	13½
Butter	—	—	2	1	Margarine	—	—	1	3
Cheese	—	1	2	26	Meat, Brawn, Veal and				
Confectionery ..	—	3	—	19	Pork	2	11	1	4
Fish	—	4	1	22	Peas	—	—	3	2
Flour	—	—	1	4	Rice	—	1	3	14
Fruit (dried) ..	—	7	2	—	Tomato Puree (large tins)	—	1	—	8½

7,133 Certificates were issued during the year.

Unsound food seized and destroyed in pursuance of Magistrates' Orders

TABLE B 46 (a)

Article	No.	Container	Articles	No.	Container
Beans	13	Tins	Nuts	288	Packets
Beans	18	Packets	Peas	74	Packets
Biscuits	85	Packets	Popcorn	56	Packets
Cheese	9	Packets	Potato Crisps	606	Packets
Coffee	72	Packets	Shortbread	38	Pieces
Confectionery ..	360	Packets	Soup	62	Packets
Curry Powder ..	3	Packets	Soup	4	Tins
Fish	64	Tins	Spaghetti	6	Packets
Fruit	35	Tins	Sugar	18	Packets
Fruit Juice	18	Tins	Tapioca	30	Packets
Jam	14	Jars	Vegetables	37	Tins
Marmalade	11	Jars	Wafers	184	Loose
Meat	14	Tins			

23 dozen Eggs, 12 Fowl, 8 Gallons Buttermilk.

TABLE B 46 (b)

Articles	Tons	Cwt.	Qrs.	Lbs.	Articles	Tons	Cwt.	Qrs.	Lbs.
Apples	—	—	1	2	Flour	—	1	2	—
Bacon	—	—	—	12	Fruit	—	1	3	16
Beans	—	—	—	14	Ham	—	—	1	23
Biscuits	—	5	2	25	Jam	—	—	—	10
Butter	—	—	—	4½	Meat	—	4	3	4
Cheese	—	—	3	6	Nuts	—	—	2	—
Confectionery ..	2	8	—	18½	Peas	—	—	—	14
Cooking Fat	—	—	—	12	Rice	—	1	—	—
Currants	—	—	—	7	Sago	—	—	—	24
Dried Egg Mixture ..	—	10	—	—					

FOOD CONTAINING EXTRANEEOUS MATTER

The following complaints received from the public of the presence of extraneous matter in food were dealt with by the Department during the year:—

- Piece of metal in a plum pudding.
- *Insect larvae in chocolate drops.
- *Mould growths in meat pies. (4 instances) (Summons in 1 instance)
- *Piece of metal in a meat pastie.
- *Live insects in fish.
- *Steel bristles in a sausage.
- *Live insects in baby food.
- Insects in a packet of popcorn.
- Piece of cloth in a tin of corned meat.
- *A wire nail in pastry.
- *Mould growths in sausage roll.
- Hairs in a malt loaf.
- *Insect in a wheaten farl.
- *Cigarette end in a wheaten farl.
- Mould growths in meat pies (2 instances).
- Piece of cord in coconut pastry.
- A wire nail in a plain loaf.
- *Mould growths in a plain loaf. (2 instances) (Summons in 1 instance)
- *Insect in a sliced loaf.
- *Safety pin in a cream cookie.

* Denotes legal proceedings taken.

Sale of Ice Cream Acts (Northern Ireland) 1937 and 1957

Comment was made in the 1958 Annual Report on the remarkable increase in the number of registered premises over the past five years. The increase continued during 1959, and at the end of the year the total registered premises in the City was 955. The greater part of ice cream now sold is pre-packed and a large volume of it is imported from England. Bulk or soft ice cream now sold in the City is manufactured locally. All premises registered for the manufacture and sale of ice-cream are regularly and systematically inspected and on the whole good hygienic conditions existed therein. Samples for chemical analysis and bacteriological examination were taken regularly throughout the year. All the samples for chemical analysis were reported by the Public Analyst as genuine and in compliance with prescribed standards as to fat and total solids contents. The results of the Methylene Blue test were much better than those reported upon in 1958.

Sale of Ice Cream Acts (Northern Ireland), 1937 and 1957

Registration of Premises used for Manufacture for sale, and sale of Ice-cream

TABLE B 47

Particulars	Manufacture and Sale	Sale Only	Total
Premises registered at 1st January, 1959	47	885	932
Deletions during the year	4	88	92
Registrations during the year	1	114	115
On register at 31st December, 1959	44	911	955

Inspections of registered premises	2,551
Summonses for selling ice cream in unregistered premises	2
Samples submitted for bacteriological examination	948
Samples submitted for chemical analysis	74
Cautionary letters sent	15
Orders made refusing or cancelling registration	9

Particulars of Ice Cream samples taken during the year for chemical analysis

TABLE B 48

Complied with Standards		Did Not Comply with Standards			
Number	%	Fat		Total Solids	
		Number	%	Number	%
74	100.00	—	—	—	—

The Ice Cream (Heat Treatment, etc.) Regulations (N.I.) 1954
Methylene Blue Test (948 samples)

TABLE B 49

Grade	Number	Percentage
1	886	93.46
2	46	4.85
3	6	0.63
4	10	1.06

Conditions discovered on inspection of Ice Cream premises

TABLE B 50

Nature of Conditions	Instances	Remedied	In Progress	Out Standing
Walls, ceilings, floors, etc. in disrepair	4	2	—	2
Lighting and ventilation not provided or insufficient	1	1	—	—
Sink defective, worn or not provided	1	—	—	1
Sink, hot and cold water not provided or insufficient	1	—	—	1
Sink, wastepipe untrapped or connected direct to the drain	1	—	—	1
Personal washing facilities not provided or insufficient	4	3	—	1
Soap and towels not provided or insufficient	2	2	—	—
Failure to prevent risk of contamination of food	5	5	—	—
Other defects	3	5	—	2
TOTALS	22	18*	—	8

* Defects remedied include outstanding defects from the previous year

FOOD HYGIENE

At the end of the year the long awaited Regulations to deal effectively with the hawker or barrow boy were still not forthcoming. Repeated representations to the Ministry have not yet produced the required legislation, consequently the rather awkward and embarrassing situation of being able to deal with the static trader and being able to do very little with the mobile trader remains. Conditions under which food is prepared, stored and sold in the Belfast Markets still continue to be unsatisfactory and the inevitable comparisons are always made when other shopkeepers are pressed to carry out alterations so that premises may comply with existing legislation.

Apart from the circumstances described above, progress still continued to be made in raising the hygienic standards in food premises in the City. There are of course the exceptional cases in which no amount of persuasion will produce the improvement in conditions necessary and legal proceedings have to be instituted. It was found necessary to issue 61 Summonses under the Public Health (Prevention of Contamination of Food) Regulations (Northern Ireland), 1948, and the Courts imposed fines amounting to £90 10s. 0d. for contraventions of the Regulations. Considerable progress was made in improving sanitary accommodation for patrons in Cafes and Restaurants, but again it was necessary to institute legal proceedings in 6 instances for failure to provide the accommodation required by law.

Progress has been made in pre-packing perishable foods such as meat, bacon, etc. The use of polythene sacs with the air exhausted from them, and the sacs heat sealed, has produced good results. Greater use is being made of refrigerated display cabinets and more cold storage facilities are being installed. All of these may be regarded as aids in the reduction of possible contamination and in the improvement of the keeping qualities of food. In the matter of health education, 1,194 wall plaques were affixed to the walls of food premises by the Health Department staff.

Inspection of Food Premises

Inspections by trade or business (excluding bakehouses)

TABLE B 51

Trade or Business	Inspections	Trade or Business	Inspections
Bacon Curing Stores	50	Industrial Canteens	16
Butchers	2331	Markets	570
Chemists	22	Meat Factories	49
Confectionery	3883	Milk Retailers	890
Fish	239	Mineral Water Factories	199
Fish and Chips	887	Poulterers	512
Food Manufacturers	106	Provisions	1022
Fruiterers	1713	Public Houses	527
Grocers	4479	Restaurants	577
Hawkers' Carts	635	Wholesalers	556
Ice Cream	2551	Pastry	59
Bottling Stores	23		
		Total	21,896

Butchers' Premises

Premises registered at 1st January, 1959	367
Deleted during year	23
Registered during year	20
Premises on register at 31st December, 1959	364
Inspections of registered premises	2,331

**Belfast Corporation Act, 1930 and the
Public Health (Prevention of Contamination of Food) Regulations (N.I.) 1948
Conditions discovered on inspection of butchers' premises**

TABLE B 52

Nature of Condition	Instances	Remedied	In Progress	Out-standing
No proper preparation room	—	3	—	—
Walls, ceilings, floors, doors, etc., in disrepair	100	93	5	48
Walls, ceilings, floors, windows, doors, etc., required cleansing or re-decoration	7	8	—	—
Lighting and ventilation not provided or insufficient	18	24	2	6
Sink: wastepipe untrapped or connected direct to drain	27	20	1	6
Sink: hot and cold water not provided or insufficient	22	16	3	8
Fixtures and fittings in a state of disrepair	16	26	1	2
Drain inlets within a food room	6	1	—	5
Failure to prevent risk of contamination of food	3	4	—	2
Cold storage facilities not provided	—	2	—	2
Cold storage improperly sited	2	1	—	1
Equipment worn or defective: required repair or renewal	16	17	2	9
Cutlery and other accessories defective or worn	—	2	—	—
Proper bins not provided for storage of bones and refuse	2	3	—	1
Refuse bin accommodation unsatisfactory	5	3	1	2
Yards, surface defective or dirty	3	4	1	1
Other defects	13	6	3	13
Suitable and sufficient personal washing facilities not provided	59	47	6	38
Supply of soap and clean towels not sufficient or not provided	47	37	5	35
Sanitary accommodation not in compliance or not provided	27	31	15	7
Totals	373	348*	45	186

* The defects remedied include outstanding defects from the previous year.

**Public Health (Prevention of Contamination of Food) Regulations (N.I.), 1948
Conditions discovered in food premises (excluding butchers, ice cream, fish and chip shops, restaurants, cafes, snack bars, canteens, and licensed premises).**

TABLE B 53

Nature of Conditions	Instances	Remedied	In Progress	Out-standing
Ceilings, walls, doors, windows, floors, etc., in disrepair	52	110	3	4
Ceilings, walls, doors, windows, floors, etc., required cleansing and re-decoration	19	19	—	—
Lighting and ventilation not provided or insufficient	28	80	4	9
Sink: hot and cold water not provided or insufficient	5	26	—	30
Sink: wastepipe untrapped or connected direct to drain	6	11	1	—
Drain inlets within the food room	7	16	4	9
Failure to prevent risk of contamination of food	9	7	1	1
Equipment worn or defective: required repair or renewal	4	12	4	10
Unsuitable cloakroom accommodation	—	1	—	—
Bottlewashing facilities not provided or insufficient	—	1	—	—
Cold storage facilities not provided	—	3	—	2
Fixtures and fittings in a state of disrepair	4	4	—	—
Yards, paving, walls, etc., dirty or defective	2	3	—	—
Proper bins not provided for storage of bones and refuse	1	7	—	—
Refuse Bin accommodation unsatisfactory	2	4	—	5
Suitable and sufficient personal washing facilities not provided	19	16	1	2
Soap and clean towels insufficient or not provided	6	6	1	2
Sanitary conveniences within or communicated direct with food room	1	6	2	5
No proper preparation room provided	—	1	—	—
Other defects	28	29	2	14
<i>Sanitary Accommodation</i>				
Sanitary accommodation not provided or insufficient	7	10	2	15
Light and ventilation not provided or insufficient	3	3	—	—
Floors, basins, walls, seats, etc., dirty or defective	13	9	—	4
Flush to water closet defective or inadequate	2	2	—	—
Screens, doors, fasteners, etc., defective or not provided	3	3	—	—
Urinals, absence of or insufficient flush	1	1	—	—
Totals	222	390*	25	112

*The defects remedied include outstanding defects from the previous year.

Conditions discovered in restaurants, cafes, snack-bars and non-industrial canteens.

TABLE B 54

Nature of Condition	Instances	Remedied	In Progress	Out Standing
No proper preparation room	8	6	2	6
Dining rooms: walls, ceilings, windows, etc., required cleansing	—	3	1	—
Dining rooms: walls, ceilings, floors, etc., in disrepair	8	15	6	8
Dining rooms: light and ventilation not provided and maintained	5	5	2	10
Kitchens: walls, ceilings, floors, windows, etc., required cleansing	1	3	—	—
Kitchens: walls, ceilings, floors, etc., in disrepair	10	15	—	—
Kitchens: light and ventilation not provided and maintained	1	5	—	1
Foodstores: walls, ceilings, floors, windows, etc., required cleansing	1	4	—	1
Foodstores: walls, ceilings, floors, etc., in disrepair	4	10	—	6
Foodstores: light and ventilation not provided and maintained	—	2	—	2
Preparation rooms: walls, ceilings, floors, etc., in disrepair	7	4	1	8
Preparation rooms: light and ventilation not provided and maintained	1	2	—	—
Fixtures and fittings in a state of disrepair	4	6	—	2
Suitable and sufficient personal washing facilities not provided	8	11	—	5
Soap and clean towels not sufficient or not provided	3	4	1	2
Sink: hot and cold water not provided or insufficient	4	8	—	1
Sink: wastepipe untrapped or connected direct to drain	3	8	—	—
Equipment defective, worn required repair or renewal	4	7	1	5
Swill-bin accommodation unsatisfactory or bins not provided	2	2	1	1
Cold storage facilities not provided or insufficient	—	3	—	—
Cooking ranges not provided with means for removal of fumes or accessible for cleansing	7	13	—	—
Sanitary conveniences, dustbins, etc., within or communicating directly	4	5	—	5
Unsuitable cloakroom accommodation	3	3	3	3
Yards, surfaces, walls, etc., defective or dirty	—	3	—	—
Failure to prevent risk of contamination of food	1	2	—	—
No proper potato store provided	1	1	—	—
Drain inlets within or communicating directly	2	2	—	—
No provision to prevent solid matter entering drains	1	1	—	—
Other defects	3	5	—	2
Sanitary Accommodation				
Floors, basins, seats, walls, etc., dirty or defective	6	4	1	1
Not provided or insufficient for males	11	5	1	12
Not provided or insufficient for females	9	4	1	12
Urinals, defective or insanitary	1	1	—	—
Totals	123	172*	21	93

*Defects remedied include outstanding defects from the previous year.

Conditions discovered in licensed premises and bottling stores.

TABLE B 55

Nature of Conditions	Instances	Remedied	In Progress	Out-standing
Sanitary conveniences, dustbins, etc., within or communicating direct	4	1	2	1
Drain inlets within or communicating direct	4	4	—	—
Bars and Parlours, walls, ceilings, floors, windows, etc., required cleansing	1	1	—	—
Bars and Parlours, light and ventilation not provided and maintained	3	3	—	—
Beer Cellars and Bottling Stores, walls, ceilings, floors, windows, etc., required cleansing	1	2	—	—
Beer Cellars and Bottling Stores, walls, ceilings, floors, etc., in disrepair	7	6	—	1
Beer Cellars and Bottling Stores, light and ventilation not provided and maintained	6	5	—	1
Preparation rooms, walls, ceilings, doors, floors, etc., in disrepair and required cleansing	—	1	—	—
No proper preparation room for preparation of snacks	—	1	—	3
Sink, wastepipe untrapped or connected directly to drain	3	3	—	—
Suitable and sufficient personal washing facilities not provided	12	9	1	2

TABLE B 55 (continued)

Nature of conditions	Instances	Remedied	In Progress	Out-standing
Soap and clean towels insufficient or not provided	11	16	1	2
Glasses; unsatisfactory method of cleansing	3	3	—	—
Failure to prevent risk of contamination of food	1	5	1	2
Beer pipes, trays, drainers, or sinks, defective, worn or cleanliness not maintained	—	3	3	2
Bottlewashing facilities insufficient or not provided	2	3	—	2
Proper bins not provided for refuse, etc., or refuse bin accommodation unsatisfactory	—	1	—	—
Yards, paving, walls, etc., in disrepair	—	2	—	2
Other defects	2	1	1	3
Sanitary Accommodation				
Not provided or insufficient for males	2	2	—	—
Not provided or insufficient for females	1	3	—	—
Screens, doors, fasteners, etc., defective or not provided	3	3	—	—
Lighting and ventilation not provided or insufficient	4	4	—	—
Urinals: defective or insanitary	1	1	—	—
Urinals: absence of or insufficient flush thereto	3	3	—	—
Flush to water closets defective or inadequate	—	2	—	—
Totals	74	88*	9	21

*Defects remedied include outstanding defects from the previous year.

Belfast Corporation (General Powers) Act (Northern Ireland), 1948, Section 25

Registration and Inspection of Premises used for the business of a Vendor of Fried Fish and Fried Potatoes

Registered at 1st January, 1959	199
Registered during the year	23
Registrations refused during the year	3
Registrations cancelled during the year	2
Summonses issued during the year for unregistered premises	1
Deleted during the year	20
Registered at 31st December, 1959	200
Inspections of registered premises	887

Conditions discovered on inspection:—

TABLE B 56

Nature of Conditions	Instances	Remedied	In Progress	Out-standing
Ceilings, walls, floors, doors, etc., in disrepair	16	15	—	1
Ceilings, walls, doors, windows, etc., required cleansing and re-decoration	7	7	—	—
Lighting and ventilation not provided or insufficient	1	1	—	—
Sink; hot and cold water not provided or insufficient	—	1	—	—
Sink; wastepipe untrapped or connected direct to drain	2	1	—	1
Cooking ranges not provided with means for removal of fumes or accessible for cleansing	2	2	—	—
Suitable and sufficient personal washing facilities not provided	4	7	—	1
Soap and clean towels not sufficient or not provided	4	4	—	1
Drain inlets within or communicating direct with food room	1	1	—	—
Yards, paving, walls, etc., defective	2	3	—	—
Yards, paving, walls, etc., dirty	1	1	—	—
Failure to prevent risk of contamination of food	1	2	—	—
Other defects	5	5	—	—
<i>Sanitary Accommodation</i>				
Floors, basins, walls, etc. dirty or defective	1	2	—	1
Lighting and ventilation not provided or insufficient	—	1	—	—
Screens, doors, fasteners, etc., defective or not provided	1	2	—	—
Totals	48	55*	—	5

*Defects remedied include outstanding defects from the previous year.

Summary of Legislation under which action was taken to bring food premises into compliance

Notices served under the various Acts and Regulations where breaches were discovered by Food and Drugs Inspectors during the year:—

TABLE B 57

Type of Business	Public Health (Prevention of Con- tamination of Food) Regulations (N.I.) 1948	Shops Act (N.I.) 1946	Public Health (Ireland) Acts 1878—1946	Belfast Corporation Acts 1845 to 1956	Total
Cafes	15	1	5	9	30
Licensed Premises	13	2	5	1	21
Butchers	84	11	14	—	109
Fish and Chips	1	—	2	—	3
Ice Cream	—	—	1	—	1
Bacon Curing, Bottling Stores and Chemists	1	—	—	—	1
Confectionery	5	1	1	—	7
Food Manufacturers	—	1	2	—	3
Fruit	6	—	3	—	9
Grocers	15	6	22	—	43
Wholesale Stores	2	—	1	—	3
Totals	142	22	56	10	230

Pests Control

Rodents

During the year there was no legislative change affecting rodent control or any apparent indication of the Rats and Mice (Destruction) Act, 1919, being superseded by an Act similar to the English Prevention of Damage by Pests Act, 1949. Under the Rats and Mice (Destruction) Act, it is the responsibility of the occupier to take such steps as may be necessary and reasonably practicable for the destruction of rats and mice in or on any land and for preventing such land from becoming infested. "Land" includes any building and other erection on land and any cellar, sewer drain or culvert in or under land. By this Act the local authority, in the exercise of its powers, can, as far as possible, take or secure collective action for the destruction of rats and mice. To maintain control of infestation in properties, a systematic survey of business premises in the City is carried out in order that the presence of rats and mice may be revealed and infestation dealt with. This survey also makes occupiers aware that a special section of the Health Department exists to deal with rodents.

It is of the utmost importance in all cases of infestation to locate the source, otherwise the problem cannot be dealt with effectively. Rodents may be brought into premises by means of packages, farm produce, etc., or may obtain entrance by means of structural defects or infestation may be due to some hidden drain or sewer defect either outside or inside the premises. The diagnosis of the latter is no easy matter and requires experience and knowledge of the habits of rats. This Section's aim has always been to concentrate on locating the source of infestation, if at all possible, and to take action accordingly. The reasons for re-infestation of premises are frequently not understood by occupiers who in many cases do not like the idea of paying the cost of more than one treatment. It should be made clear that there can be no guarantee that premises once treated will not become re-infested.

During the year the rodent control staff surveyed 9,046 sites in connection with the systematic survey and investigation of complaints, and a further 12,773 visits were made entailing operational visits and re-examination of buildings and lands. Of the 9,046 sites examined 564 were found infested, details of which are shown in the statistical data.

During the year 292 buildings were disinfested and 69 were in the process of being disinfested at the end of the year. Infestations are not considered remedied until no further trace of rodents is found during a period of three or four weeks after the treatment has been completed. The destruction of rats and mice within the area of infestation in the shortest possible time is the purpose of the Pests Control Section. In this way the danger of infestation by the invasion of rodents from adjoining buildings and lands and the natural increase of rodents by breeding is reduced to a minimum.

The 21,819 inspections, surveys, etc. do not include inspections made by Sanitary Officers under the Act in relation to dwelling houses.

Statistical Details:—

Surveys of lands and premises	21,819
Lands, premises, etc. found infested	564
Rat Infestation:	
1. Food premises	65
2. Non-food premises	261
Mouse Infestation:	
1. Food premises	88
2. Non-food premises	150
Premises treated by Pests Officers	332
Poison campaigns carried out by Pests Officers on request of the occupier who undertook to pay costs	
1. For Rats	230
2. For Mice	131
School buildings and meals kitchens treated at the request of Director of Education	12
Poison campaigns carried out in school buildings and meals kitchens.. .. .	14
(For rats—9, for mice—5)	
Premises cleared of rats and mice by Pests Officers	292
Premises where the clearing process was not completed at the end of the year	
	69
Premises test baited	7,274
Premises wherein the occupier undertook to eliminate rats and mice on statutory or verbal notice under the Rats and Mice (Destruction) Act, 1919	
	189
1. Action taken by rat destruction firms	
(a) For rats	10
(b) For mice	12
2. Action taken by the occupiers	
(a) For rats	77
(b) For mice	90
Premises having no evidence of rats or mice at time of surveying but with rat and mouse destruction firms on contract	149
Premises where rat proofing and other work was done to prevent re-infestation	34
Notices served under the Rats and Mice (Destruction) Act, 1919	113
Summonses issued under the Rats and Mice (Destruction) Act, 1919	1
Premises where the drains were tested on complaint of rats	252
Premises where the drains were defective on test	136
Drains repaired	450
Drains re-laid	295
Number of rat destruction campaigns carried out at Corporation tipping grounds	14

Sewer Treatment

In order to maintain a high standard of rodent control in the City, it is essential for surface and sewer rodent control to be closely co-ordinated, therefore it has been necessary to maintain a constant watch on the breeding and migration of rats through sewers and drains with a view to eliminating infestations of buildings and lands from the sewers. A large section of the Corporation's sewerage system is, through the co-operation of the City Surveyor, subjected to systematic treatment, which has brought the rat population in the sewers under satisfactory control. The method employed is similar to that of previous years. This consists of poison baiting with either zinc phosphide or arsenious oxide at all manholes in areas which have not shown by test baiting to be free from rats. The poison bait is preceded by two placings of plain bait on alternate days.

The total area of the City which is subjected to periodical treatment against rats in sewers is bounded by:—

NORTH—Crumlin Road, Ballysillan Road, Ardoyne Road, Oldpark Road, Westland Road, Hughenden Avenue, Skegoneill Avenue, U.T.A. Railway Corporation Street and Donegall Quay.

SOUTH—Donegall Road, Glenmachan Street, Olympia Drive, Capstone Street, Osborne Park, Deramore Park, Stranmillis Road and River Lagan.

EAST—Station Street, Ulster Transport Authority Railway, Holywood Road, Belmont Road, Earlswood Road, Sandown Road, North Road, Loop River, Ardenlee Avenue, Ravenhill Road, Carolan Road and Annadale Embankment.

WEST—Woodvale Road, Ballygomartin Road, Britton's Lane, Springfield Road, Whiterock Road and Falls Road.

This section of the City is divided into 61 sewer areas involving the treatment of 5,460 manholes.

Rat destruction campaigns carried out in the sewerage system	..	227
Manholes treated in the sewer area	.. .. .	5,460
Pre baits laid	.. .. .	19,784
Pre baits taken by rats	.. .. .	10,726
Poison baits laid in manholes	.. .. .	5,401
Poison baits taken by rats	.. .. .	5,081

Mosquito Control

The annual routine work within the City Boundary began on 20th April and continued intermittently as required until 16th October, 1959. The method of control consisted of the application of waste oil with D.D.T. added by the Todd Insecticidal Fog Applicator operated by one of the Pests Officers. Where this treatment could not be applied control was obtained by hand spraying. Preliminary surveys of the potential breeding places were carried out at the beginning of April and oiling by fogging where it was possible followed.

Information of the various areas which were visited is as follows:—Bog Meadows: Moderate breeding existed in this area but satisfactory control was maintained from several operational positions.

Musgrave Park: Mosquito larvae were found at the beginning of the season and were successfully controlled by the larvicidal treatment until this area completely "dried up".

Lagan Valley: Mosquito larvae (not in large numbers) were found in parts of this area at the commencement of the season. The continuance of the exceptionally dry weather reduced considerably this breeding area. Control measures were applied where it was necessary.

Orangefield and Castlereagh: Several applications of insecticidal fog were given to the swampy ground at rear of Sandhill Parade and adjoining the Knock River and between the Loop River and Orby Road including Elmgrove school.

Rosevale Park (Knock Road): Slight mosquito activity was observed in this area although no complaints were received from the residents in the neighbourhood. Mosquito larvae were found in the field at Rosevale Park in the month of May. Several oil treatments maintained satisfactory control until the stagnant water in the field and ditch "dried up".

Duncrue Street: Most of the slob-land has been filled in except a few places where mosquitoes could develop. The treating of these places was successful in maintaining mosquito suppression here.

Shore Road and Greencastle: The ditches adjoining the Ulster Transport Authority Railway from the rear of Downview Bungalows to Greencastle were treated a number of times. Slight evidence of mosquito larvae was found.

Fortwilliam Park and Belfast Castle Grounds: At Fortwilliam Park and Belfast Castle Grounds mosquito breeding was found in the month of May. Treatment with insecticidal fog and spraying satisfactorily suppressed the breeding here.

Garden Plots: The garden plots at Adelaide, Annadale, Channing Street, Flora Street, Monarch Street, Malone Road, Westland Road and Whiterock Road were visited several times and water containers with mosquito larvae were treated with larvicide.

During the season the following inspections were made, treatments carried out and materials used.

Surveys of mosquito areas	306
Areas treated with larvicide	263
Mileage run by vehicle	921 miles
Waste transformer oil used	1,040 gallons
Larvicide used	126 ..
Paraffin oil used	114 ..
Petrol used by vehicle and Tifa machine	149 ..

Other Insect Pests

During the year complaints regarding various kinds of insects such as bugs, cockroaches, fleas, flies, spider beetles, steam flies, Pharaoh's ants, etc., were investigated and complainants advised as to the best method of dealing with their problems. Treatment in special circumstances on request from Sanitary Officers, Health and Welfare Visitors was applied when considered necessary. The campaign against the house fly continued this season, the principal target being the breeding sites and for this purpose regular periodic treatment of manure pits was carried out from early in the spring until the beginning of autumn. The exceptionally good summer increased the fly problem at their breeding places and especially at the Corporation's tipping grounds which were treated by the Cleansing Section's staff of the City Surveyor's Department. During August and September the Health Department supplemented (by request) the treatment of the tips. In addition 714 visits were made to food premises and advice given on fly control and in many instances demonstrations were given of an aerosol spray suitable for use in most food shops for an almost immediate knock-down action.

Rag merchants' premises were given as usual the monthly application of insecticide. Treatments were carried out and the costs charged to the respective occupiers. Corporation houses were, on request from the Estates Department, disinfested of fleas and bugs and this usually occurred when there was a change of tenancy. During the year it was necessary to treat 26 dwelling houses for bugs and 73 premises for cockroaches and steam flies.

Inspections of premises on complaint from Sanitary Officers, Health and Welfare Visitors, Occupiers, etc.	2,072
Premises found infested	813
(a) Bugs	26
(b) Cockroaches and steam flies	73
(c) Fleas	208
(d) Flies	451
(e) Other insects	55
Premises treated with insecticide	664
Stables, Cattle yards and piggeries treated	475
Rag stores treated	178
Visits to food shops and aerosol demonstrations	714

The Hydrogen Cyanide (Fumigation) Act, 1938

The Hydrogen Cyanide (Fumigation of Buildings) Regulations (Northern Ireland) 1952

Notification of intention to fumigate buildings with hydrogen cyanide to destroy mill pests—4.

The Lister Todd Fog Applicator

In addition to mosquito control and the application of insecticides, the TIFA machine was used for the testing of drains and sewers which could not be tested by the hand operated machine, or in cases where the smoke test revealed no defects, due to the impossibility of obtaining the necessary pressure of smoke in the drain to make a satisfactory test.

Sewer and drain tests by TIFA Machine	77
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Disinfection

The Disinfecting Station, situated at the Laganbank Road, is a one storey building consisting of two sections; one for infected and the other for disinfected articles with separate male and female apartments with male and female attendants. There are two high pressure steam disinfectors which are supplied with steam from an electrode boiler. After the removal to hospital of patients suffering from certain infectious diseases or after the recovery of nursed-at-home patients, a disinfecting service is provided for infected premises and bedding. Disinfection of bedding is carried out at the station for the Down County Health Authority in accordance with an agreed arrangement. Traders deliver to the station for disinfection second-hand clothing for export for which a certificate is required. A fee is charged in certain instances for disinfection and the issue of certificates.

Articles disinfected at the Disinfecting Station:—

By steam	8,673
By formalin	3,223

In addition:—

Articles destroyed on request	169
Library books withdrawn from circulation and returned to the Central Library (after 3 months)	235
Library (private) books disinfected	18
Persons bathed and disinfected at the station	109
Visits to premises where infectious disease occurred	1,221
Premises disinfected	671
Miles covered by vehicles in the disinfection of premises, bedding, etc.	5,363

Cleansing Clinic

A Cleansing Clinic is also provided at the Disinfecting Station for the cleansing of verminous persons and the treatment of scabies in adults and children. During the year 67 verminous persons were deloused and 1,205 articles of clothing and bedding were disinfected at the Clinic. 85 persons were treated for scabies involving 181 treatments. The table shows the number of persons treated at the Clinic for scabies during the six years 1954—1959.

TABLE B 58

Year	First Treatment	Subsequent Treatment	Total
1954	41	21	62
1955	66	80	146
1956	105	125	230
1957	100	66	166
1958	69	47	116
1959	85	96	181

FLOODING

The only flooding of dwellings reported during the year occurred in the month of June in Fane Street, Great Northern Street and the lower end of Ulsterville Avenue. The affected householders were supplied with disinfectant.

ANALYSIS OF LEGAL PROCEEDINGS, 1959

TABLE B 59

Proceedings	Offences	Summonses	Orders	Fines
Belfast Corporation Acts, 1845 to 1956	Failed to provide dustbin	3	—	—
	Failed to register premises as a vendor of fried fish or fried potatoes	1	—	£5 0 0
	Failed to provide suitable sanitary conveniences	6	—	22 7 6
	Failed to register premises as butcher's shop	1	—	5 0 0
	Kept swine within 300 ft. of a dwelling house	3	—	6 0 0
	Deposited swine's dung within 300 ft. of a dwelling house	1	—	3 0 0
	Failed to cleanse and/or repair drains	37	—	0 2 0
	Carried out repairs to a drain without giving prior notice to the local Authority	1	—	2 0 0
	Factories Acts (N.I.), 1938 and 1949	Failed to maintain and keep clean the sanitary convenience	2	—	9 12 0
Failed to provide a suitable sanitary convenience		1	—	1 0 0
Merchandise Marks Act, 1887	Applied a false trade description	2	—	18 0 0
Public Health (Ireland) Act, 1878 and the housing (Ireland) Act, 1919	Contravention of By-laws in respect of houses occupied by workers and let in lodgings or occupied by members of more than one family	200	—	76 10 0
	Disobedience (continuing offences)	43	—	59 19 6
Public Health (Ireland), Acts, 1878 to 1946	Failed to abate public health nuisances	1,572	183	108 13 0
	Disobedience of Magistrates' Orders to abate public health nuisances	23	—	203 0 4
	Water closets not provided with sufficient water for flushing purposes	84	—	27 10 0
	Disobedience (continuing offences)	1	—	1 5 0
	Sold or exposed for sale food unfit for the food of man which was seized and destroyed by order of Resident Magistrate	20	—	27 10 0
	Refused to obey an order of a Resident Magistrate to allow admission of a Sanitary Officer (Section 118)	2	—	10 0 0
	Failed to provide sufficient sanitary accommodation	1	—	1 0 0
	Nuisance arising from the emission of black smoke	1	1	5 0 0
Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland), 1927 to 1958	Sold foods containing prohibited preservatives	11	—	37 0 0
	Sold food containing preservatives in excess of the amount allowed	13	—	41 0 0
Public Health (Prevention of Contamination of Food) Regulations (Northern Ireland), 1948	Food prepared and stored in a room communicating directly with the sanitary convenience	1	—	0 5 0
	Food prepared or stored in a room where there was an outlet for ventilation of a drain	2	—	4 0 0
	Failed to keep in proper repair walls, ceilings, floors, windows and doors in a room where food was prepared for sale	6	—	10 0 0
	Failed to finish with a hard, smooth, and durable material walls and ceilings in rooms where food was prepared for sale	8	—	5 0 0
	Failed to paint walls and ceilings as often as may be necessary to keep them clean in a room where food was prepared for sale	1	—	2 0 0
	Used a room as a living room or sleeping place in which food was prepared or stored for sale	6	—	10 10 0

TABLE B 59 (continued)

Proceedings	Offences	Summonses	Orders	Fines
	Food prepared or stored in a room communicating directly with a sleeping place	1	—	1 10 0
	Failed to secure and maintain suitable and sufficient means of ventilation in rooms used as food rooms	3	—	2 0 0
	Failed to provide adequate washing facilities	10	—	19 5 0
	Failed to observe due cleanliness of rooms where food was deposited for sale	6	—	10 0 0
	Failed to secure cleanliness of apparatus, utensils, etc., used in the preparation of food for sale	3	—	8 0 0
	Failed to take all reasonable precautions to protect food deposited for sale against contamination by animals and dirt	1	—	1 0 0
	Failed to secure the cleanliness of vehicle used in conveyance of food for sale	1	—	2 0 0
	Failed to observe due cleanliness by persons employed on a vehicle transporting food for sale	4	—	11 5 0
	Failed to take all reasonable precautions to prevent contamination of food in preparation for sale	8	—	5 0 0
Rats and Mice (Destruction) Act, 1919	Failed to take reasonable steps which were necessary to destroy rats on premises	1	—	4 0 0
Sale of Food and Drugs Acts, 1875 to 1899	Adulteration of foodstuffs	4	—	4 0 0
Shops Act (Northern Ireland), 1946	Contraventions of Section 22	3	—	1 10 0
Sale of Ice Cream Acts (Northern Ireland), 1937 to 1957	Sold ice cream in unregistered premises	2	—	2 0 0

The number of pupil Sanitary Officers engaged in practical training in the Department at 31st December, 1959, was 14. During the year Mr. A. R. S. Twaddell was successful in qualifying as an inspector in Meat and Other Foods, Messrs. N. Barry, R. J. Coulter and D. Owens qualified for the Diploma for Smoke Inspectors. The examination was held by the Royal Society for the Promotion of Health, London.

Mr. Robert Isdell, Divisional Sanitary Officer, retired at the end of July after forty years service with the Belfast Corporation. He was a loyal and conscientious officer and I wish him many years of happy retirement.

At the end of another year it is my great pleasure to thank the Medical Officer of Health for the kindness and consideration that he has shown to me. I would also thank every member of the Sanitary and Clerical Staff for their loyal co-operation.

JOSEPH WALKER, M.A.P.H.I.,

Chief Sanitary Officer.

RAINFALL IN INCHES

TABLE B 60

Month	1952	1953	1954	1955	1956	1957	1958	1959
January ..	4.73	1.78	3.05	3.05	4.19	4.85	4.78	2.52
February ..	1.04	1.61	4.57	3.87	1.31	2.52	6.49	1.40
March ..	1.61	0.41	4.96	1.27	1.77	3.78	2.19	2.89
April ..	1.77	2.09	0.75	3.03	1.50	2.04	2.07	2.72
May ..	1.25	2.49	4.03	3.15	1.85	2.95	3.88	1.94
June ..	3.19	1.53	3.05	5.26	3.27	1.20	7.83	2.64
July ..	2.19	6.39	4.17	1.64	3.77	4.39	4.79	4.36
August ..	6.16	3.30	2.87	1.18	6.69	3.93	4.66	0.87
September ..	2.26	2.67	5.15	4.79	4.19	5.93	5.46	1.53
October ..	4.39	2.17	7.08	2.83	3.15	4.55	2.09	3.28
November ..	3.42	4.23	7.27	3.31	2.12	2.10	2.35	3.43
December ..	5.05	3.62	6.66	6.69	6.10	5.53	6.13	6.07
	37.06	32.29	53.61	40.07	39.91	43.77	52.72	33.65

Data kindly supplied by the Belfast City and District Water Commissioners. Readings taken at Oldpark Station. Gauge at 200 feet O.D.

REPORT OF THE CITY VETERINARIAN FOR THE YEAR 1959

Report of the work at the Belfast Municipal Abattoir in connection with Ante-mortem and post-mortem examinations of animals slaughtered for human food.

Number and description of animals slaughtered each month.

TABLE C 1

Month	Cows	Heifers	Bulls	Bullocks	Calves	Sheep and Lambs	Goats	Pigs
January ..	277	360	15	4,621	14	13,102	36	277
February ..	221	212	29	3,811	7	9,713	40	447
March ..	262	168	33	4,172	4	9,859	39	182
April ..	330	172	15	4,215	8	11,255	42	206
May ..	278	143	19	3,012	9	11,999	17	223
June ..	255	140	13	3,752	10	15,326	21	429
July ..	233	237	9	3,128	2	13,439	28	458
August ..	198	162	13	3,859	30	18,838	11	30
September ..	402	172	7	4,499	83	21,097	21	178
October ..	288	146	1	4,977	143	19,253	45	276
November ..	345	119	4	4,796	85	21,287	69	178
December ..	213	138	16	4,646	84	16,386	59	434
	3,302	2,169	174	49,488	479	181,554	428	3,318

TOTAL OF ANIMALS SLAUGHTERED—240,912

Compared with 1958, cattle show a decrease of 2,584; calves an increase of 321; sheep and lambs an increase of 23,932; goats a decrease of 153; and pigs an increase of 114.

Carcases condemned from all causes in 1959, compared with 1958.

TABLE C 2

Description	1958	1959
Cows	63	52
Heifers	26	17
Bulls	4	1
Bullocks	90	64
Calves	19	18
Sheep and Lambs	576	871
Goats	34	16
Pigs	76	104
	888	1,143

Diseased conditions which involved seizure and total destruction of carcasses in 1959.

TABLE C 3

	Cows	Heifers	Bulls	Bullocks	Calves	Sheep	Goats	Pigs	Total
Abcesses	—	—	—	1	—	1	—	11	13
Anaemia	—	—	—	—	—	6	—	—	6
Cysticercus Bovis	—	—	—	1	—	—	—	—	1
Decomposed	—	—	—	—	—	10	—	1	11
Dropsical	3	—	—	1	2	686	16	7	715
Fevered	6	1	—	2	1	41	—	7	58
Fibrosis	—	—	—	1	—	—	—	1	2
Gangrenous	—	—	—	—	—	3	—	—	3
Injured	2	—	—	—	2	33	—	3	40
Immature	—	—	—	—	5	—	—	—	5
Joint Ill	—	—	—	—	2	—	—	—	2
Leukemia	—	—	—	1	—	—	—	1	2
Neoplasms	1	—	—	—	—	7	—	6	14
Objectionable odour	—	—	—	1	—	—	—	—	1
Oedema	—	—	—	2	1	6	—	1	10
Pyæmia	1	—	—	3	—	1	—	22	27
Redwater	—	—	—	2	—	—	—	—	2
Septicaemia	4	1	—	2	5	13	—	12	37
Septic Arthritis	—	—	—	—	—	—	—	3	3
Septic Mastitis	6	—	—	—	—	6	—	—	12
Septic Metritis	1	—	—	—	—	7	—	—	8
Septic Nephritis	—	—	—	—	—	—	—	—	—
Septic Pericarditis	2	—	—	—	—	1	—	—	3
Septic Peritonitis	—	—	—	3	—	9	—	2	14
Septic Pleurisy	1	—	—	—	—	6	—	1	8
Septic Pneumonia	2	—	—	4	—	32	—	11	49
Swine Erysipelas	—	—	—	—	—	—	—	2	2
Toxaemia	1	1	—	—	—	3	—	2	7
Tuberculosis	22	14	1	40	—	—	—	9	86
Uraemia	—	—	—	—	—	—	—	2	2
	52	17	1	64	18	871	16	104	1,143

In addition to the above there were 3 tons 19 cwts. 2 qrs. 23 lbs. injured beef; 10 tons 6 cwts. 2 qrs. 1 lbs. other causes (tuberculosis, etc.); 7 tons 1 cwt. 2 qrs. 27 lbs. mutton; and 4 tons 3 cwt. 2 qr. 14 lbs. of pork seized as being unsound and unfit for human food.

TABLE C 4 Diseased organs seized and destroyed in 1959 compared with 1958.

	1959	1958	Increase	Decrease
Beef:				
Heads	1,627	1,729	—	102
Tongues	1,640	1,789	—	140
Hearts	446	465	—	29
Lungs	2,950	3,095	—	145
Livers	25,733	18,101	7,632	—
Stomachs	563	680	—	117
Udders	447	727	—	280
Mesenteries	462	832	—	370
Omentum	496	632	—	136
Diaphragms	291	61	230	—
Kidneys	377	190	187	—
Mutton:				
Lungs	1,546	559	987	—
Livers	25,664	16,581	9,083	—
Kidneys	7	—	7	—
Pork:				
Heads	89	26	63	—
Hearts	40	14	26	—
Lungs	216	196	20	—
Livers	228	139	89	—
Kidneys	49	68	—	19

The above does not include the viscera of animals totally destroyed.

Percentage incidence of generalised tuberculosis in animals slaughtered in 1959 compared with 1958.

TABLE C 5

	1959	1958
Cows .. .. .	.66	.94
Other Cattle .. .. .	.15	.13
Cattle (all classes) .. .. .	.13	.18
Calves	—	—
Pigs .. .. .	.26	.12

(This does not include cattle slaughtered under the attestation scheme).

Amount of beef, mutton, pork, etc., presented for examination

TABLE C 6

BEEF ..	512 sides, 1,331 quarters and 100 cuts examined; 8 cwts. 1 qr. 6 lbs. seized and destroyed.
MUTTON	1,620 carcasses and 29 cuts examined; 2 carcasses 2 qrs. 24 lbs. seized and destroyed.
VEAL ..	2 carcasses examined; 26 lbs. seized and destroyed.
PORK ..	530 carcasses and 111 cuts examined; 50 carcasses and 10 cwts. 3 qrs. 6 lbs. seized and destroyed.
FOWL	39 examined; 29 seized and destroyed.
TINNED MEATS	137 examined; 173 seized and destroyed.
FISH	1 ton 13 cwts. 1 qr. 17 lbs. cod, plaice, etc., seized or surrendered.

CYSTICERCUS BOVIS

During the year cysticercus bovis infections were shown to be present to the extent of .97 of all bovines slaughtered at the Abattoir; compared with the previous year 1958 this shows an increase of .19.

During the year there was one instance in which the disease existed in a generalised form (Table C 3) the parasite being widely distributed throughout the carcass musculature.

This parasite is of great importance from a meat inspection aspect as it is communicable to man if the meat is eaten in a raw or improperly cooked state, giving rise to the tape worm (*Taenia Saginata*).

To my staff for their loyal support and manner in which they carried out their duties at all times, I say, "thanks".

ALEX. McLEAN, B.Sc., M.R.C.V.S., D.V.H.

**REPORT OF SENIOR MEDICAL OFFICER, MATERNITY AND CHILD HEALTH DIVISION,
FOR THE YEAR, 1959**

Notification of Births Act.

The total number of births notified as occurring in the area during the year was 11,072. Of these 5,670 were males, 5,400 were females, 2 sex unknown; 251 were still births.

TABLE D 1

Births Occurring in		
Hospitals	.. .. .	7,485
Private Nursing Homes	.. .. .	339
Other Institutions	.. .. .	119
Home	.. .. .	2,594
Home (Hosp. Dist. Cases)	.. .. .	535
Total		11,072

Infant Mortality

During the year, 274 children died under the age of 12 months giving an infant mortality rate of 33. The rate for the previous year was 30.

Neonatal and Perinatal Mortality

Deaths occurring during the first month of life numbered 182 giving a neonatal mortality rate for the year of 22. The rate for the previous year was 19. The perinatal rate, i.e. stillbirths and deaths during the first week per 1,000 total births (live and still), was 40 against 42 for the previous year.

Maternal Mortality

The number of women who died from pregnancy, childbirth and the puerperal state during the year was 2, giving a maternal mortality rate of 0.24 per 1,000 live births. The rate for the previous year was 0.36. Table D13 shows the Maternal Mortality per 1,000 live births analysed according to the cause of death.

Health Visiting

56 Health Visitors were employed at the end of the year.

The routine visitation and supervision of the health of infants and young children forms the main part of the work, but the after-care of ex-hospital patients and the follow-up of special cases also occupies a considerable portion of the health visitors' time.

Regular liaison visits are made once or twice weekly to hospitals by certain members of the staff, the information exchanged being most helpful. Some also attend the Child Guidance Clinic at the Royal Belfast Hospital for Sick Children.

The Health Visitors assist the Welfare Department in the administration of the Home Help Scheme as far as expectant mothers and mothers of young children are concerned, and a close liaison is maintained with that Department in many aspects of child care.

They had the opportunity of attending refresher courses during the year, and Dr. D. Gardiner, Psychiatrist, Purdysburn Mental Hospital very kindly gave several groups a series of lectures on Mental Health to make them better equipped for preventive work in this increasingly important field. Certain members continued to give lectures in connection with training courses for students.

During the year, following the merger of the Northern Ireland Tuberculosis Authority with the Northern Ireland Hospitals Authority the tuberculosis health visiting services in the city were transferred to this department. Eleven Health Visitors were engaged on these duties, and continued to work from the Central Clinic in Durham Street.

Visits paid during the year were as follows:—

- (1) To expectant mothers: First visits, 1,188; Re-visits, 1,567; Total 2,755.
- (2) To children under one year of age: First visits, 8,062; Re-visits, 48,228; Total, 56,290.
- (3) To children between 1 and 5 years: 70,813.
- (4) To Tuberculosis cases, 17,886 (9 months only).

Ante-Natal Clinics

As the great majority of expectant mothers attending the Ante-Natal Clinics make arrangements through the clinics for their confinement in hospital the Clinic Medical Officer maintains close contact with the hospitals. At the Royal Maternity Hospital she also assists at one of the Ante-Natal sessions, and is a member of the Honorary Medical Staff.

Specimens of blood are taken for Group, Rh factor, Wasserman, etc., and arrangements are in operation whereby private medical practitioners can refer their cases to the clinics for these tests. Some medical practitioners also refer abnormal cases for a second opinion.

Instruction in Analgesia and in relaxation has been continued in combination with a special series of Mothercraft talks. These are open to all ante-natal cases irrespective of whether they are attending for ante-natal supervision or not.

Clinics and Attendances :

TABLE D 2

	1st Visit	Re-visits
Grovefield School, Mount Street, morning	63	719
do. afternoon	133	882
Mersey Street, Church Hall	80	638
Mountcollyer Street	50	429
Spier's Place, Shankill Road	82	641
Ariel Street	94	692
Hawthorne Street (R. M. Hosp.)	125	1,041
	627	5,042

1,654 Blood Tests were carried out during the year.

Child Health Centres

The number of sessions provided at the end of the year was 36 per week.

As there is still no alternative accommodation available a number of the sessions continue to be held in very unsuitable premises.

The talks to mothers with film strip illustrations were continued during the winter months and special stress was again placed on the prevention of accidents. In addition, members of the Health Visiting Staff addressed meetings of several organisations on Health topics.

Our thanks are again due to the members of the Voluntary Workers' Association for their valuable assistance throughout the year.

Centres and Attendances:

TABLE D 3

						Under 1 year	Over 1 year
Highfield	(Monday)	..	..	..	..	1,391	690
York Street	"	..	..	..	..	1,720	668
Ariel Street	"	..	..	..	..	2,629	1,031
Bloomfield	"	..	..	..	..	3,930	1,491
Stranmillis	"	..	..	..	..	2,997	1,001
Donegall Road	"	..	..	..	..	2,740	864
Glenard	(Tuesday)	..	..	..	..	3,075	1,079
Havelock Place	"	..	..	..	..	2,774	954
Mersey Street	"	..	..	..	..	2,700	848
Donegall Road	"	..	..	..	..	2,203	622
Bread Street	"	..	..	..	..	1,729	688
Woodstock	"	..	..	..	..	3,071	1,009
Ariel Street	"	..	..	..	..	3,477	1,290
Avoca Street	(Wednesday)	..	..	..	..	1,601	431
Bread Street	"	..	..	..	..	2,223	784
Ligoniel	"	..	..	..	..	1,662	577
Seaview	"	..	..	..	..	4,492	1,397
Windsor	"	..	..	..	..	2,755	660
Woodstock	"	..	..	..	..	3,051	1,141
Palmerston Road	"	..	..	..	..	1,735	557
Avoca Street	(Thursday)	..	..	..	..	3,603	1,177
Kimberley Street	"	..	..	..	..	3,544	1,551
Greencastle	"	..	..	..	..	2,795	1,549
Mountcollyer	"	..	..	..	..	2,812	980
Spier's Place	"	..	..	..	..	2,997	1,005
Bread Street	"	..	..	..	..	2,571	1,338
Susan Street	"	..	..	..	..	3,871	1,679
Woodstock	"	..	..	..	..	3,762	1,364
Malone	(Friday)	..	..	..	..	1,036	1,269
Ariel Street	"	..	..	..	..	1,997	404
Bread Street	"	..	..	..	..	1,872	750
Joanmount	"	..	..	..	..	2,674	932
Spier's Place	"	..	..	..	..	1,937	605
Sydenham	"	..	..	..	..	4,125	1,084
Woodstock	"	..	..	..	..	2,222	913
Ballymurphy	"	..	..	..	..	1,605	888
Total Attendances						95,378	35,250

Mother and Baby Homes
(Ante and Post-Natal Hostels)

TABLE D 4

Name and address of Home or Hostel	NUMBER OF BEDS						Average length of stay	
	Ante- Natal	Post- Natal	Labour	Isola- tion	Maternity (excluding labour and isolation)	Cots	Ante- Natal	Post- Natal
(a) Hopedene	3	11	—	—	—	11	4-6 weeks	8 weeks
(b) Thorndale	9	4	2	1	25	16	8 weeks	17 weeks

The total number of City cases admitted during the year was 20.

These hostels are in receipt of a grant from the Health Committee.

Residential Nurseries

TABLE D 5

Name and address of Nursery	Whether long stay or short stay	Number of Beds provided at the end of year				
		Aged 0-9 mths.	10 mth.-2 years	Aged 2-5	Girls over 5	Boys over 5
Glendhu Hostel Holywood Road .. (A voluntary Hostel in receipt of a grant from the Health Committee).	Short Stay	22	18	19	23	24

106 children resident in Belfast were admitted to the Hostel during the year.

Communicable Diseases

TABLE D 6

	(1) Ophthalmia Neonatorum		(2) Pemphigus Neonatorum		(3) Puerperal Fever		(4) Puerperal Pyrexia	
	Dom. Confinements	Instit. Confinements	Dom. Confinements	Instit. Confinements	Dom. Confinements	Instit. Confinements	Dom. Confinements	Instit. Confinements
Number of cases notified during year	—	—	—	—	—	—	2	19
Number of cases visited by Officers of the Local Authority ..	—	—	—	—	—	—	2	16
Number of cases—Home Nursing Provided ..	—	—	—	—	—	—	1	—
Number of cases removed to hospitals	—	—	—	—	—	—	1	—

Midwives

TABLE D 7

	Domiciliary Midwives	No. in Inst. other than Hospitals	Midwives in Hospitals	Midwives in Nursing Homes	Total
Total number of Midwives practising at the end of the year in the area of the Local Supervising Authority ..	52	32	128	9	221

Number of cases in which Medical Aid was summoned during the year under Section 22 of the Midwives (Ireland) Act, 1918, by a midwife:—

Nil

Domiciliary Midwives

22 midwives were employed on a salaried and 23 on a fee-per-case basis. Progress continues to be slow in recruiting sufficient midwives to enable the service to be placed entirely on a whole-time salaried basis. Two hostels are now in operation, one in Springfield Road and the other in Templemore Avenue. The Templemore Avenue Hostel provides for a number of resident pupil midwives.

Allowances to cover uniform, laundry and travelling are granted, the uniform being that laid down by the Joint Nursing and Midwives Council. Equipment is issued on loan, and all drugs, dressings, etc., in use are supplied to the midwives.

Special cots, etc., for the care of premature babies are available. The trend however is for these babies to be admitted to the special nurseries attached to the two large maternity hospitals in the City.

Refresher courses are arranged from time to time.

The midwives attended a total of 2,419 domiciliary cases during the year.

Maternity Medical Services

General Medical Practitioners agreeing to provide maternity medical services in domiciliary cases are enrolled on a panel maintained in the department and are paid on a fee-per-case basis. Both the doctor and the midwife are employed by the Health Committee.

The following is a summary of the work carried out under the scheme by Medical Practitioners during the year:—

TABLE D 8

Number of domiciliary confinements at which General Practitioner attended	3,126
Number of women confined at home who were examined ante-natally	2,992
Total number of ante-natal examinations made of women confined at home	24,053
Number of women referred to institutions for confinement who were examined ante-natally	452
Total number of ante-natal examinations made of women confined in institutions	3,064
Total number of final pelvic examinations made of women confined at home	2,798
Total number of final pelvic examinations made of women confined in institutions	212
Number of cases of abortion attended	581
Number of anaesthetics given by second practitioner	51

Registration of Nursing Homes

TABLE D 9

	Number of Homes	Number of beds provided for:—		
		Maternity	Dual Purposes	Total
Homes first registered during the year ..	—	—	—	—
Homes on the register at the end of the year	10	42	42	84

Action during 1959:

Number of applications for registration refused	—
Number of exemptions granted	—
Number of exemptions withdrawn	—
Number of registrations cancelled	—
Number of appeals by aggrieved persons to a Court of Summary Jurisdiction	—
Number of cases in which fines were imposed	—
Number of inspections	93
Number of registered homes not inspected	—

The inspections during the year were made by the Clinic Medical Officer, the Superintendent Nursing Officer, and the Assistant Superintendent Nursing Officers.

Deaths of Infants under one year associated with prematurity, and, in the post-natal period associated with diarrhoea and enteritis, pneumonia, broncho-pneumonia, and bronchitis

TABLE D 10

	1950		1951		1952		1953		1954		1955		1956		1957		1958		1959	
	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	107	12.11	102	11.61	108	12.69	84	9.85	74	8.91	78	9.62	53	6.45	91	10.8	85	10.3	90	10.8
Diarrhoea and Enteritis	37	4.19	45	5.12	57	6.70	65	7.62	24	2.89	29	3.58	8	0.97	10	1.2	13	1.6	12	1.4
Pneumonia, Broncho-Pneumonia and Bronchitis	88	9.96	52	5.91	40	4.70	56	6.57	49	5.90	35	4.32	28	3.41	26	3.1	45	5.4	34	4.1

Infant Mortality by Causes and Sex

TABLE D 11

CAUSES OF DEATH	Under 1 Month				1-11 Months			Total Under 1 Year	
	Males	Females	Total	Rate per 1,000 live births	Males	Females	Total	No.	Rate per 1,000 live births
Tuberculosis of Respiratory System	—	—	—	—	—	—	—	—	—
Tuberculosis, other Forms ..	—	—	—	—	—	—	—	—	—
Dysentery	1	—	1	0.12	1	—	1	2	0.24
Scarlet Fever and Streptococcal sore throat	—	—	—	—	—	—	—	—	—
Typhoid	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—
Whooping Cough	—	1	1	0.12	6	—	6	7	0.84
Meningococcal Infections	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	1	—	1	1	0.12
Other Infectious and Parasitic Diseases	—	—	—	—	1	—	1	1	0.12
Benign and Unspecified Neoplasms	—	—	—	—	—	—	—	—	—
Vascular Lesions affecting Central Nervous System	—	—	—	—	—	1	1	1	0.12
Non-meningococcal Meningitis	1	—	1	0.12	—	—	—	1	0.12
Other Diseases of Heart	—	—	—	—	—	—	—	—	—
Influenza	—	—	—	—	2	—	2	2	0.24
Pneumonia	—	—	—	—	18	16	34	34	4.06
Bronchitis	—	—	—	—	—	—	—	—	—
Intestinal Obstruction and Hernia	—	—	—	—	2	1	3	3	0.36
Gastritis, Duodenitis, Enteritis and Colitis, except Diarrhoea of the new born	—	—	—	—	7	5	12	12	1.44
Cirrhosis of Liver	—	—	—	—	—	—	—	—	—
Nephritis and Nephrosis	—	—	—	—	—	—	—	—	—
Congenital Malformations	19	18	37	4.42	8	11	19	56	6.69
Birth Injury, Post-natal Asphyxia and Atelectasis	—	—	—	—	—	—	—	—	—
(a) with prematurity	11	9	20	2.39	—	—	—	20	2.39
(b) without prematurity	20	10	30	3.58	—	1	1	31	3.71
Infections of New-Born	—	—	—	—	—	—	—	—	—
(a) with prematurity	—	1	1	0.12	—	—	—	1	0.12
(b) without prematurity	5	5	10	1.19	—	—	—	10	1.19
Other Diseases peculiar to Early Infancy	—	—	—	—	—	—	—	—	—
(a) with prematurity	31	38	69	8.25	—	—	—	69	8.25
(b) without prematurity	6	3	9	1.07	1	1	2	11	1.32
All other Causes	1	—	1	0.12	4	3	7	8	0.96
Accidents	1	—	1	0.12	—	2	2	3	0.36
Unknown Causes	—	—	—	—	—	—	—	—	—
Homicide and Operations of War ..	1	—	1	0.12	—	—	—	1	0.12

Infant Mortality (By Age Groups)

TABLE D 12

Sex	Under 1 day	1 day and less than 7 days	1-4 weeks	1-2 months	2-3 months	3-6 months	6-12 months	Total	Deaths of Illegitimate children
Males ..	53	34	10	4	9	24	14	148	4
Females ..	50	23	12	8	6	12	15	126	4
Total ..	103	57	22	12	15	36	29	274	8

TABLE D 13

Cause of Death	No. of Deaths	Rate per 1,000 live births
Acute Fulminating Eclampsia	1	0.12
Mesenteric Thrombosis; Pre-Eclamptic Toxaemia; Acute Fatty Metamorphosis of Liver	1	0.12

Infant Mortality Rate, 1940—1959

TABLE D 14

YEAR	Deaths per 1,000 Births	YEAR	Deaths per 1,000 Births
1940	122	1950	49
1941	91	1951	44
1942	92	1952	47
1943	111	1953	45
1944	89	1954	39
1945	84	1955	37
1946	61	1956	29
1947	60	1957	32
1948	45	1958	30
1949	56	1959	33

Home Nursing Service

The Home Nursing Staff consists of 1 Superintendent, 1 Assistant Superintendent, 45 Queen's Nurses and 7 trainee staff.

There were 13 nurses in training during the year. 11 were Staff candidates and 2 were County candidates. The training remains at a high standard and several of the candidates obtained credits in various subjects at the examination.

The Superintendent attended a Training Conference arranged by the Queen's Institute of District Nursing on 12/13th June.

4 District Nurses attended a refresher course held in Belfast on 13/18th March.

The total number of visits paid during the year was 218,848, in comparison with 219,578 in 1958.

Sick room requisites such as Dunlopillo mattresses, air cushions, bed-rests, rubber sheeting, bed-pans, etc., are sent out to patients on loan when required.

Home Nursing Service
Statistics of Work Done, 1959

TABLE D 15

A.	Number of Cases:—					
	(i)	Brought forward from 1958	..	..	..	1,299
	(ii)	New cases taken on during 1959	..	..	..	4,868
		(Analysis of new cases:—				
		Tuberculosis	181			
		Cancer	322			
		Diabetes	75			
		Gynaecological	27			
		Pneumonia	55			
		Surgical	617			
		General Medical	3,591)			
	(iii)	Removed during 1959	..	..	..	4,742
		(Cause of removal:—				
		Convalescent	2,735			
		Died	598			
		To Hospital	887			
		Other Causes	522)			
		Remaining on books at end of 1959	..	..	..	1,425
B.	Analysis of Visits made to all cases in 1959:—					
		Tuberculosis	9,930			
		Cancer	15,904			
		Diabetes	28,370			
		Gynaecological	1,335			
		Pneumonia	674			
		Surgical	21,408			
		General Medical	141,227			
		Total Visits	218,848			

AFTER-CARE

The Committee's scheme for dietetic assistance continued during the year. Assistance is given up to a period of six weeks after discharge from Hospital during which time the National Assistance Board, to whom each case is referred, arranges for its continuance from central funds if necessary. The total number of cases dealt with was 126. Women over 60 and men over 65 are excluded from the scheme and are dealt with by the National Assistance Board.

The transfer of the functions of the Northern Ireland Tuberculosis Authority extended the scheme to those persons recommended by chest physicians and one pint of milk is supplied daily. During the nine months from 1st April, 723 persons received milk under the scheme. Cases are reviewed periodically by the chest physician who recommends the continuation or cessation of supplies.

MEDICAL COMFORTS

The transfer of the functions of the Northern Ireland Tuberculosis Authority also placed on the Committee the duty of providing beds, bedding and other sick room requisites for T.B. patients discharged from Hospital for home nursing. During the nine months 43 persons were issued with beds, etc. in addition to the 79 persons who had after-care equipment on loan at the date of the service being handed over.

In conclusion I would like to express to the members of the staff my sincere appreciation of the excellent manner in which they discharged their duties throughout the year.

H. A. WARNOCK, M.D., B.Sc., D.P.H.,

Senior Medical Officer

REPORT OF THE SENIOR MEDICAL OFFICER, SCHOOL HEALTH DIVISION, FOR THE YEAR 1959

Belfast Grant-Aided Schools

Section 42 of the Education Act (N.I.) 1948, as amended by the Education (Amendment) Act (N.I.) 1956, lays on the local authority's health committee the duties of providing for medical inspection and treatment of all pupils attending grant-aided schools in their area; these duties are carried out by the School Health Service. In Table E 1 are shown the different types of grant-aided schools in the City of Belfast and the number of pupils attending them.

The closing of old and obsolete buildings continues, and several modern schools to replace them were opened during the year. Thus, Table E 1 shows a reduction of one county primary and two voluntary primary schools in 1959 compared with 1958, and the opening of a county secondary, a special and two voluntary secondary schools. The number of pupils with whom we have to deal rose slightly again this year to 81,251 on roll at 31st December.

Staff

For a large part of 1959 our staff of medical officers was reduced from twelve to ten and so the relevant tables in this report show a corresponding reduction of about one sixth in the work done as compared with the previous year.

Shortage of qualified Health Visitors continued in 1959 but we had no difficulty in recruiting good nurses without the Health Visitor's certificate to fill vacancies. Two of these nurses from the School Health Service were seconded in September to the Health Visitors Training Course at the Royal College of Nursing for a period of about nine months; temporary replacements were engaged to continue the work of these seconded nurses.

Speech therapists continue to be very scarce. Though our establishment provides for five and a half therapists, throughout the year we had only one full-time therapist on our staff; this lady resigned on marriage at the end of the year and could not be replaced. The equivalent of one full-time speech therapist was also provided throughout the year by the Northern Ireland Hospitals Authority in the form of eleven sessions per week from three therapists on the staff of the Royal Belfast Hospital for Sick Children who did part-time work in our school clinics. Two other therapists who are married women worked one or two sessions per week in the clinics when they could find someone to care for their own young children. The secondment of suitable girls to speech therapy training centres by the health committee appears to be the only solution to this chronic shortage.

School Medical Inspections

Owing to our depleted medical officer staff the total number of medical inspections in 1959 was 30,722, some 4,600 fewer than in 1958. Routine medical inspections were reduced by about 4,000 and re-examinations by about 600; special examinations of children referred by the teacher were almost the same number as last year at 579.

We abandoned Group V altogether as one of the least fruitful groups in which to find defects and we reduced the inspections of nursery schoolchildren by more than half. These nursery children are normally examined each term, but we felt unable to do this in 1959; each child was examined at least once during the year. Group 1, the entrants, being the most important of the compulsory groups under present regulations, was examined in full, while the other groups were not completely covered (Table E 2).

Table E 4 shows the attendance of parents at routine medical inspections. In 1959, 42.5% of the examinations were made in the presence of a parent, a welcome increase of 2.2% over the previous year. As usual the parents attend better at primary than at secondary schools, better for younger than for older children, and better for girls than for boys.

The value of routine medical examinations continues to be questioned in the medical press and elsewhere, but these doubts are usually cast by persons not themselves engaged in the routine examination of ostensibly healthy children. Our medical staff are all agreed that routine medical inspection has a valuable part to play in child health and would be reluctant to abandon this measure unless it were replaced by a more efficient substitute.

For the past few years we have noted the action found to be necessary as a result of routine medical inspection as distinct from the defects found on inspection. A table showing this necessary action has been given in our annual report since 1956, and is again published this year, Table E 11.

This table indicates the formidable total of 4,113 items found to need some attention not already being given; it does not include all children who have defects—these are shown in Table E 7—nor does it include children whose defects are already being adequately treated. This picture confirms our findings of the past few years. We discover annually 4,000 to 5,000 defects for which the School Health Service has to initiate some treatment, and this means that we need to do something for one out of every 4 or 5 children examined as a routine and not referred because of suspected trouble.

A valuable feature of the present system which can hardly be reduced to statistics is that it gives the opportunity for health education in perhaps its most effective form, namely on a personal basis. Each year on countless unrecorded occasions advice is given by the doctor to parent or child when they meet for a routine examination, innumerable questions from parents and children are answered, and discussions take place on topics ranging from porridge for breakfast to television at bedtime. Many parents seize on the school doctor's routine examination to voice fears and problems which they think would be considered too trivial to warrant a visit to their family doctor; often the school doctor is able to dispel bogies and superstitions which have been a longstanding worry, or conversely he may find in these apparently trivial matters the seeds of serious trouble-to-come and be able to take preventive action.

This type of work is very difficult to record and measure, but those of us who practice it are convinced of its merits. Of course the doctor is unable to do this kind of therapy in a hurry and we are much in favour of amendments to the legislation which would give us more freedom to deal with inspections in our own way without removing the obligation on parents to submit their children for examination on request. Our experience of the relatively few cases of refusal to submit to medical examination over the past twelve years indicates that the refusal always has a cause which, far from making the examination unnecessary, makes it essential. The refusals tend to come on the one hand from autocratic child mis-managers who do not wish us to see the maladjusted products of their misrule, and on the other from well-meaning but over-protective parents anxious to spare their children from imagined horrors involved in the correction of a hernia or other treatable abnormality.

The legislation in England and Wales provides that local authorities may, if they wish, have the Ministry's approval to experiment with other methods than routine medical inspection for age groups older than entrants. As we said in the 1957 annual report, we in Belfast would welcome a similar change in the statutory requirements here.

Heights, Weights and Nutrition

Last year's figures for the average heights and weights of boys and girls showed that the small steady increase which had been in evidence for at least ten years had halted, and although at some ages the averages were slightly higher than in 1957, more often a slight fall occurred. On comparing this year's figures with 1958 we again find at some ages an increase and at some a fall in the averages, but on the whole the general tendency is once again upwards (Table E 3).

As usual this year's table of nutrition shows very few badly undernourished children (Table E 6).

Defects discovered at Routine Medical Inspections

This year we found 270 children per thousand to have more or less defective vision (Table E 7). But although more than a quarter of all children examined have less than perfect vision, they have improved over the past few years according to the numbers defective per thousand examined:—1956—319; 1957—312; 1958—294; 1959—270. The greatly improved standards of school buildings; their better design, siting, internal decoration, and lighting; must have something to do with this.

We found 39.5 children per thousand to have a squint, about the same proportion as in previous years, and a figure typical of industrial areas throughout the British Isles. The greater number of these squints are found in children from primary schools, 42 per thousand, and only 24 per thousand in secondary school children.

Apart from defects of psychological development which show a substantial reduction, all other defects in Table E 7 occurred with almost exactly the same frequency as in 1958.

Table E 8 sets out the distribution of defects of visual acuity with and without glasses. Table E 9 shows defects of colour vision.

Tuberculin Tests and B.C.G. Vaccinations

In Table E 10 are shown the results of tuberculin tests of schoolchildren at routine medical examinations. No children tested in this Table had had B.C.G. vaccinations, and so the last column gives

an estimate of the rate of naturally acquired positive reactions. This rate has been falling over recent years, reflecting a fall in tuberculous infection throughout the community. This year's 12.9% positive tuberculin reactors compares with last year's 15.4%.

In addition to those children tested at routine medical inspections with a view to B.C.G. vaccination, a number of tests were made in the school clinics at the request of parents. With the winding up of Northern Ireland Tuberculosis Authority in April, 1959, the responsibility for B.C.G. vaccination fell directly on the health committee, whose programme of vaccinations had hitherto been carried out as agents of the Tuberculosis Authority. The School Health Service has now undertaken the vaccinations at an increased number of schools and other establishments, and of volunteers requesting vaccination at any age. We also deal with record keeping in connection with B.C.G. vaccinations and tuberculin reactions of Belfast residents.

During 1959 retesting of 80 children vaccinated at various times up to six years ago was done, and in no case was a reversion to negative reaction found.

Handicapped Pupils

An increase of about 150 in the number of pupils classed as educationally subnormal occurred in 1959 (Table E 14). Rather more children are now regarded as partially deaf and fewer as totally deaf; there are fewer epileptics and a few more maladjusted and physically handicapped pupils. We think that ascertainment in all categories other than educationally subnormal and maladjusted is not far from complete.

Table E 15 shows the frequency with which the various handicaps coincide with one another in the same child. The figure at the foot of each column is the sum of the figures, if any, appearing above and to the left of it; it indicates for the handicap named at the top of the column the number of times that handicap is found in association with any other amongst our 3,322 handicapped Belfast pupils. The figures other than those at the foot of each column show the number of times given pairs of handicaps coincide.

Multiple handicaps occur often and they present very difficult problems of education and treatment. About one in eight handicapped pupils has more than one handicap, and these are usually due to a common cause damaging more than one part of the body.

Special schools in Belfast underwent further development during the past year and plans for the future are in hand. A new school for junior educationally subnormal pupils was opened at Harberton and the two existing schools, Mount Vernon and Oakleigh, were reorganised as schools for the senior educationally subnormal. The new school includes housemothers on the staff, so that young retarded pupils can be handled who would otherwise have to remain at home until more mature, and retarded children with additional handicaps can more easily be admitted. A housemother has been added to the staff at Graymount Open Air School where she is kept very busy and relieves the teachers of many time-consuming tasks. At Fleming Fulton School where our spastics and other physical handicaps are dealt with another class was added, bringing the roll to 56 pupils. There is still a waiting list for admission, and plans to enlarge the school and add residential accommodation are being prepared. The open-air-school at Graymount is also to be rebuilt shortly.

A special class in a normal school is to be established soon to deal with partially deaf children whose handicap is not severe enough for a special school, but who need help to keep up with their fellows.

Clinics

The School Health Service has waited long for new clinic accommodation which would give the facilities needed to attract both patients and staff. This year work was commenced on the building of our first new clinic at Cupar Street in west Belfast and is expected to be completed before the end of 1960. The plans are also well advanced for the second new clinic which will be built on a site already acquired at Lincoln Avenue. In the design and equipment of these clinics our committee and the Ministry of Health have given us virtually everything that we asked for and the architectural staff of the City Surveyor's department have produced plans for beautiful and modern buildings to the completion of which we look forward with great pleasure.

A. L. WALBY, M.B., D.P.H.,

Senior Medical Officer.

Belfast Grant-Aided Schools

TABLE E 1

Type of School							Number	Pupils
Nursery Schools and Classes							10	346
Primary†	{ County Primary Schools						72	30,599
	{ Voluntary Primary Schools under Lay Manager						1	207
	{ Voluntary Primary Schools under Roman Catholic Management						63	20,088
	{ Special Schools						9	948
Secondary†	{ County Secondary Schools						18	13,569
	{ Voluntary Secondary Schools †(Participating)						19	13,518
	{ Voluntary Secondary Schools †(Non-participating)‡†						3	1,976

† These groups of schools are considered separately where possible in the following tables.

‡† These schools conduct their own schemes of medical and dental inspection and treatment under the provisions of Section 42 (6) of the Education Act (N.I.), 1947.

† Includes preparatory school in most cases.

School Medical Inspections

TABLE E 2

Type of School	Sex	Routines						Totals	Specials	Re-examinations	Totals
		Age Groups									
		Nursery	Entrants	II	III	IV	V				
Primary Schools	Boys	239	3,438	764	2,524	296	—	7,261	264	5,336	12,861
	Girls	169	3,306	790	2,356	275	1	6,897	211	4,315	11,423
Secondary Schools	Boys	—	86	78	484	1,154	—	1,802	61	1,779	3,642
	Girls	—	134	136	414	790	—	1,474	43	1,279	2,796
Totals	Both	408	6,964	1,768	5,778	2,515	1	17,434	579	12,709	30,722

Average Heights and Weights

TABLE E 3

Boys						
Age	Number Examined		Average Weight Pounds		Average Height Inches	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
4	415	23	39.3	43.8	41.1	43.6
5	2,054	58	42.0	45.2	42.8	44.8
6	970	5	45.5	46.6	44.6	45.3
7	107	2	49.8	66.0	46.7	51.3
8	53	5	56.7	63.8	49.7	51.5
9	608	72	64.4	69.8	52.3	54.2
10	1,551	109	69.7	77.3	53.7	55.8
11	596	20	71.6	78.5	54.7	55.3
12	377	355	80.0	93.5	56.9	59.5
13	223	814	90.5	98.3	59.0	61.3
14	64	330	95.9	106.1	60.6	62.4
15	4	9	117.5	94.1	63.3	60.7
16	—	—	—	—	—	—
17	—	—	—	—	—	—
18	—	—	—	—	—	—
19	—	—	—	—	—	—

Girls						
Age	Number Examined		Average Weight Pounds		Average Height Inches	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
4	437	43	39.4	41.7	40.5	42.2
5	1,889	77	40.4	43.6	42.5	44.0
6	968	12	43.2	47.2	44.2	46.4
7	150	17	46.0	54.8	45.6	48.5
8	53	32	54.5	66.5	49.6	52.6
9	597	90	63.3	69.2	51.9	53.6
10	1,388	104	67.6	75.2	53.3	54.8
11	512	38	74.0	85.5	55.0	58.6
12	459	271	83.8	95.8	57.6	60.3
13	218	535	93.8	103.5	59.1	61.3
14	48	247	103.3	105.9	61.4	61.9
15	8	8	102.3	142.5	61.1	59.8
16	1	—	108.0	—	59.0	—
17	—	—	—	—	—	—
18	—	—	—	—	—	—
19	—	—	—	—	—	—

Attendance of Parents at Routine Medical Inspections

TABLE E 4

Age Group	Primary				Secondary			
	Boys		Girls		Boys		Girls	
	Entrants	2,352	(68.4%)	2,280	(69.0%)	36	(41.9%)	63	(47.0%)
II	321	(42.0%)	429	(54.3%)	18	(23.1%)	39	(28.7%)
III	813	(32.2%)	978	(41.5%)	24	(5.0%)	41	(9.9%)
IV	31	(10.5%)	30	(10.9%)	37	(3.2%)	30	(3.8%)
V	—	—	—	—	—	—	—	—
Totals	3,517	(50.1%)	3,717	(55.2%)	115	(6.4%)	173	(11.7%)
	7,324 (53.3%)				288 (8.8%)			
	7,612 (44.7%)							

Vaccination

TABLE E 5

Type of School	Sex	Entrants		II		III		IV		V		Totals	
		No. Examined	Number Unsatisfactory	No. Examined	Number Unsatisfactory	No. Examined	Number Unsatisfactory	No. Examined	Number Unsatisfactory	No. Examined	Number Unsatisfactory	No. Examined	Number Unsatisfactory
Primary	Boys	3,438	1,058 (30.8%)	764	195 (25.5%)	2,524	795 (31.5%)	296	90 (30.4%)	—	—	7,022	2,138 (30.4%)
	Girls	3,306	1,119 (33.8%)	790	211 (26.7%)	2,356	650 (27.6%)	275	87 (31.6%)	1	—	6,728	2,067 (30.7%)
	Both	6,744	2,177 (32.3%)	1,554	406 (26.1%)	4,880	1,445 (29.6%)	571	177 (31.0%)	1	—	13,750	4,205 (30.6%)
Secondary	Boys	86	13 (15.1%)	78	12 (15.4%)	484	108 (22.3%)	1,154	256 (22.2%)	—	—	1,802	389 (21.6%)
	Girls	134	31 (23.1%)	136	19 (14.0%)	414	81 (19.6%)	790	212 (26.8%)	—	—	1,474	343 (23.3%)
	Both	220	44 (20.0%)	214	31 (14.5%)	898	189 (21.0%)	1,944	468 (24.1%)	—	—	3,276	732 (22.3%)
TOTALS	Both	6,964	2,221 (31.9%)	1,768	437 (24.7%)	5,778	1,634 (28.3%)	2,515	645 (25.6%)	1	—	17,026	4,937 (29.0%)

Nutrition

TABLE E 6

Age Group	Type of School	NORMAL (A)		SUB-NORMAL (B)		BAD (C)	
		Boys	Girls	Boys	Girls	Boys	Girls
Entrants	Primary	3,174 (92.4%)	2,944 (89.1%)	249 (7.2%)	339 (10.3%)	12 (0.4%)	20 (0.6%)
	Secondary	85 (98.8%)	129 (96.3%)	1 (1.2%)	5 (3.7%)	—	—
II	Primary	723 (94.6%)	724 (91.8%)	40 (5.3%)	63 (8.0%)	1 (0.1%)	2 (0.2%)
	Secondary	77 (98.7%)	123 (91.1%)	1 (1.3%)	12 (8.9%)	—	—
III	Primary	2,340 (92.9%)	1,178 (96.2%)	177 (7.0%)	45 (3.7%)	3 (0.1%)	1 (0.1%)
	Secondary	450 (93.2%)	401 (96.9%)	33 (6.8%)	12 (2.9%)	—	1 (0.2%)
IV	Primary	282 (95.3%)	—	14 (4.7%)	—	—	—
	Secondary	1,110 (96.3%)	769 (97.6%)	41 (3.5%)	19 (2.4%)	2 (0.2%)	—
V	Primary	—	—	—	—	—	—
	Secondary	—	—	—	—	—	—
TOTALS	Primary	6,519 (92.9%)	4,846 (91.2%)	480 (6.9%)	447 (8.4%)	16 (0.2%)	23 (0.4%)
	Secondary	1,722 (95.7%)	1,422 (96.7%)	76 (4.2%)	48 (3.2%)	2 (0.1%)	1 (0.1%)

Defects Discovered at Routine Medical Inspection

TABLE E 7

Defect		Type of School	Defective for Treatment	Per 1,000	Defective for Observation	Per 1,000
Skin		Primary ..	90	6.6	152	11.1
		Secondary ..	18	5.5	46	14.0
		Total ..	108	6.3	198	11.6
Eyes	(a) vision	Primary ..	1,299	94.5	2,430	176.7
		Secondary ..	339	103.5	635	193.8
		Total ..	1,638	96.2	2,965	174.1
	(b) squint	Primary ..	180	13.1	414	30.1
		Secondary ..	16	4.9	62	18.9
		Total ..	196	11.5	476	28.0
	(c) other	Primary ..	48	3.5	113	8.2
		Secondary ..	12	3.7	17	5.2
		Total ..	60	3.5	130	7.6
Ears	(a) hearing	Primary ..	124	9.0	156	11.3
		Secondary ..	14	4.3	8	2.4
		Total ..	138	8.1	164	9.6
	(b) otitis media	Primary ..	21	1.5	72	5.2
		Secondary ..	—	—	10	3.1
		Total ..	21	1.2	82	4.8
	(c) other	Primary ..	57	4.1	34	2.5
		Secondary ..	6	1.8	6	1.8
		Total ..	63	3.7	40	2.4
Nose and Throat	Primary ..	256	18.6	1,631	118.6	
	Secondary ..	29	8.9	104	31.7	
	Total ..	285	16.7	1,735	101.9	
Speech	Primary ..	68	5.0	219	15.9	
	Secondary ..	10	3.1	16	4.9	
	Total ..	78	4.6	235	13.8	
Cervical glands	Primary ..	22	1.6	172	12.5	
	Secondary ..	3	.9	4	1.2	
	Total ..	25	1.5	176	10.3	
Heart and circulation	Primary ..	75	5.5	207	15.1	
	Secondary ..	11	3.4	25	7.6	
	Total ..	86	5.1	232	13.6	
Lungs	(a)	Primary ..	157	11.4	308	22.4
		Secondary ..	33	10.1	56	17.1
		Total ..	190	11.2	364	21.4
	(b) pulmonary tuberculosis	Primary ..	2	.2	7	.5
		Secondary ..	—	—	2	.6
		Total ..	2	.1	9	.5
Development	Primary ..	16	1.2	36	2.6	
	Secondary ..	1	.3	2	.6	
	Total ..	17	1.0	38	2.2	
Orthopaedic	(a) posture	Primary ..	88	6.4	30	2.2
		Secondary ..	24	7.3	6	1.8
		Total ..	112	6.6	36	2.1
	(b) feet	Primary ..	193	14.0	184	13.4
		Secondary ..	67	20.5	54	16.5
		Total ..	260	15.3	238	14.0
	(c) other	Primary ..	23	1.7	81	5.9
		Secondary ..	13	4.0	18	5.5
		Total ..	36	2.1	99	5.8

TABLE E 7 (continued)

Defect	Type of School	Defective for Treatment	Per 1,000	Defective for Observation	Per 1,000	
Nervous System	(a) epilepsy	Primary ..	4	.3	29	2.1
		Secondary ..	1	.3	1	.3
		Total ..	5	.3	30	1.8
	(b) other	Primary ..	6	.4	17	1.2
		Secondary ..	1	.3	4	1.2
		Total ..	7	.4	21	1.2
Psychological	(a) development	Primary ..	21	1.5	100	7.3
		Secondary ..	1	.3	2	.6
		Total ..	22	1.3	102	6.0
	(b) stability	Primary ..	12	.9	16	1.2
		Secondary ..	—	—	2	.6
		Total ..	12	.7	18	1.1
Tuberculosis—non-pulmonary	Primary ..	1	.1	8	.6	
	Secondary ..	—	—	—	—	
	Total ..	1	.1	8	.5	
Other defects	Primary ..	192	14.0	383	27.9	
	Secondary ..	36	11.0	57	17.4	
	Total ..	228	13.4	440	25.8	

The numbers of children examined were:—Primary 13,750; Secondary 3,276; Total 17,026.

The visual acuity could not be accurately assessed in 316 primary and 7 secondary schoolchildren; for "Eyes (a) vision", therefore, the numbers examined were:—Primary 13,434; Secondary 3,269; Total 16,703.

Visual Acuity

TABLE E 8

(a) Primary schoolchildren without glasses

Visual Acuity	Left Eye							Right Eye	
	6/6	6/9	6/12	6/18	6/24	6/36	6/60	<6/60	Totals
6/6	10,181	359	119	70	31	37	16	14	10,827
6/9	332	752	101	57	27	17	4	4	1,294
6/12	89	115	194	53	19	14	2	—	486
6/18	48	37	69	131	34	10	2	2	333
6/24	28	26	17	33	65	18	4	2	193
6/36	28	14	14	16	31	69	7	2	181
6/60	9	3	3	4	2	5	26	2	54
<6/60	8	3	—	3	1	2	3	46	66
Totals	10,723	1,309	517	367	210	172	64	72	13,434

(b) Primary schoolchildren with glasses

Visual Acuity	Left Eye							Right Eye	
	6/6	6/9	6/12	6/18	6/24	6/36	6/60	<6/60	Totals
6/6	294	74	29	10	13	14	2	5	441
6/9	43	111	25	10	4	5	1	1	200
6/12	28	35	47	17	1	2	—	—	130
6/18	11	13	20	28	2	1	—	—	75
6/24	8	8	5	4	6	1	—	—	32
6/36	8	3	2	2	3	5	1	—	24
6/60	3	2	2	—	—	—	1	—	8
<6/60	2	1	—	1	1	—	—	4	9
Totals	397	247	130	72	30	28	5	10	919

TABLE E 8 (continued)

(c) Secondary schoolchildren without glasses

Right Eye	Left Eye								Right Eye	
	Visual Acuity	6/6	6/9	6/12	6/18	6/24	6/36	6/60		<6/60	Totals
	6/6	2,352	92	39	22	17	11	2	3	2,538
	6/9	88	101	28	9	4	4	1	1	236
	6/12	27	23	51	12	13	3	4	—	133
	6/18	15	12	24	41	6	8	2	—	108
	6/24	10	9	8	15	32	16	1	—	91
	6/36	9	5	3	5	13	54	7	—	96
	6/60	4	2	—	1	1	2	29	3	42
	<6/60	1	2	1	1	1	1	1	17	25
Left Eye	Totals	2,506	246	154	106	87	99	47	24	3,269

(d) Secondary schoolchildren with glasses

Right Eye	Left Eye								Right Eye	
	Visual Acuity	6/6	6/9	6/12	6/18	6/24	6/36	6/60		<6/60	Totals
	6/6	164	34	14	3	1	1	1	—	218
	6/9	34	41	7	2	2	1	—	—	87
	6/12	16	14	22	5	—	—	—	—	57
	6/18	5	2	4	4	2	—	—	—	17
	6/24	1	2	4	5	—	2	—	—	14
	6/36	—	—	—	—	—	—	—	1	1
	6/60	—	1	—	—	—	—	—	—	1
	<6/60	—	—	—	—	—	—	—	—	—
Left Eye	Totals	220	94	51	19	5	4	1	—	395

Colour Vision

TABLE E 9

Colour Vision	Type of School	Boys	Girls	Total
Normal	Primary	394 (88.5%)	503 (96.3%)	897 (92.8%)
Defective—safe		27 (6.1%)	16 (3.1%)	43 (4.4%)
Defective—unsafe		24 (5.4%)	3 (0.6%)	27 (2.8%)
Total		445 (100%)	522 (100%)	967 (100%)
Normal	Secondary	1,253 (91.6%)	803 (99.4%)	2,056 (94.5%)
Defective—safe		63 (4.6%)	3 (0.4%)	66 (3.0%)
Defective—unsafe		52 (3.8%)	2 (0.2%)	54 (2.5%)
Total		1,368 (100%)	808 (100%)	2,176 (100%)
Normal	All Schools	1,647 (90.8%)	1,306 (98.2%)	2,953 (94.0%)
Defective—safe		90 (5.0%)	19 (1.4%)	109 (3.5%)
Defective—unsafe		76 (4.2%)	5 (0.4%)	81 (2.5%)
Total		1,813 (100%)	1,330 (100%)	3,143 (100%)

Tuberculin Tests

TABLE E 10

Age	Number of children available	Offered* tuberculin test	Refused	Tested	Negative	Positive
4	918	—	—	—	—	—
5	4,078	1	—	1	—	1 (100%)
6	1,955	—	—	—	—	—
7	276	3	1 (33.3%)	2	2 (100%)	—
8	143	36	1 (2.8%)	35	34 (97.1%)	1 (2.9%)
9	1,367	795	105 (13.2%)	690	636 (92.2%)	54 (7.8%)
10	3,152	2,047	432 (21.1%)	1,615	1,458 (90.3%)	157 (9.7%)
11	1,166	617	131 (21.2%)	486	406 (83.5%)	80 (16.5%)
12	1,462	414	114 (27.5%)	300	243 (81.0%)	57 (19.0%)
13	1,790	554	139 (25.1%)	415	330 (79.5%)	85 (20.5%)
14	689	177	49 (27.7%)	128	89 (69.5%)	39 (30.5%)
15	29	6	2 (33.3%)	4	3 (75.0%)	1 (25.0%)
16	1	—	—	—	—	—
17	—	—	—	—	—	—
18	—	—	—	—	—	—
19	—	—	—	—	—	—
Totals	17,026	4,650	974 (20.9%)	3,676	3,201 (87.1%)	475 (12.9%)

* From 10 years onwards the difference between this figure and the number available is accounted for largely by children known to have had B.C.G. vaccination, but includes some who had skin disease or other ailments making tuberculin testing undesirable. At routine medical inspections the younger children are not usually offered tuberculin test unless they are tuberculosis contacts, or their parents request it, or they are nearing 10 years of age.

Action to be Taken as a Result of Routine Medical Inspection

TABLE E 11

Primary Schools

Age Group	Home Visits		To Family Doctor		To School Clinic		To Eye Specialist		To E.N.T. Specialist		To Hospital		To N.I.T.A.		To Physio-therapist		To Speech Therapist		To Audio-metrist		Other Action	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Entrants	112	71	25	33	204	174	217	171	3	4	11	8	—	—	52	29	22	11	26	23	16	48
II	42	20	6	10	60	60	112	92	3	8	7	9	—	—	18	23	4	3	4	1	6	6
III	127	106	13	13	140	167	319	305	14	8	5	9	—	2	47	71	12	4	15	16	23	32
IV	19	14	1	2	15	13	65	56	—	1	2	1	—	—	8	10	—	2	3	2	9	9
V	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	300	211	45	58	419	414	713	625	20	21	25	27	—	2	125	133	38	20	48	42	54	95
							1,338		41		52		2		258		58		90		149	

Secondary Schools

Age Group	Home Visits		To Family Doctor		To School Clinic		To Eye Specialist		To E.N.T. Specialist		To Hospital		To N.I.T.A.		To Physio-therapist		To Speech Therapist		To Audio-metrist		Other Action	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Entrants	4	2	2	4	2	—	4	2	—	—	—	—	—	—	—	2	—	—	—	—	—	1
II	4	2	1	4	—	3	3	8	—	—	—	—	—	—	—	5	—	—	1	—	—	4
III	4	6	5	11	16	7	40	32	—	—	—	2	—	—	8	17	4	—	—	—	4	15
IV	8	17	12	26	41	26	124	100	—	1	2	4	—	1	11	22	6	1	5	1	11	30
V	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	20	27	20	45	59	36	171	142	—	1	2	6	—	1	19	46	10	1	5	2	15	50
							313		1		8		1		65		11		7		65	

Re-examinations

TABLE E 12

Defects for which re-examined	Primary Schools			Secondary Schools		
	For Treatment	For Observation	Cured	For Treatment	For Observation	Cured
Skin	20	72	78	2	31	31
Eyes (a) vision	1,642	2,676	951	533	1,558	224
(b) squint	152	464	13	20	81	4
(c) other	13	29	24	—	4	7
Ears (a) hearing	134	185	142	10	31	13
(b) otitis media	13	48	49	1	8	7
(c) other	16	31	52	2	18	7
Nose and throat	218	1,091	1,071	15	85	197
Speech	75	228	166	14	22	25
Cervical glands	10	67	42	—	4	6
Heart and circulation	30	157	105	4	29	40
Lungs (a)	61	246	296	2	53	49
(b) pulmonary tuberculosis	1	13	11	—	2	—
Development	16	53	24	—	4	—
Orthopaedic (a) posture	7	51	46	2	9	20
(b) feet	32	134	146	25	70	136
(c) other	9	55	36	1	11	10
Nervous system (a) epilepsy	4	24	1	—	4	—
(b) other	2	13	8	—	2	2
Psychological (a) development	30	119	22	1	19	6
(b) stability	4	16	13	—	2	3
Tuberculosis—non-pulmonary	—	23	10	—	3	—
Other defects	111	375	393	13	96	115
Totals	2,600	6,170	3,699	645	2,146	902
		12,469			3,693	
			16,162*			

* 16,162 defects in 12,709 children (Primary 9,651; Secondary 3,058).

Clinic Examinations

TABLE E 13

Reason for examination	Number of examinations carried out	Per cent
Skin	1,512	8.1
Eyes (a) vision	691	3.7
(b) squint	117	.6
(c) other	131	.7
Ears (a) hearing	629	3.4
(b) otitis media	169	.9
(c) other	105	.6
Nose and throat	571	3.1
Speech	63	.3
Cervical glands	12	.1
Heart and circulation	225	1.2
Lungs (a)	504	2.7
(b) pulmonary tuberculosis	6	.03
Development	33	.2
Orthopaedic (a) posture	14	.1
(b) feet	112	.6
(c) other	86	.5
Nervous system (a) epilepsy	31	.2
(b) other	41	.2
Psychological (a) development	649	3.5
(b) stability	111	.6
Tuberculosis non-pulmonary	3	.01
Other defects	1,093	5.8
B.C.G. vaccination	3,761	20.1
Tuberculin skin test	2,712	14.5
Pre-anaesthetic examination	5,284	28.3
Total	18,665	100

Handicapped Pupils

TABLE E 14

Handicap	At Special Day School		At Special Residential School		At Normal School		At No School		At Home Tuition		Totals	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Blind	7	9	3	5	—	—	2	—	1	—	13	14
Partially Sighted ..	9	8	3	3	29	27	3	1	—	—	44	39
Deaf	10	14	4	2	—	—	—	—	—	—	14	16
Partially Deaf ..	20	17	5	6	115	89	1	2	1	1	142	115
Delicate	58	77	2	—	33	38	1	—	6	3	110	118
Educationally Subnormal	368	235	7	6	742	494	22	19	4	5	1,143	759
Epileptic	18	9	1	3	65	42	4	3	—	1	88	58
Maladjusted ..	20	16	1	2	102	37	1	—	3	1	127	56
Physically Handicapped	56	48	9	7	89	76	10	5	20	21	184	157
Speech Defect ..	33	15	—	1	354	325	3	2	1	1	391	344
Totals ..	520	434	35	35	1,608	1,142	47	32	36	33	2,246	1,676
	954		70		2,750		79		69		3,922*	

*3,922 handicaps in 3,322 pupils (1,946 boys, 1,376 girls). Of these, 360 children have 2 handicaps, 52 have 3 handicaps, and 6 have 4 handicaps.

Multiple Handicaps

TABLE E 15

Handicap	Blind	Partially Sighted	Deaf	Partially Deaf	E.S.N.	Epileptic	Maladjusted	Physically Handicapped	Speech Defect	Delicate
Delicate ..	—	2	—	8	46	2	7	6	5	76
Speech defect ..	—	3	—	10	113	6	17	20	174	
Physically handicapped ..	1	7	2	3	59	10	3	111		
Maladjusted ..	—	2	—	3	110	4	146			
Epileptic ..	1	2	1	1	45	72				
E.S.N. ..	1	16	—	57	447					
Partially deaf ..	1	2	—	85						
Deaf ..	—	—	3							
Partially sighted ..	—	34								
Blind ..	4									

Showing the distribution of 924 handicaps among the 426 children who have multiple handicaps. 360 children have two handicaps and appear once in the table; 60 children have three handicaps and appear three times; 6 children have four handicaps and appear six times each.

TABLE E 16

Graymount Open-Air School

Reasons for Admission	Boys	Girls	Total
Adenitis	—	1	1
Anaemia	1	—	1
Asthma	7	9	16
Bronchiectasis	3	3	6
Bronchitis	3	5	8
Cerebral Palsy	1	—	1
Chorea	—	1	1
Debility	2	9	11
Heart disease (Congenital)	2	—	2
Heart disease (Rheumatic)	2	1	3
Late effects of Poliomyelitis	—	1	1
Late effects of primary tuberculous complex	1	2	3
Lobectomy	—	1	1
Muscular dystrophy	1	—	1
Nervousness	1	1	2
Retarded physical development	—	1	1
Rheumatism	—	3	3
Number admitted during 1959	24	38	62
Number discharged during 1959	30	31	61
Average duration of stay in months	41	32	36

TABLE E 17

Miscellaneous

Ultra violet light treatments	3,623	
Physiotherapy:		
Children treated	854	
Total attendances	9,796	
Cases discharged	425	
Waiting list	20	
Speech Therapy:		
Total attendances	4,002	
Audiometry:		
Children sweep tested at school	5,032	
Children failing sweep test	339	(6.7%)
Children failing individual test	251	(5.0%)
Children referred to specialist	100	
Cleanliness:		
Children inspected	156,897	
Children found to have nits	6,969	(4.4%)
Children found to have vermin	2,063	(1.3%)
Children cleansed at clinics	3,862	
B.C.G. Vaccinations:		
Vaccinations at School Clinics	3,761	
Vaccinations by other authorities	980	
Children tuberculin tested at school	3,676	
Children showing positive reaction	475	(12.9%)
Children showing negative reaction	3,201	(87.1%)
Vaccinated children retested—positive	80	
Vaccinated children retested—negative	—	
Nurses' Home Visits	6,285	
Nurses' School Visits	1,243	
Medical Officers' Visits	199	
Eye Specialist:		
Children refracted	4,624	
Children given post-mydratic examination	2,304	
Children examined for other eye conditions	478	
Children referred for orthoptic treatment	133	
E.N.T. Specialist:		
Children examined	6	
Medical Specialist:		
Children examined at school clinics	97	
Children examined at special schools	80	
General Anaesthetics	5,284	

REPORT OF THE CHIEF DENTAL OFFICER FOR THE YEAR 1959

Report covering the work of the Dental Section during the year 1959. Statistical tables relative to the various aspects are appended.

Dental Inspection in Schools

During the year all schools within the Health Committee's Scheme namely a total of 202 were visited. This entailed 560 visits by the dental officers who, between them, dealt with an average of 128 children per session. The aggregate inspected was 71,424 or 90.1% of the average on rolls. Five schools do not participate in the Health Committee's Scheme. These provided privately for inspection of 1,991 pupils or 90% of their total on rolls. In the Committee's clinics a further 13,117 routine dental inspections were recorded, making an ultimate total of dental inspections by the Committee's officers of 84,541 for the year.

Dental Condition of Children Inspected

Of the total pupils examined in Schools, 51,169 were classified as defective, equivalent to 71.6% of those inspected. Boys and girls were found on the average equally defective, the percentages varying between 30% and 81%, the former figure in respect of the two years age group and the latter in reference to the eight years group. In particularised figures, of the total of teeth examined, approximately 149,000 required attention, 121,000 being considered capable of preservation. It needs little imagination to realise the tremendous effort and cost necessary to effect this yearly totality of repair.

Post Inspection Notification and Parents' Response

In accordance with routine, and excepting those children currently in process of having treatment, the parents of all pupils found on inspection to have defect were duly notified. A total of 49,057 were thus advised to seek treatment. In response, 73.5% agreed, 60.47% indicating their intention of having this carried out privately, and the balance 39.53% asking for treatment at the Committee's clinics. Approximately one in eight parents refuse yearly to have any dental treatment for their children. The success of dental health education in respect of this section appears doubtful. Happily they are a minority, many of whom incidentally expect instant professional attention when pain supervenes.

Attendances at City Clinics

All those asking for treatment to be carried out at the Committee's clinics were duly given appointments. These numbered 14,260, of which total 10,651 individuals eventually attended, making an aggregate of 36,911 patients during the year. Patients attending for the first time numbered 3,548, the balance, 33,363 or 90.3%, being those who returned, presumably appreciatively, for further treatment.

Dental Treatment in Clinics

Treatment in clinics during the year followed the usual course and, with the exceptions of Prosthetic, Orthodontic and other specialised cases, covered all branches necessary to secure dental fitness of the child. Filling treatments at 26,198 greatly outweighed, as they should, those of extraction, 3,817 treatment sessions out of a total of 4,353 being devoted to conservation measures. Those in need of Orthodontic treatments were referred to the Dental Department of the Royal Victoria Hospital. These totalled 158. Those requiring dentures were referred to the appointed surgeon, and 39 pupils were prosthetically equipped. The above special treatment figures are not included in the statistical tables. Analysis of the treatments per child provided in the Committee's clinics shows that each child treated received an average of 7.2 treatments, and that there was an average of 2.8 check inspections per child inspected. Patients per surgeon averaged 3,538 and treatments for the year totalled 43,705.

General Remarks

As this is the last report I shall have the honour of presenting, I may perhaps be permitted to briefly recapitulate in regard to the fortunes of the Service.

In 1927 the surgical staff comprised of only four part-time officers. Their work mainly consisted of trying to cope with a flood of extractions. Ten years later in 1937 the first full-time officer was appointed, and the long arduous process of building up the Service on a conservative basis began. Equipment, premises and staff were quite inadequate in the attempts to meet the treatment demand, and, as a result, long waiting lists for treatment were continuously in evidence. Nevertheless the

persistent pressure of demand produced a gradual if slow march forward, and some idea of the development of the Service may be gauged from the fact that a yearly total of treatments of 7,552 in the year 1927, increased to a yearly total of 75,116 in 1954. This year, however, proved unfortunately to be the peak year of the Service. The existing clinics, all adapted buildings, were by this time incapable of housing any further expansion of the Service, and the long awaited new clinics were still in a procrastinatory position far away on the horizon. The acquisition of further dental officer staff was hampered by the fact that these surgeons could find more lucrative positions elsewhere. Many private practitioners who, in the first years of the General Health Service, had no time nor desire for juvenile patients, now decided to take all comers. Parents naturally responded to this situation by taking their children to the more comfortable and more conveniently situated private surgeries, and the change over from clinic to private dentist became increasingly apparent. The past ten years has consequently seen the demand for clinic treatment steadily drop. Whereas in 1949, only 11.3% indicated their intention of attending a dentist privately and 88.7% asked for treatment at the clinics, today 60.47% go to the private dentist, and only 39.53% avail themselves of the clinics. Is the process likely to proceed to a complete change over? Is the future of the School Dental Service destined to be merely that of a School Inspection Service? These questions are pertinent, in view of the officially known and accepted fact that the cost to the nation of the priority dental treatment of children is infinitely less when provided by the local authorities. In these circumstances it would seem appropriate that Governmental policy should be stated, in guidance to the local Health Authority, before the latter is expected to further embark upon what may easily now prove to be a too ambitious, or even eventually a quite unnecessary dental clinic programme.

It would not be fitting if I conclude this report without also recording my gratitude to all my colleagues, Dental, Medical and Administrative, for their co-operation, courtesy and tolerance during my term of office. These factors made my path the easier, and I retire with very happy recollections of the period in which I have been privileged to serve.

A. S. IRVING, L.D.S., R.C.S. (Edin.),

Chief Dental Officer

School Dental Inspection

TABLE F 1

SCHOOL DENTAL INSPECTION	Area 1	Area 2	Area 3	Totals
SCHOOLS VISITED:				
Primary	54	50	37	141
Intermediate	3	12	6	21
Technical, Preparatory, and Grammar	12	6	6	24
Nursery and Nursery Centre	1	6	2	9
Special	3	3	1	7
TOTAL Visits	200	211	149	560
.. Inspection Sessions	200	211	149	560
.. Inspected per Session (Average)	126	128	128	128
TOTAL SCHOOLS VISITED	73	77	52	202
.. .. . (per cent)	(100.0)	(100.0)	(100.0)	(100.0)
RESPONSE TO NOTIFICATION:				
Refusing Inspection	—	—	—	—
Absent from Inspection	3,118	4,035	2,679	9,832
.. .. . (per cent)	(11.0)	(13.0)	(12.3)	(12.1)
TOTAL "CHILDREN" NOTIFIED	28,380	31,097	21,779	81,256
.. .. . (per cent of Rolls)	(100.0)	(100.0)	(100.0)	(100.0)
CHILDREN INSPECTED:				
Primary	16,223	16,703	12,834	45,760
Intermediate	2,294	7,481	3,487	13,262
Technical, Preparatory, and Grammar	6,327	2,039	2,448	10,814
Nursery School and Centre	34	126	79	239
Special School	384	713	252	1,349
TOTAL Boys Inspected	13,109	14,637	9,833	37,579
.. Girls Inspected	12,153	12,425	9,267	33,845
TOTAL CHILDREN INSPECTED	25,262	27,062	19,100	71,424
.. .. . (per cent of Rolls)	(89.56)	(90.46)	(90.30)	(90.10)
CHILDREN DEFECTIVE:				
Primary	12,695	13,205	9,762	35,662
Intermediate	1,403	5,264	2,620	9,287
Technical, Preparatory, and Grammar	2,951	950	1,256	5,157
Nursery School and Centre	263	527	170	960
Special School	18	62	23	103
TOTAL Boys Defective	8,935	10,866	7,158	26,959
.. .. . (per cent Inspected)	(68.16)	(74.24)	(72.80)	(71.74)
TOTAL Girls Defective	8,395	9,142	6,673	24,210
.. .. . (per cent Inspected)	(69.08)	(73.58)	(72.01)	(71.53)
TOTAL CHILDREN DEFECTIVE	17,330	20,008	13,831	51,169
.. .. . (per cent Inspected)	(68.6)	(73.93)	(72.41)	(71.64)

Classification of Dental Defects

TABLE F 2

CLASSIFICATION	Area 1	Area 2	Area 3	Totals	
INDIVIDUALS:					
Children with	Saveable Teeth	10,927	14,191	10,190	35,308
	Unsaveable Teeth	775	1,134	686	2,595
	Saveable and Unsaveable Teeth	4,832	4,384	3,295	12,511
	Irregularity of Dentition	304	381	423	1,108
	Other Dental and Oral Defects	337	413	457	1,207
TEETH:					
Temporary Dentition	Sound	125,101	124,544	102,113	351,758
	Saveable	18,290	24,241	16,647	59,178
	Unsaveable	7,999	6,064	4,446	18,509
Permanent Dentition	Sound	367,547	384,554	302,440	1,054,541
	Saveable	20,369	24,856	17,041	62,266
	Unsaveable	2,972	3,662	2,412	9,046
TOTAL Teeth Saveable	38,659	49,097	33,688	121,444	
.. .. . Unsaveable	10,971	9,726	8,858	27,555	
.. .. . Examined	542,288	567,921	445,099	1,555,308	

Classification of Defectives

TABLE F 3

AGE GROUPS	BOYS			GIRLS		
	Inspected	Defective	Per cent Defective	Inspected	Defective	Per cent Defective
2	16	6	37.50	10	3	30.00
3	59	22	37.29	58	21	36.21
4	398	236	59.30	386	248	64.25
5	1,863	1,356	72.79	1,877	1,364	72.67
6	3,136	2,428	77.42	2,874	2,227	77.49
7	3,141	2,523	80.32	2,947	2,348	79.67
8	3,239	2,600	80.27	3,106	2,528	81.39
9	3,328	2,691	80.86	3,179	2,545	80.06
10	3,472	2,683	77.28	3,279	2,493	76.03
11	4,151	2,924	70.44	3,689	2,534	68.69
12	4,312	2,870	66.56	3,798	2,547	67.06
13	3,608	2,310	64.02	3,204	2,095	65.39
14	3,525	2,380	67.52	2,902	1,926	66.37
15	1,922	1,248	64.93	1,641	985	60.02
16	810	423	52.22	569	226	39.72
17	462	209	45.24	291	104	35.74
18	132	48	36.36	34	15	44.12
19	5	2	40.00	1	1	100.00
TOTALS	37,579	26,959	71.74	33,845	24,210	71.53

Post-Inspection Notification and Parents' Response

TABLE F 4

ITEMS	Area 1	Area 2	Area 3	Total
NOTIFIED AS DEFECTIVE:				
Total Notified	16,868	17,896	14,293	49,057
PARENTS' RESPONSE:				
Refusing Treatment	2,060	2,616	1,548	6,224
" " (per cent)	(12.21)	(14.62)	(10.83)	(12.69)
No response	2,041	3,509	1,210	6,760
" " (per cent)	(12.10)	(19.61)	(8.47)	(13.78)
Consenting to Treatment (Total)	12,767	11,771	11,535	36,073
" " (per cent notified)	(75.69)	(65.77)	(80.70)	(73.53)
" " By own Dentist	8,068	6,890	6,855	21,813
" " (per cent)	(63.19)	(58.53)	(59.43)	(60.47)
" " at City Clinics	4,699	4,881	4,680	14,260
" " (per cent)	(36.81)	(41.47)	(40.57)	(39.53)
TREATMENT ARRANGED:				
Appointments—				
Issued	4,699	4,881	4,680	14,260
" Per cent Applications	(100.0)	(100.0)	(100.0)	(100.0)

Attendances at City Clinics

TABLE F 5

CLINIC ATTENDANCES	Area 1	Area 2	Area 3	Totals
INDIVIDUALS:				
Attending for Inspection	907	670	613	2,190
" " Treatment	2,292	1,999	1,705	5,996
" " Inspection and Treatment	190	1,679	596	2,465
TOTAL INDIVIDUALS	3,389	4,348	2,914	10,651
PATIENTS:				
New Patients	1,134	1,503	911	3,548
Previous Patients	7,833	11,794	13,736	33,363
TOTAL PATIENTS	8,967	13,297	14,647	36,911

Dental Clinic Attendances:—Schools' Analysis

TABLE F 6

School	Total on Rolls	Children Attending Clinic	Total Clinic Attendances	Total Treatments
PRIMARY SCHOOLS:—Area 1				
All Saint's Junior	161	8	31	28
Argyle Senior	719	82	183	229
Ashmore Street Junior	241	44	69	112
Ballymurphy	261	22	40	70
Blythefield Infants	259	17	41	71
Blythefield Junior	522	28	84	141
Botanic Senior	471	22	74	75
Broadway Junior	180	22	59	79
Brown Street	438	78	191	274
Charter's Memorial	255	61	130	190
Donegall Road Junior	367	65	215	245
Earl Street Girls	119	30	56	74
Earl Street Infants'	154	29	64	78
Fane Street Senior	648	50	212	238
Mabel Street Junior	126	21	52	89
Malone	237	32	103	122
Mayo Street	293	47	134	160
McQuiston	359	21	68	81
Ormeau Road Junior	172	7	29	29
Porter's Senior	279	5	41	40
Queen Victoria	224	42	130	160
St. Anthony's Boys'	149	28	46	91
St. Anthony's Girls'	221	41	87	136
St. Brendan's	348	79	154	238
St. Bride's	275	45	127	135
St. Catherine's Convent	491	57	157	190
St. Colmcille's	56	14	22	31
St. Comgall's Boys'	505	87	185	239
St. Comgall's Girls'	385	80	178	237
St. Finian's	509	90	209	287
St. Gall's	410	89	255	312
St. John's Boys'	279	53	121	154
St. John's Girls'	363	26	74	83
St. Joseph's Boys'	493	61	120	157
St. Joseph's Girls'	316	31	66	89
St. Kevin's Boys'	962	164	382	505
St. Kevin's Girls'	1,076	194	472	615
St. Mary's Christian Brothers'	381	70	235	290
St. Mary's Boys'	93	17	39	54
St. Mary's Girls'	113	14	51	63
St. Mary's	398	67	184	217
St. Patrick's	94	9	22	35
St. Paul's Boys'	402	84	212	281
St. Paul's Girls'	151	18	25	41
St. Peter's Boys'	311	34	54	74
St. Peter's Girls'	241	25	48	63
St. Simon's Junior	354	69	253	283
St. Vincent's	701	122	365	460
Springfield	445	82	243	286
Stranmillis	207	24	53	63
Taughmonagh	576	83	222	291
Ulsterville Junior	484	95	332	388
Workman	135	25	101	144
No School	—	36	106	135
TOTALS	18,409	2,746	7,206	9,252

Dental Clinic Attendances:—Schools' Analysis—(continued)

TABLE F 7

School	Total on Rolls	Children Attending Clinic	Total Clinic Attendances	Total Treatments
PRIMARY SCHOOLS:—Area 2				
Ballygolan	385	84	347	391
Blenheim Junior	196	65	139	214
Carr's Glen	1,019	74	300	314
Cliftonville Infants'	358	62	247	282
Cliftonville Junior	514	96	334	371
Convent	809	150	451	517
Crumlin Road Junior	323	34	92	125
Currie Junior	330	68	179	182
Finiston	477	67	240	304
Forth River	347	56	151	174
Getty Junior	234	52	108	157
Grove Junior	619	127	380	403
Hemsworth Square Senior	593	59	166	162
Hillman	340	82	262	305
Holy Cross Boys'	671	75	140	185
Holy Cross Girls'	908	105	215	299
Holy Family Boys'	337	108	355	331
Holy Family Girls'	370	115	422	386
John White Junior	501	72	204	213
Lancaster Street	234	37	73	114
Lowwood Infants'	326	97	287	350
Lowwood Junior	455	52	185	173
Our Lady of Lourdes	223	28	85	127
Perth Street	256	36	87	104
Riddel Memorial Junior	320	64	146	194
St. Colmban's Boys'	349	43	99	113
St. Colmban's Girls'	402	55	137	148
St. Joseph's Boys'	61	16	34	46
St. Malachy's Boys'	205	31	53	92
St. Mark's	177	37	99	102
St. Mary's Junior	474	68	174	180
St. Mary's Star of Sea Boys'	414	54	114	149
St. Mary's Star of Sea Girls'	425	88	236	320
St. Patrick's Christian Brothers'	382	120	321	381
St. Patrick's Boys' Junior	331	48	143	163
St. Patrick's Girls' Junior	348	55	144	181
St. Vincent de Paul's Boys'	117	18	34	60
St. Vincent de Paul's Girls'	134	7	15	22
Seaview	417	143	489	550
Skegoniel	490	144	598	746
Springhill	645	69	163	272
Star of Sea Boys'	131	60	124	162
Star of Sea Girls'	294	80	218	269
Wheatfield Infants'	398	62	162	202
Wheatfield Junior	457	61	210	262
Wolfhill	130	17	33	65
Woodvale Junior	403	103	326	388
No School	—	73	174	216
TOTALS	18,329	3,317	9,695	11,466

Dental Clinic Attendances:—Schools' Analysis—(continued)

TABLE F 8

School	Total on Rolls	Children Attending Clinics	Total Clinic Attendances	Total Treatments
PRIMARY SCHOOLS:—Area 3				
Avoniel Junior	702	95	370	485
Beechfield Junior	636	66	257	304
Belmont Junior	324	20	116	129
Elmgrove	854	180	944	1,043
Euston Street	734	149	642	770
Greenwood	322	56	263	301
Harding Memorial	670	167	886	881
Lagan Village	88	11	38	44
Megain Memorial Junior	247	36	133	179
Memel Street Junior	123	9	42	39
Mersey Street	801	78	287	347
Nazareth House	83	3	8	12
Nazareth Lodge	112	32	108	139
Nettlefield	773	205	966	1,057
Orangefield	608	123	704	721
Ravenhill Road	109	17	71	89
Robert Bell	196	47	157	219
Rosario Boys'	226	59	246	308
Rosario Girls'	167	39	217	248
Rosetta	582	149	793	778
St. Anthony's Boys'	150	40	171	189
St. Anthony's Girls'	150	39	192	186
St. Colman's	340	26	96	129
St. Congall's Boys'	96	5	19	21
St. Congall's Girls'	89	8	18	20
St. Joseph's Boys'	183	24	127	129
St. Joseph's Girls'	139	26	127	148
St. Malachy's Christian Brothers'	159	29	82	89
St. Malachy's Convent	400	60	228	275
St. Matthew's Boys'	451	73	230	317
St. Matthew's Convent	348	62	250	305
Strand	542	47	266	322
Strandtown	1,060	136	785	866
Sydenham	435	61	211	241
Templemore Avenue	724	41	186	196
Ulidia	533	103	531	619
No School	—	59	244	234
TOTALS	14,156	2,380	11,011	12,379

TABLE F 9

Dental Clinic Attendances:—Schools' Analysis—(continued)

School	Total on Rolls	Children Attending Clinic	Total Clinic Attendances	Total Treatments
INTERMEDIATE SCHOOLS:				
Area 1				
Kelvin	890	53	160	185
St. Louise's Girls'	883	32	71	86
St. Thomas's Boys'	902	77	214	284
Total	2,675	162	445	555
Area 2				
Ballygomartin Boys'	882	71	207	224
Dunlambert Boys'	750	79	447	484
Edenderry	685	43	136	115
Everton	866	63	210	211
Glenwood Girls'	511	37	120	99
Graymount Girls'	807	81	336	437
Little Flower Girls,	473	1	12	15
Model Boys'	856	139	523	599
Model Girls'	916	97	408	437
Mountcollyer	717	60	203	237
St. Gabriel's Boys'	611	48	108	138
St. Patrick's Boys'	713	48	146	155
Total	8,787	767	2,856	3,151
Area 3				
Ashfield Boys'	874	62	328	413
Ashfield Girls'	871	48	303	340
Orangefield Boys,	832	93	602	723
Park Parade	944	100	600	654
St. Monica's Girls,	668	25	188	225
Total	4,189	328	2,021	2,355
TOTAL (All Areas)	15,651	1,257	5,322	6,061

TABLE F 10

Dental Clinic Attendances:—Schools' Analysis—(continued)

School	Total on Rolls	Children Attending Clinic	Total Clinic Attendances	Total Treatments
TECHNICAL, PREPARATORY, and GRAMMAR:				
Area 1				
Ashleigh House	405	5	21	23
" " (Ardeen)	68	—	1	2
Christian Brothers' Grammar	759	86	264	305
Grosvenor High	761	91	535	665
Methodist College	1,795	93	390	426
Princess Gardens	346	13	72	85
Richmond Lodge	414	5	21	24
Royal Academical Institution	1,085	31	136	145
" " " (Inchmarlo)	249	10	26	28
Technical Intermediate	277	36	113	121
Victoria College	418	17	46	53
" " (Drumglass House)	137	—	—	—
Total	6,714	387	1,625	1,877
Area 2				
Christian Brothers' Technical	289	37	93	129
Royal Academy	840	31	154	157
" " (Ben Madigan)	50	1	4	2
" " (Wingfield)	162	3	6	5
" " (Sinclair Memorial)	73	10	35	40
St. Malachy's College	762	57	191	234
Total	2,176	139	483	567
Area 3				
Annadale Boys'	733	69	386	449
Bloomfield Collegiate	374	11	69	71
Cabin Hill	276	1	7	3
Carolan Girls,	397	36	312	335
Methodist College (Downey House)	196	28	140	173
Strathearn	570	10	37	47
Total	2,546	155	951	1,078
TOTAL (All Areas)	11,436	681	3,059	3,522

Dental Clinic Attendances:—Schools' Analysis—(continued)

TABLE F 11

School	Total on Rolls	Children Attending Clinic	Total Clinic Attendances	Total Treatments
NURSERY SCHOOLS AND CENTRES:				
Area 1				
Arellian	46	4	10	12
Taughmonagh	26	1	10	9
Area 2				
Ballygolan	11	7	19	25
Brefne	22	—	—	—
Edenderry	48	13	26	34
Frederick Street	25	1	6	6
Glenbank	24	4	11	11
Tudor Lodge	49	8	21	24
Area 3				
McArthur	48	5	6	7
Nazareth Lodge	47	5	5	5
TOTAL (All Areas)	346	48	114	133

Dental Clinic Attendances:—Schools' Analysis—(continued)

TABLE F 12

School	Total on Rolls	Children Attending Clinic	Total Clinic Attendances	Total Treatments
SPECIAL SCHOOLS:				
Area 1				
Blind, Deaf and Dumb	32	1	1	5
Fleming Fulton	42	6	19	34
Harberton	82	1	4	6
Malcolm Sinclair House	23	—	—	—
Ulster School for Deaf and Blind	158	80	166	381
Area 2				
Blind, Deaf and Dumb	—	—	—	—
Graymount	160	73	135	200
Mount Vernon	152	16	35	41
St. Aloysius's Boys'	134	3	8	8
Area 3				
Blind, Deaf and Dumb	—	—	—	—
Oakleigh	165	37	102	162
Victoria Homes	—	4	33	53
TOTAL (All Areas)	948	222*	504*	892†

* Includes one "Outside Area" patient.

† Includes two "Outside Area" treatments.

Dental Clinic Attendances:—School Group Totals

TABLE F 13

School	Total on Rolls	Children Attending Clinic	Total Clinic Attendances	Total Treatments
Primary	50,894	8,443	27,912	33,097
Intermediate	15,651	1,257	5,322	6,061
Technical, Preparatory, and Grammar ..	11,436	681	3,059	3,522
Nursery and Nursery Centre	346	48	114	133
Special	948	222	504	892
TOTAL (All Areas and Schools) ..	79,275	10,651	36,911	43,705

Dental Treatment in Clinics

TABLE F 14

TREATMENTS	Area 1	Area 2	Area 3	Totals
EXTRACTIONS:				
Temporary Dentition	2,156	2,624	2,383	7,163
Permanent Dentition	611	1,008	749	2,368
Total	2,767	3,632	3,132	9,531
.. (per cent of Treatments) ..	(24.12)	(23.22)	(18.88)	(21.81)
ANAESTHETICS:				
Local	30	260	96	386
General	1,486	1,936	1,862	5,284
Total	1,516	2,196	1,958	5,670
.. (per cent of Treatments) ..	(13.21)	(14.04)	(11.80)	(12.97)
FILLINGS:				
Temporary Dentition	1,519	2,318	2,179	6,016
Permanent Dentition	5,003	6,754	8,425	20,182
Total	6,522	9,072	10,604	26,198
.. (per cent of Treatments) ..	(56.84)	(57.99)	(63.93)	(59.94)
SPECIAL TREATMENTS:				
Orthodontic	*	—	—	—
X-Ray	106	19	87	212
Prosthetic	*	—	—	—
Total	106	19	87	212
.. (per cent of Treatments) ..	(0.92)	(0.12)	(0.52)	(0.49)
SUBSIDIARY TREATMENTS:				
Dressings (Tooth)	219	346	407	972
Scalings	17	21	32	70
Polishings	46	188	45	279
Other Operations	281	170	322	773
Total	563	725	806	2,094
.. (per cent of Treatments) ..	(4.91)	(4.63)	(4.86)	(4.79)
CLINICAL INSPECTIONS	3,140	4,924	5,053	13,117
TOTAL TREATMENTS	11,474	15,644	16,587	43,705

* See Text of Report

Analysis of Treatment Sessions

TABLE F 15

ITEMS								TOTALS
TREATMENT SESSIONS (Half-day):								
Extractions	}	..	..	..	..	..	..	450
Anaesthetics		..	..	..	..	..	..
Fillings	}	..	..	..	..	..	..	3,817
Subsidiary Treatments		..	..	..	..	..	..
Clinical Inspections		..	..	..	..	..	..
Special Treatments		..	..	..	..	..	..	86
TOTAL TREATMENT SESSIONS								4,353

Dental Treatment Averages

TABLE F 16

ITEMS								AVERAGE
TREATMENT AVERAGE (Children):								
Extractions	..	(Per Child Treated)	..	..	..	..	..	1.6
Anaesthetics	..	( " " " )	..	..	..	..	..	0.9
Fillings	..	( " " " )	..	..	..	..	..	4.4
Subsidiary Treatments	..	( " " " )	..	..	..	..	..	0.3
Special Treatments	..	( " " " )	..	..	..	..	..	0.04
TOTAL TREATMENTS (Per Child Treated)								7.2
CLINICAL INSPECTION:								
Check Inspections		(Per Child Inspected)	..	..	..	..	..	2.8
TREATMENT AVERAGE (Staff):								
Extractions	..	(Per Extraction Session)	..	..	..	..	..	21.2
"	..	(Per Anaesthetic)	..	..	..	..	..	1.7
Anaesthetics	..	(Per Extraction Session)	..	..	..	..	..	12.6
Fillings	..	(Per Filling Session)	..	..	..	..	..	6.9
Subsidiary Treatments	..	( " " " )	..	..	..	..	..	0.5
Special Treatments	..	(Per Special Treatment Session)	..	..	..	..	..	2.5
Clinical Inspection	..	(Per Treatment Session)	..	..	..	..	..	3.0
PATIENTS	..	(Per Surgeon)	..	..	..	..	..	3,538.8
INDIVIDUALS TREATED (per Surgeon)								811.1

Staff Complement:—Clinic Accommodation

TABLE F 17

ITEMS								TOTALS
STAFF COMPLEMENT:								
Chief Dental Officer	..	..	..	..	..	..	..	1
Dental Officers	..	(Full-time)	}	Equivalent Full-time Total	..	..	..	10.43
"	..	(Sessional)						
Anaesthetists	..	(Sessional)	..	..	..	..	..	6
Dental Clinic Nurses	..	(Full-time)	..	..	..	..	..	1
Dental Attendants	..	(Full-time)	..	..	..	..	..	3
"	..	(Full-time)	..	..	..	..	..	4
"	..	(Full-time)	..	..	..	..	..	4
"	..	(Full-time)	..	..	..	..	..	9.6
TOTAL DENTAL STAFF: Full-time Equivalent								33.03
CLINICS:								
Area 1.	(Dental Surgery accommodation for 4 Officers)	..	..	..	..	..	..	1
Area 2.	(Dental Surgery accommodation for 4 Officers)	..	..	..	..	..	..	2
Area 3.	(Dental Surgery accommodation for 5 Officers)	..	..	..	..	..	..	1
TOTAL DENTAL CLINICS								4

Comparative Dental Totals:—1957—1958—1959

TABLE F 18

ITEMS	1957	1958	1959	1959 compared 1958
SCHOOL DENTAL INSPECTION:				(per cent)
Schools visited	196	195	202	(+) 3.5
Visits	538	529	560	(+) 5.5
Inspection Sessions	531	529	560	(+) 5.5
Notified for Inspection	75,701	76,274	81,256	(+) 6.1
Refusing Inspection	—	2	—	—
Absent from inspection (per cent)	(12.7)	(11.6)	(12.1)	(+) 0.5
Inspected	66,088	67,441	71,424	(+) 5.6
Defective	47,082	49,367	51,169	(+) 3.6
Defective (per cent)	(71.2)	(73.2)	(71.6)	(-) 1.6
POST-INSPECTION NOTIFICATION:				
Notified as Defective	42,102	39,998	49,057	(+) 18.5
" " " (per cent)	(89.4)	(81.0)	(95.9)	(+) 14.9
RESPONSE TO NOTIFICATION:				
No Response (per cent)	(8.0)	(9.0)	(13.8)	(+) 4.8
Refusing Treatment (per cent)	(13.7)	(13.2)	(12.7)	(-) 0.5
Consenting to Treatment:—				
Total (per cent)	(78.3)	(77.8)	(73.5)	(-) 4.3
By own Dentist (per cent)	(52.4)	(56.9)	(60.5)	(+) 3.6
At Clinics (per cent)	(47.6)	(43.1)	(39.5)	(-) 3.6
TREATMENT ARRANGED:				
Appointments—				
Issued (Total)	15,676	13,409	14,260	(+) 6.0
Per cent Clinic Applications	(100.0)	(100.0)	(100.0)	—
Per cent Defectives Inspected	(33.3)	(27.2)	(27.9)	(+) 0.7
ATTENDANCES AT CLINICS:				
New Patients (per cent)	(7.79)	(8.8)	(9.6)	(+) 0.8
Previous Patients (per cent)	(92.2)	(91.2)	(90.4)	(-) 0.8
Total Patients	44,661	38,255	36,911	(-) 3.5
Individuals	14,224	11,681	10,651	(-) 8.8
" (per cent of Roll Defectives)	(26.1)	(20.4)	(18.8)	(-) 1.6
TREATMENTS:				
Extractions—				
Temporary Dentition	9,569	8,320	7,163	(-) 13.9
Permanent Dentition	2,852	2,885	2,368	(-) 17.9
Total	12,421	11,205	9,531	(-) 14.9
Anaesthetics—				
Local	408	545	386	(-) 29.2
General	6,547	5,838	5,284	(-) 9.5
Total	6,955	6,383	5,670	(-) 11.2
Fillings—				
Temporary Dentition	5,322	4,937	6,016	(+) 17.9
Permanent Dentition	22,291	19,833	20,182	(+) 1.7
Total	27,613	24,770	26,198	(+) 5.5
Special Treatments—				
Orthodontic	—	—	—	—
X-Ray	210	200	212	(+) 5.7
Prosthetic	—	—	—	—
Dressings (Tooth)	1,039	950	972	(+) 2.3
Scalings	109	118	70	(-) 40.7
Polishings	329	273	279	(+) 2.2
Other Operations	838	812	773	(-) 4.8
Clinical Inspections	17,733	15,180	13,117	(-) 13.6
TOTAL TREATMENTS	49,514	44,711	43,705	(-) 2.3
" Individuals Treated	10,300	8,774	5,996	(-) 31.7
" " (per cent Roll Defectives)	(18.9)	(15.3)	(10.6)	(-) 4.7

Supplementary Dental Report

Dental Inspection in Non-Participating Schools

TABLE F 19

SCHOOL OR COLLEGE	Notified	Absent	Refusing	Total Inspected	Total Defective	Per cent Defective
Belfast High School	535	20	—	515	330	64.08
.. .. . (Somerton House) ..	198	7	—	191	119	62.30
Dominican College	557	23	—	534	227	42.51
St. Dominic's School	717	46	—	671	349	52.01
.. .. . (Aquinas Hall) ..	100	20	—	80	42	52.50
TOTALS	2,107	116	—	1,991	1,067	53.59

Summarised Dental Report

TABLE F 20

(A)	Number of Children on School Rolls in Area						81,251
	(1) Participating in Authority's Scheme						79,275
	(2) Others						1,976
(B)	Number of Health Authority Dental Clinics in operation at 31st December:						
	(1) Static						Four
	(2) Mobile						Nil
(C)	Number of Clinic Sessions devoted to:						
	(1) Inspection						560
	(2) Treatment						4,353
(D)	Total number of Children dentally inspected (In School) ..						71,424
	(1) Age Group 5—7 years } In School						15,838
	(2) Other Age Groups }						55,586
	(3) "Specials" (Inspected in Clinics)						13,117
	Total Children Inspected						84,541
(E)	Number found to require treatment (At School Inspection)						51,169
(F)	Number of those at (E) for whom:						
	(1) Treatment was accepted at Authority's Clinics						14,260
	(2) Parent chose to consult a private dentist						21,813
	(3) Treatment was declined						6,224
(G)	Number actually treated at Authority's Clinics (Individuals)						5,996
(H)	Total Attendances at Clinics						36,911
(I)	Number of General Anaesthetics administered						5,284

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