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REPORT

ON THE

**Health of the County
Borough of Belfast
for the Year 1957**



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 1957

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

Medical Officer of Health

COUNTY BOROUGH OF BELFAST

Health Committee

1957

Chairman:

Alderman ANDREW SCOTT, J.P.

Deputy Chairman:

Councillor HERBERT JEFFERSON, J.P., M.A., Ph.D.

Aldermen:

THOMAS HENDERSON

ROBERT PIERCE, J.P.

ANDREW SCOTT, J.P.

ROBERT GEORGE CALDWELL KINAHAN, J.P.

Councillors:

Major WILLIAM DUNCAN GEDDIS, J.P.

HERBERT JEFFERSON, J.P., M.A., Ph.D.

JOHN MACGOUGAN

JOHN SAMUEL ROLSTON HARCOURT

Miss IRENE MARGARET ELIZABETH McALERY

WILLIAM ATCHESON

WILLIAM BOUCHER

THOMAS ARTHUR CARRAGHER

JAMES ROBERT McCLURG

SAMUEL HAROLD WALSH

Mrs. MARJORIE SINCLAIR

HEALTH DEPARTMENT
STAFF AS AT 31st DECEMBER, 1957

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:—

1 Clerk Higher Division Grade II; 3 Shorthand Typists; 3 Receptionist/Operators.

Accounts Branch:—

1 Clerk Higher Division Grade II; 2 Clerical Officers; 2 Clerical Assistants.

Stores Branch:—

1 Clerk Higher Division Grade II; 1 Clerical Officer; 3 Clerical Assistants.

Registration Branch:—

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

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

ENVIRONMENTAL HEALTH DIVISION:—

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

Infectious Diseases Branch:—

Medical Officer—S. N. Donaldson, M.B., D.P.H.; 1 Clerk Higher Division Grade II;
1 Vaccination Enforcement Officer; 6 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. McMahan

Divisional Sanitary Officer, South —R. Isdell.

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.

2 Clerks Higher Division Grade II; 4 Clerical Officers; 2 Shorthand Typists; 1 Copy Typist; 5 Clerical Assistants; 1 Clerical Attendent; 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; 1 Clerical Officer.

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.

43 Health Visitors; 46 District Nurses; 16 Midwives (Salaried); 39 Midwives (Fee-per-case).

Executive Officer — R. H. Howard.

1 Clerk Higher Division Grade II; 1 Clerical Officer; 2 Shorthand Typists; 23 Clerical Assistants; 2 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.
P. J. Ward, L.R.C.P.(I), L.R.C.S.(I), D.P.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.))
N. O. Watchman, L.D.S.
S. R. Sheane, L.D.S.

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

Dental Officers — J. H. Dougherty, L.D.S.
P. J. R. Griffith, M.B., 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; 21 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; 10 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 .. .. .	.. .. .	440,100 (estimate of Registrar General for N.I., June, 1957)
Marriages .. .. .	.. .. .	3,645
Marriage Rate .. .. .	.. .. .	8.3
Births Registered .. .. .	.. .. .	8,459 (4,363 males; 4,096 females)
Birth Rate .. .. .	.. .. .	19.2
Birth Rate average for the ten years 1948-1957	.. .. .	19.3
Illegitimate Births .. .. .	.. .. .	197 (102 males; 95 females)
Births (notified) .. .. .	.. .. .	11,069
Still Births (included in total births notified)	.. .. .	314
Deaths .. .. .	.. .. .	4,899 (2,465 males; 2,434 females)
Death Rate .. .. .	.. .. .	11.1
Death Rate average for the ten years 1948-1957	.. .. .	10.9
Deaths of infants under one year of age	.. .. .	275 (140 males; 135 females)
Infant Mortality Rate .. .. .	.. .. .	32 deaths per 1,000 live births
Average for the ten years 1948-1957 .. .. .	.. .. .	42 deaths per 1,000 live births
Neo-Natal Deaths (under one month)	.. .. .	186
Neo-Natal Death Rate .. .. .	.. .. .	22 per 1,000 live births
Average for the ten years 1948-1957 .. .. .	.. .. .	23 per 1,000 live births
Maternal Deaths .. .. .	.. .. .	8
Death Rate .. .. .	.. .. .	0.95 per 1,000 births registered
Deaths from Communicable Diseases listed in Table 8 .. .. .	.. .. .	88
Death Rate from these Diseases .. .. .	.. .. .	0.2
Deaths from Measles .. .. .	.. .. .	2
Deaths from Typhoid Fever .. .. .	.. .. .	Nil
Deaths from Scarlet Fever .. .. .	.. .. .	Nil
Deaths from Whooping Cough .. .. .	.. .. .	1
Deaths from Diphtheria .. .. .	.. .. .	Nil
Deaths from Diarrhoea and Enteritis (under two years of age) .. .. .	.. .. .	12
Deaths from Dysentery .. .. .	.. .. .	Nil
Deaths from Influenza .. .. .	.. .. .	63
Deaths from Tuberculosis of the Respiratory System .. .. .	.. .. .	60
Death Rate from Tuberculosis of the Respiratory System .. .. .	.. .. .	0.13
Deaths from Bronchitis .. .. .	.. .. .	261
Deaths from Pneumonia .. .. .	.. .. .	268

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 to you the Annual Report of the Medical Officer of Health of the City of Belfast for the year 1957, comprised of the reports of the Environmental Health, School Health and Maternity and Child Health Divisions of the Health Department.

Vital Statistics:

The estimated mid-year population has fallen by 4,700 to 440,100. Registered births numbered 8,459 an increase of 247 compared with 1956.

The number of deaths registered has increased by 350 giving a rise in the death rate to 11.1. The rate for Northern Ireland for 1957 was 10.9.

Table 5 shows that the trend of mortality from cancer continues upwards; 844 deaths from this cause is the greatest number ever recorded and 103 more than two years ago, the rate per 1,000 having risen from 1.6 to 1.9. There were 139 deaths from cancer of the lung in males and 18 in females.

The Infant mortality rate was 32 per 1,000 related live births, the second lowest recorded in the City and compares with a rate of 29 in 1956, the lowest recorded. Of the 186 neonatal deaths in 1957, 91 were associated with prematurity. There were 146 such deaths in 1956. Table 3 shows that the number of deaths associated with prematurity moves up to seventh from ninth place in the list of principal causes of death. Pulmonary Tuberculosis has fallen from seventh to ninth place in this list. The total number of deaths from tuberculosis was 69, a new low record. The number of deaths as the result of motor vehicle accidents fell from 46 in 1956 to 36 in 1957 and that due to all other accidents from 93 in 1956 to 79 in 1957.

For the sixth year in succession there were no deaths from diphtheria and for the third successive year no cases of diphtheria were notified. There were two deaths registered as due to measles and one to whooping cough. It is necessary to emphasise the importance of continuing the programme of immunisation of babies against whooping cough. Six non-immunised children under 1 year died from this disease during the previous year, 1956. This disease is a greater cause of mortality and morbidity in the very young child than poliomyelitis and the protection of such children against whooping cough must not be ignored in the glaring publicity given to anti-poliomyelitis vaccination.

Housing:

During the year the Housing (Clearance and Re-development) Committee of the Corporation was formed to undertake amongst other things the duties imposed by the Housing (Miscellaneous Provisions) and Rent Restriction Law (Amendment) Act (N.I.) 1956. The survey of the state of houses in the City required under this Act was commenced during the year and imposed a severe strain on the depleted staff of Sanitary Officers. In addition during the year Part II of the Act came into operation. Accordingly each house for which application is made for an improvement or conversion grant is inspected by a Sanitary Officer in order that an opinion can be conveyed by the Medical Officer of Health to the City Surveyor as to the suitability or otherwise of the premises for such a grant.

Piggeries:

At the end of the year the new By-Laws referred to in the last Annual Report were still awaiting confirmation by the Ministry of Health and Local Government.

Food:

The opening of shops for the sale of meat as cat and dog food has caused concern owing to the difficulty of assuring that none of it will by unauthorised means be used for human consumption. The meat is obtained from knackers' yards. There is no statutory authority giving the Health Department specific powers to supervise this trade.

A campaign was organised during the summer months to encourage occupiers of food premises to eradicate flies as the fly is a carrier of certain dangerous infectious diseases. In addition fly breeding places such as piggeries, stabling yards and tipping grounds were sprayed at intervals with insecticide.

School Health Services:

The Education (Amendment) Act (N.I.) 1956 came into operation on 1st January and on 1st August amended Handicapped Pupils and Special Schools Regulations (N.I.) 1957. The transfer of the duty of ascertainment of Handicapped Pupils to the Education Committee from the Health Committee has taken place without involving any change of duty of the Medical Officers engaged in this work, except that the Medical Officer of Health or his representative now makes the reports to an Education Sub-Committee instead of the Health Committee.

I once again wish to thank all the members of the staff for their continued co-operation in their varied duties as well as the Chairman and Members of the Committee for their support during the past 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	Percentage of Total Deaths	
	Male	Female	Total		1957	1956
Under 1 Year	140	135	275	34.3	5.7	5.2
1—4	15	14	29	0.9	0.6	0.4
5—14	15	10	25	0.3	0.5	0.5
15—24	23	14	37	0.5	0.7	0.7
25—44	122	112	234	1.8	4.8	4.6
45—64	764	535	1,299	12.5	29.0	26.7
65—74	654	608	1,262	48.5	26.3	25.9
75 and over	732	1,006	1,738	144.8	36.2	36.4

Principal causes of death in order of importance

TABLE 3

1.	Heart Disease	..	..	..	..	..	..	1,383
2.	Cancer	..	..	..	..	..	..	844
3.	Vascular Lesions affecting the Central Nervous System	..	..	..	..	..	..	636
4.	Pneumonia	..	..	..	..	..	..	268
5.	Bronchitis	..	..	..	..	..	..	261
6.	Violent and Accidental Deaths	..	..	..	..	..	..	144
7.	Associated with Prematurity	..	..	..	..	..	..	91
8.	Senility and Ill-defined and Unknown Causes	..	..	..	..	..	..	69
9.	Pulmonary Tuberculosis	..	..	..	..	..	..	60

Comparative Statistics for Counties and County Boroughs, 1957

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 ..	6.7	21.5	10.9	0.13	29	1.10
Belfast County Borough ..	8.3	19.2	11.1	0.16	32	0.95
Londonderry County Borough	8.3	28.4	10.1	0.14	26	—
County Antrim ..	6.2	22.7	10.2	0.10	23	1.96
County Armagh ..	6.2	22.0	11.1	0.10	34	0.78
County Down ..	5.8	20.7	10.9	0.12	23	0.97
County Fermanagh ..	5.7	20.8	11.8	0.10	33	1.86
County Londonderry ..	5.7	23.1	10.3	0.06	31	1.19
County Tyrone ..	5.2	24.6	11.4	0.16	32	0.93

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

— Signifies information not available

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

TABLE 6

Year	Population	Births		Deaths		Natural Increase
		Number	Rate	Number	Rate	
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

Deaths from Cancer by Sex and Site

TABLE 7

Detailed List Nos.	Sites	Males	Females
Buccal Cavity and Pharynx			
140	Lip	—	—
141	Tongue	3	—
142	Salivary Gland	1	1
143-144	Mouth	2	3
145-148	Pharynx	9	3
Digestive Organs and Peritoneum			
150	Oesophagus	16	10
151	Stomach	80	53
152-153	Intestines	40	55
154	Rectum	28	31
155-156	Biliary Passages and Liver	7	14
157	Pancreas	20	13
158	Peritoneum	2	1
159	Other Digestive Organs	1	—
Respiratory System			
160	Nose, Nasal Cavities, etc.	1	3
161	Larynx	6	3
162-163	Trachea, Bronchus and Lungs	139	18
164	Mediastinum	1	1
165	Thoracic Organs	—	—
Breast and Genito-Urinary Organs			
170	Breast	—	77
171-174	Uterus	—	24
175	Ovary, Fallopian tube and Broad Ligament	—	24
176	Other Female Genital Organs	—	4
177	Prostate	28	—
178	Testis	3	—
179	Other Male Genital Organs	2	—
180	Kidney	1	8
181	Bladder and Other Urinary Organs	16	11
Other and Unspecified Sites			
190-191	Skin	5	5
192	Eye	—	1
193	Brain and other parts of the Nervous System	9	9
194	Thyroid Gland	2	4
195	Other Endocrine Glands	—	1
196	Bone	3	3
197	Connective Tissue	1	—
198-199	Other Sites	17	8
200-202 } 203-205 }	Neoplasms of Lymphatic and Haematopoietic Tissues	6	7
TOTAL		449	395

Deaths from certain communicable diseases from 1890

TABLE 8

Year	Cerebro-Spinal Fever	Diphtheria	Dysentery	Diarrhoea	Measles	Polio-myelitis	Puerperal Fever	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	—	9	18	18	259	—
1915	39	27	—	240	177	0	8	107	10	134	—
1920	4	45	1	223	132	0	39	94	34	84	243
1925	0	38	0	203	167	0	2	49	18	99	84
1930	—	22	0	116	6	—	8	7	2	65	38
1935	0	55	0	249	251	2	14	37	11	22	65
1940	22	85	0	316	150	1	7	10	1	54	161
1945	2	7	1	188	10	4	5	2	1	26	16
1947	0	3	1	123	42	4	1	0	7	35	27
1948	0	4	1	77	9	0	0	0	1	15	10
1949	0	6	2	109	3	0	0	0	1	9	29
1950	5	3	0	37†	5	11	0	2	1	16	32
1951	4	1	4	54†	3	2	0	1	0	4	232
1952	4	0	0	43†	4	2	0	0	0	10	18
1953	2	0	0	70†	3	1	0	0	0	8	24
1954	2	0	1	29†	2	1	0	0	0	2	20
1955	5	0	3	31†	2	0	0	0	0	10	34
1956	10	0	1	8†	0	1	0	0	0	6	27
1957	0	0	0	12†	2	2	8	0	0	1	63
Average Annual Deaths 1947-56	3.2	1.7	1.3	39†	7.3	2.2	0.1	0.3	1	11.5	45.3

— Signifies information not available

* Not notifiable

† Under two years of age

Notifications of certain communicable diseases from 1900

TABLE 9

Year	Cerebro-Spinal Fever	Diphtheria	Dysentery	Erysipelas	Food Poisoning	Diarrhoea	Measles	Polio-Myelitis	Puer-peral Pyrexia*	Scarlet Fever	Ty-phoid Fever	Whooping Cough
1900	—	407	—	420	—	—	—	—	44	658	1,777	—
1905	—	234	—	352	—	—	—	—	19	650	631	—
1910	—	238	—	257	—	—	—	—	16	734	95	—
1915	65	179	—	185	—	—	—	1	6	1,994	49	—
1920	8	300	—	151	—	—	—	1	48	1,939	210	—
1925	5	423	—	54	—	—	—	0	5	1,657	143	—
1930	24	118	—	109	—	—	—	9	20	1,132	32	—
1935	19	1,201	—	155	—	—	6,203	22	31	3,394	117	337
1940	166	1,165	—	115	—	—	5,062	2	9	1,266	17	701
1945	39	213	—	76	—	—	1,702	20	1	768	14	603
1947	24	115	1	77	—	—	6,468	61	1	1,144	43	821
1948	25	107	18	108	—	—	2,618	8	4	931	6	666
1949	25	107	33	98	34	775	2,025	13	1	2,931	3	1,566
1950	22	45	35	82	55	377	4,209	109	4	1,668	5	1,078
1951	34	10	170	39	40	560	3,354	36	4	349	24	834
1952	44	3	69	49	16	489	2,702	65	56	399	7	2,131
1953	29	1	112	53	26	614	3,146	47	55	612	8	945
1954	32	1	217	43	23	513	1,613	14	42	496	5	773
1955	26	0	401	40	29	689	4,328	3†	46	791	23	1,460
1956	20	0	198	31	31	412	1,797	9	37	540	8	790
1957	14	0	269	27	18	410	4,109	141	50	492	4	119
Average Annual Notifications 1947-56	29	39	125	62	32	554	3,226	37	25	986	13	1,106

— 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. Diarrhoea (notified as Gastro-Enteritis of children under 2 years of age) notifiable only since 1949.
3. Measles—notifiable only as the first case occurring in a household within a period of 2 months.
4. Whooping Cough— notifiable only as the first case occurring in a household within a period of 3 months.

Notification of certain communicable diseases in 1957, by age periods and sexes.

TABLE 10

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	—	1	1	—	—	—	—	—	—	4
Dysentery ..	19	12	39	25	26	18	4	4	5	—	8	1	9	2	18	2	10	269	
Scarlet Fever ..	1	1	14	13	72	128	30	30	26	4	3	1	1	—	—	9	10	492	
Diphtheria ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-Spinal Meningitis	1	1	2	3	2	—	—	—	1	1	—	—	—	—	—	—	—	—	14
Poliomyelitis ..	4	2	17	19	38	5	2	2	3	3	3	1	2	—	7	—	—	141	

MEASLES—4,109 Cases notified.

WHOOPING COUGH—119 Cases notified.

Diphtheria Immunisation

During the year 5,065 children completed a course of immunisation against Diphtheria; of these 2,937 were immunised by the Health Committee's Medical Officers at Clinics, schools, etc., and 2,128 by general practitioners. In addition, 3,546 children received reinforcing injections, 3,355 by Health Committee's Medical Officers and 191 by general practitioners.

TABLE 11 Age Grouping of Immunised Children

Age at end of Year	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	At end of 1957
0—	69	33	57	72	99	89	54	116	147	158	147	330	357	269	Age Groups 1—4 years 11,725 =36.6%
1—	2,492	2,445	2,329	2,475	2,597	2,453	1,642	1,982	2,167	1,809	1,719	1,885	1,978	1,677	
2—	1,329	1,474	1,554	1,259	1,236	1,291	892	1,210	937	885	920	857	791	724	
3—	628	614	752	517	523	633	381	393	413	329	301	315	356	276	
4—	453	358	514	430	352	382	248	224	196	240	198	246	258	201	Age Group 5—9 years 26,473 =66.0%
5—	663	542	557	604	562	699	612	520	690	526	522	642	668	622	
6—	965	810	691	664	655	881	762	669	912	782	834	999	922	749	
7—	802	678	615	480	360	595	500	441	464	398	528	509	497	373	
8—	492	360	328	263	186	221	237	193	210	177	262	227	190	112	Age Group 10+ years 17
9—	251	170	182	121	61	91	80	81	76	45	73	68	42	17	
10+	274	267	233	191	125	279	76	102	128	92	101	63	43	45	TOTAL
TOTAL	8,418	7,751	7,762	7,076	6,756	7,614	5,484	5,931	6,340	5,441	5,605	6,141	6,102	5,065	

WHOOPIG COUGH IMMUNISATION

(Children Immunised with Combined Diphtheria/Pertussis Prophylactic or Simple Whooping Cough Prophylactic)

TABLE 12

Age at end of Year	1952	1953	1954	1955	1956	1957	Total of age Group At end of Year
0—	68	99	131	310	338	258	258 (3.2%)
1—	527	1,023	1,446	1,729	1,838	1,596	1,934 (24.2%)
2—	123	354	687	719	676	642	2,790 (38.5%)
3+	77	131	233	372	471	353	2,889

COMMUNICABLE DISEASES

The year 1957 was characterised by three epidemics: measles during the first quarter of the year, poliomyelitis during the two middle quarters and influenza in the autumn.

Measles. Cases of this disease were first notified in large numbers from West Belfast, a densely populated area where most of our epidemics start. The infection took some five months to spread across the City—a somewhat slower rate of progress than usual. School attendance was greatly affected only in those areas where houses are reasonably well spaced and the size of family is on the average small. In overcrowded areas the children contract measles before school age.

4,109 households were notified as infected. Two deaths were registered, both children of school age, who were treated with antibiotics, but encephalitis developed.

Poliomyelitis. This epidemic proved to be the most extensive of recent years. 142 notifications were received but this is not an accurate estimate of the incidence of poliomyelitis. What clinical condition is notifiable as "acute anterior poliomyelitis" appears to be a matter of opinion which varies from doctor to doctor and from hospital to hospital.

A complete virological study of all cases and suspect cases was carried out at the Department of Microbiology, Queen's University. This revealed that 171 cases of type I poliomyelitis producing clinical symptoms occurred in Belfast. The age distribution of these cases was:—

Age	0—	5—	15+	Total
Paralytic Poliomyelitis	89	21	7	117
Non-Paralytic Poliomyelitis	26	21	7	54

There were two deaths, an infant under 1 year of age and a child of 4 years.

The two most notable features of the epidemic were the age distribution (90% of paralytic cases occurred in children under six years of age), and the unusual number of multiple cases in households. There were 9 instances of multiple cases and with one exception the youngest child was the paralysed one or the more severely paralysed.

Influenza. A new type (Asian) of this disease was reported from the Far East during the summer. Its importation into Belfast appeared to be accomplished by a group of young people who acquired the infection from their Australian cousins while both parties were attending a youth festival in Moscow during August. Some of these young people fell ill while returning home and some after arrival in Belfast.

The subsequent epidemic was most extensive among school children. Classes were reduced to one fifth of their normal numbers and two boarding schools had to be closed as all the children became ill. Institutions for old people were remarkably free from infection. This selective age distribution was the reason for the small number of deaths which was 63. This compares with the 234 deaths caused by the A-prime virus (Liverpool strain) in 1951, in which year old people were largely affected.

Whooping Cough. Only 119 cases were notified, a record low incidence, yet one death occurred, an infant under 6 months of age.

Intestinal Infections. There were four sporadic cases of typhoid fever, all different phage types, involving a sailor, a nurse, a shipyard worker and a school-boy. At least two of these acquired their infection outside the city.

There were no cases of paratyphoid fever.

Food poisoning cases were few and sporadic in character. Dr. Newell of Queen's University sought, in various ways, to encourage general practitioners and hospital doctors to notify and investigate all cases of suspicious illness, yet only 10 sporadic cases of salmonella infection were found. These were 4 cases of *S. heidelberg*; 3 cases of *S. typhimurium*; 2 cases of *S. dublin* and 1 case of *S. enteritidis*.

It is now more than 12 years since any outbreak of food poisoning has occurred in Belfast. Due credit for this must be given to the food and drug inspectors who have sought to attain and maintain high standards of hygiene in food and catering establishments. It is regrettable and surprising that this fact has been used by learned counsel in Court as an argument in favour of a lowering of the standard of hygiene.

Bacillary dysentery (sonne type) remains endemic among children of pre-school age. It is mild in character; there were 269 notifications but no deaths.

IMMUNISATION

In spite of efforts to continue established routine immunisation procedures (smallpox vaccination, diphtheria and whooping cough immunisation) throughout the year the number of children vaccinated and immunised fell below the level of previous years. This was due to the poliomyelitis epidemic and the fear of post-inoculation paralysis: later in the year the influenza epidemic upset the school immunisation programme. Again numbers of infants with bilateral B.C.G. lesions and adenitis were not brought for other inoculations. It is relevant to note here that during the year no fatal cases of tuberculosis occurred under the age of 25 while an infant of less than 6 months died from whooping cough, even in a year of record low incidence of whooping cough. The competing claims of B.C.G. vaccination and whooping cough immunisation in early infancy are worth considering—an infant's life may be at stake.

Poliomyelitis immunisation for children up to 2 years of age was introduced in April and met with a poor response, mainly because of the doubt in parents' minds about the safety of imported vaccine. Some general practitioners advised parents against accepting the vaccine and it was considered that health visitors should not strongly advocate the vaccine in these circumstances. Even with this poor demand, supplies of vaccine never exceeded one third of requirements—this also discouraged health visitors who saw little purpose in stimulating a demand which could not be satisfied. By the end of the year 3,447 children had received a complete course of inoculations: of these 2,647 (77%) were under 5 years of age. At that time the number registered for immunisation was 13,200 of whom 8,294 (63%) were in the most susceptible (under 5 years) age group.

The issue of influenza vaccine (Asian type) by the Ministry of Health and Local Government for the use of general practitioners and local authority staff was an interesting venture. Unfortunately the epidemic arrived before the vaccine. Severe reactions (pyrexial and allergic) to the vaccine were common and discouraged its use.

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SANITARY SERVICES DIVISION

This section of the Report and the following sections, which deal with Smoke Prevention, Port Health, Factories and Shops, Food and Drugs and Rodent and Insect Pests Control, illustrate the variety of functions undertaken by the Chief Sanitary Officer and his staff in connection with the environmental health services in the City. The shortage of sanitary officers is, of course, a national problem, but Belfast, deficient of over 20% of qualified officers, experiences greater difficulties than most authorities, although much has been done during the year to mitigate the effects of the shortage. Because of the urgency of maintaining progress in the Slum Clearance programme the Health Committee was reluctantly compelled to utilise Pupil Sanitary Officers, working under the supervision of inspectors, on this work. Another arrangement is that specialist Sanitary Officers engaged on Factories and Shops or Food Inspection deal with all aspects including sanitary complaints, thus avoiding the necessity of more than one inspector visiting the same premises.

During the latter part of 1956, the Housing (Miscellaneous Provisions) and Rent Restriction Law (Amendment) Act (N.I.) 1956, came into operation. This important Act imposed a considerable volume of work upon the Health Department in implementing measures dealing with slum clearance, improvement and conversion of houses, and, rent restriction. With this responsibility is created the opportunity of tackling the problem of the large number of old, dilapidated houses throughout the City. With full co-operation of the various Corporation Departments concerned with the administration of this Act, a comprehensive policy can be formulated to achieve a satisfactory solution of the City's long standing slum problem, within fifteen to twenty years.

The Department received many complaints of nuisances caused by itinerants. During the year 84 statutory notices were served on occupants for the abatement of public health nuisances in and adjoining shacks erected upon land in various parts of the City. 23 summonses were subsequently served for non-compliance with notices. It was necessary to issue 4 disobedience summonses for non-compliance with Magistrates' Orders to abate public health nuisances. The fines imposed amounted to £20 3s. 6d.

The arrangements whereby plans for new work submitted to the City Surveyor's Building Inspection Department are forwarded to the Health Department for comment on public health matters, continues to prove very useful and enables a check to be kept upon the work being carried out. During the year 346 plans were submitted for examination and comment.

During the year investigation was made of the practices of exposing for sale and the sale, in Pet Shops, of meat obtained from knackers' premises. The meat consisted of beef and horseflesh. The meat when exposed for sale was labelled in various ways, e.g., "cat and dog food; not for human consumption", or "not for human consumption." In one instance there was a large notice placed in the window "fresh meat for cats and dogs". These shops are specifically pet shops and do not stock any food for human consumption. The volume of this trade has reached considerable proportions and it was clear from interviews with the proprietors of the shops that shortage of supplies was the only limiting factor. In addition the investigation revealed that none of the persons selling this class of meat had any experience of what constitutes unsoundness. The traffic in this type of meat is potentially dangerous from the public health view-point for the following reasons: (a) it is a serious breach in the system of the inspection of meat coming into the City and the disposal of meat found to be unfit for human consumption. (b) there is no accurate knowledge of the source of supply or quality and soundness of the meat. (c) because of the manner in which the meat is labelled and the nature of the premises from which it is sold, the rights of inspection and seizure if unsound are difficult to enforce under existing legislation. (d) there is no guarantee that this meat will not be sold for human consumption. (e) meat could be sold which might be dangerous to persons handling it. (f) belief that the meat is sound might tempt some people to purchase meat cheaply for human consumption.

The above facts were reported to the Health Committee and representations were made to the Ministry of Health and Local Government (N.I.) to introduce legislation which would be adequate to control the sale of this class of meat.

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	1,075
City Surveyor for various nuisances and defects	2,855
Belfast City and District Water Commissioners for defects in water fittings.	944

Sewerage and Sewage Disposal

The system of sewerage and sewage disposal is under the control of the City Engineer and Surveyor. The drainage and sewerage of almost the whole of the City is arranged on the combined system. A few houses on the outskirts of the City, where there is no sewer, drain to cesspools. Work is progressing on the new High level Intercepting Sewer designed to improve the drainage of the north-western part of the City. The section now being constructed extends from the main Drainage Outfall Works to Mervue Street and the main sewer has now been laid as far as the Shore Road, while some two hundred yards of 7 ft. 6 ins. diameter sewer has been constructed in tunnel in the vicinity of the Grove. Design work is well forward for the Kinnegar Sewage Disposal Works which are designed to deal with the drainage of most of that part of the City lying to the east of Templemore Avenue, together with the Urban District of Holywood and parts of Castlereagh Rural District. This will also necessitate a new pumping station at Sydenham, the construction of a pumping main from Sydenham to Kinnegar and other works.

During the year the laying of the following new sewers has been completed—Sydenham Road, Castleview Road and Old Holywood Road/Quarry Road. Tenders have been invited for sewers from Limestone Road to Cliftonville Circus and from Glen Road to Arizona Street and Turf Lodge. Three new pumps are at present being installed in Greencastle Pumping Station and these will considerably enlarge the pumping capacity. Work is nearing completion on the Scheme to improve Corporation lands between Shore Road and the railway by constructing a concrete channel to replace the open ditch. The concreting of the pebble paved streets including the reconstruction of the sewers thereunder was completed at the end of March. In addition to the main schemes mentioned above, general maintenance including the cleansing of sewers has been carried out throughout the year.

Refuse Collection and Disposal

This work is carried out by the City Surveyor's Department by means of direct labour under the control of the Superintendent of Cleansing.

Over 156,000 dustbins are cleansed weekly, resulting in about 2,550 tons of house and trade refuse for disposal. This material is mainly disposed of by controlled tipping on sites geographically situated so as to equalise transport charges. A daily service is provided for certain premises such as hotels, restaurants, etc., but the standard of refuse collection for dwelling houses is a regular seven day service. Thus the housewife knows the day and approximate time each week when the Cleansing employees call: this, apart from public health considerations, also tends to expedite the work of refuse collection.

During the year tipping was completed on a site off the Holywood Road, owned by a large industrial concern. The whole site was then covered with a layer of cinders and finished on top with a further layer of soil. Grass has been sown and the ground divided into sports pitches, running track and bowling green. These playing fields will be available for the firm's employees during 1958. Prior to being filled this ground was swampy and a potential breeding place for mosquitoes. In 1957 a small bulldozer was purchased for use on tipping grounds. This machine was given a thorough trial on a large tipping ground on the Springfield Road and has been found to give better consolidation of tipped material with less wear and tear on vehicles and a reduction in manpower required.

During the year Sanitary Officers made 110 inspections of private and public tipping grounds within the City boundary. In addition 21 rat destruction campaigns were carried out by the Pests Control Section in order to exterminate rats at different tipping grounds under the control of the Corporation. During the year special attention was paid to the fly problem at the Corporation's tipping grounds. After consultation with the Cleansing Superintendent it was decided to use Gammexane as D.D.T. had been used for years, and there was the possibility that the fly might have acquired resistance to the latter. Control measures for flies are carried out by the Cleansing Section's workmen.

Water Supplies

The control of the public water supply is vested by Acts of Parliament in the Belfast City and District Water Commissioners.

Belfast's water storage was augmented by 1,700,000 gallons by the completion on 2nd October, 1957, of the new Ben Crom reservoir, which will feed the Silent Valley reservoir and increase the regular storage of water by about 60%. The Ben Crom reservoir, which is built above the Silent Valley reservoir, is created by a dam 700 feet long, 100 feet wide at the base section, and 125 feet high, which took about 3 years to build. It avoids the wastage which would normally take place through the Silent Valley overflow. This, added to the existing 3,000 million gallon storage capacity, will ensure that up to 30,000,000 gallons per day can be supplied to Belfast and District. The new reservoir which cost £750,000, is a further instance of the traditional policy of the Water Commissioners to keep supplies abreast of demand.

Routine bacteriological examinations of water supplied by the Water Commissioners continued throughout the year by the Counties Public Health Laboratories, London, and copies of the results 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 14 samples of water before treatment with chlorine, 469 samples of filtered and chlorinated water and 512 samples of chlorinated water. The results showed 1 containing Bact-coli (Type 1) and Coliform Organisms, and 14 containing Coliform Organisms. 11 Samples of untreated water showed Coliform Organisms and Bact-coli (Type I). Such a degree of impurity is comparatively unimportant in view of the subsequent treatment. The following is a summary of reports on the bacteriological examination of water samples taken from consumer's taps direct from distributing service mains throughout the City by Officials of the Water Commissioners:—

Samples examined during the year	..	..	..	645
Samples reported as highly satisfactory	..	..	..	615
Samples reported as showing Coliform Organisms	..	..	..	29
Samples reported as showing Bact-Coli (Type I) and Coliform Organisms	..	..	..	1

From January to December 269 samples of water were taken by food inspectors from consumers' taps throughout the City and submitted to the Public Health Laboratory of the Northern Ireland Hospitals Authority for bacteriological examination. 252 of these samples were reported by the bacteriologist as highly satisfactory and the remaining 17 samples were 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	16	1—3	8
4—10	1	4—10	—
Greater than 10	—	Greater than 10	—

8 samples contained both Faecal and Non-Faecal Coli.

Domestic Water Supplies from Private Wells, Etc.

During the year two dwelling houses were connected to the Water Commissioners' Mains after representations had been made to the owner by the Medical Officer of Health who was concerned at the repeated unsatisfactory results of samples of the supply of water for domestic purposes, laid on to the dwellings from a hillside spring which was contaminated by animals. The Department continued investigations into all private supplies on the outskirts of the City where there were no public supply mains. When unsatisfactory results were reported by the Bacteriologist, householders were contacted and advised to treat the water before use. 119 samples of water were taken from private wells by Sanitary Officers and examined at the Public Health Laboratory. The results showed that 37 of the samples were highly satisfactory. The remaining 82 samples were returned as unsatisfactory because of the presence of coliform organisms.

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	9	1—3	12
4—10	10	4—10	9
Greater than 10	63	Greater than 10	58

79 samples contained both Faecal and Non-Faecal coli.

Water Supplies from Artesian Wells

During the year 55 samples of water were obtained for bacteriological examination by Food Inspectors from privately owned artesian wells: the water from these wells is used in the manufacture of food. The Bacteriologist reported 48 of these samples as highly satisfactory and the remaining 7 samples as unsatisfactory due to the presence of coliform organisms. Where unsatisfactory results were obtained investigations were made by the Food Inspection staff with a view to eliminating the source of pollution.

Samples of Water from Mineral Water Manufacturers' Premises

During the year 105 samples of water were taken by Food Inspectors for bacteriological examination at the Public Health Laboratory. The results showed that 87 samples were highly satisfactory and 18 samples unsatisfactory due to the presence of coliform organisms, some of faecal origin. The number of samples reported as unsatisfactory shows a decrease in comparison with the figures for 1956. Credit is due to the vigilance of the Food Inspection staff in investigating causes of pollution and to the firms concerned for their ready co-operation.

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	15	1—3	4
4—10	2	4—10	1
Greater than 10	1	Greater than 10	—

5 samples contained Faecal and Non-Faecal coli.

Public Swimming Baths

A Warm Baths Section at Templemore Avenue Baths has been completely renovated and a tender has been invited for painting. Sketch plans have been prepared for comprehensive renovation of Falls Road Baths. Tenders have also been accepted for two "Economic" boilers and an economiser and water filtration plant and storage calorifiers for these Baths and work should commence shortly on installation. The working drawings for the Grove Baths, including ancillary services, are well in hand and will be completed in the course of a few months.

452 inspections of the four baths were made by Sanitary Officers: where structural defects were discovered these were reported to the Baths Superintendent for attention. Swimming-bath water is exposed not only to faecal contamination but also to contamination with organisms from the skin and nasopharynx of the bathers. It is therefore recommended that a sample of swimming bath water should not contain any coliform organisms per 100 ml. 184 samples of baths water were taken during the year by the Senior Food Inspector for bacteriological examination at the Public Health Laboratory. 268 samples of baths water were examined at the 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 11 were found to be unsatisfactory and action was taken to improve conditions.

Open-Air Swimming Pools

The Belfast Corporation recently acquired the lower part of the Waterworks at Antrim Road, for conversion into a public park, and during the season samples of water were taken from an open-air pool used by swimmers. All samples showed coliform organisms and faecal coli (Type I) in large numbers.

Investigation revealed that the main feed to the pond was from Carr's Glen river, which flows through garden allotments and that surface drainage from a Golf course and other lands, also entered the pond. As this pond consisted of a large expanse of water (estimated at 22 acres surface area) no effective treatment could be recommended. The matter was taken up by the Medical Officer of Health with the Town Clerk and the Director of Parks. In view of the unsatisfactory bacteriological results and in the interest of public health it was decided to withdraw the facilities for swimming.

Extensive alterations and improvements were made at Victoria Park Swimming Pond, including the construction of retaining walls, the provision of a continuous foot-trough and concrete area surrounding the pond to prevent contamination of the water by bathers, and the renovation of filtration and chlorination plant.

Tenders have been accepted for water purification plant and a filter house at Falls Park Open-Air Swimming Pool and work is expected to commence soon.

29 samples of water were taken during the season by Sanitary Officers from Corporation owned open-air swimming pools for bacteriological examination. The Bacteriologist reported 19 samples as highly satisfactory and 10 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 4

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

7 samples contained both Faecal and Non-Faecal coli.

25 samples of water were taken during the season from privately owned open-air swimming pools for bacteriological examination: of this number 19 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	1
4—10	1	4—10	2
Greater than 10	—	Greater than 10	—

3 samples contained both Faecal and Non-Faecal coli.

During the season the Sanitary Officers made 72 visits to and took 17 samples of the water of these pools to ascertain the amount of chlorine present so as to ensure a safe margin for bathers. Extensive investigations were made and action taken in relation to those samples reported by the Bacteriologist as unsatisfactory.

Housing

During the year the Housing (Clearance and Re-Development) Committee was constituted by the Belfast Corporation to deal with the City's slum clearance scheme. This Committee also took over the responsibility for building about 2,000 houses planned for various estates.

The number of applicants registered for houses with the Belfast Corporation at 31st December, 1957, was 7,291. It would be impossible for the Corporation to estimate when all these applicants will be accommodated, as suitable undeveloped land within the City boundary is scarce. The Corporation has three major sites on hand—Annadale Embankment, Turf Lodge (Springfield Road) and Victoria Barracks (Clifton Street) which between them might yield sites for about 1,300 dwellings. The Corporation is already building houses outside the City boundary at Knocknagoney (Holywood Road) and has been in consultation with other local authorities about an aerial survey for more building land outside the City.

25 units of housing accommodation were provided by the Belfast Corporation at Sydenham Avenue and Alliance Avenue, for old people who otherwise would have to spend the evening of their lives without any real privacy or home comfort, and for those who lived in large houses which were suitable for family life, but now could only be a burden to a sole occupant. Under the scheme 183 old persons are registered with the Corporation, who plan to provide 29 units at Clara Park and Annadale Embankment.

The total number of permanent dwelling houses completed and occupied within the City boundary during the year was 745. In addition, 94 self-contained flats were provided. 225 dwelling houses and 84 flats were provided by the local authority and 520 dwelling houses and 10 flats were provided by private enterprise. Table B. 6 shows the sites with the number of dwelling houses erected by the local authority and table B. 7 shows the number of dwelling houses erected by private enterprise during the year in the four Divisions of the City.

TABLE B 6

Site	Dwelling Houses	Flats
Andersonstown Park	74	—
Bromley Street	10	—
Clara Park	107	27
Mountcollyer Street	—	15
New Barnsley	12	24
Stratheden Street	22	—
Marsden Gardens	—	18
Totals	225	84

TABLE B 7

Division	Dwelling Houses	Flats
North	167	4
South	60	3
East	221	3
West	72	—
Totals	520	10

At 31st December, 1957, the total number of dwelling houses provided and owned by the Belfast Corporation since the commencement of Local Authority Housing Schemes was 9,959 comprising:

Permanent houses built and purchased prior to 1939	2,437
Permanent houses built under Belfast Improvement Order 1910	250
Permanent houses built from 1946 to 1957	5,162
Permanent Flats built from 1946 to 1957	1,111
Temporary (Prefabricated) bungalows	999

Tenement Houses

Section 100 of the Public Health (Ireland) Act, 1878, and Section 20 of the Housing (Ireland) Act, 1919, provide that the operation of the By-laws made on 3rd January, 1955 (with respect to houses within the City which are occupied by workers and let in lodgings) be limited to houses let in lodgings and occupied by more than one family. The Department is aware of 150 houses which are so occupied, i.e., with two or more lodger families, in addition to the tenant family: the actual number is possibly greater.

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

Inspections during the year	571
Sanitary Defects discovered	61
Statutory notices served on owners and occupiers	24
Sanitary defects remedied	187
Summonses issued for non compliance with By-laws	132
Summonses issued for continuing offences	36
Number of houses registered at 31st December, 1957	150

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

Applications for certificates and reports during 1957	2,386
Certificates issued to tenants during 1957	1,672
Reports issued to Landlords during 1957	368
Refusals of certificates to Tenants as the dwelling houses were found to be in good and tenantable repair	15
Refusals of reports to Landlords as all the work specified in Certificates had not been completed	279
Number of applications for certificates and reports cancelled during 1957	25
Certificates and reports to be dealt with as at 31st December, 1957	27
Total applications for certificates and reports from 1st September, 1951, until 31st December, 1957	35,170
Number of certificates issued to Tenants from 1st September, 1951, until 31st December, 1957	24,981
Number of reports issued to Landlords from 1st September, 1951, until 31st December, 1957	5,780

Housing Acts (Northern Ireland) 1890 to 1956

In accordance with the Housing (Miscellaneous Provisions) and Rent Restriction Law (Amendment) Act (Northern Ireland) 1956, Belfast has two years in which to submit its slum clearance proposals to the Ministry of Health and Local Government. This, of course, does not mean that the Corporation will be immediately in a position to undertake its programme which will ultimately involve about 14,000 unfit houses. Slum clearance is a long-term policy. Two or three years will elapse before slum clearance proper can commence. Each area requires to be confirmed for clearance, maps prepared, objections invited, public enquiries held if necessary and all the requisite steps taken to acquire the land. Even then the clearance programme will depend on the availability of new houses to which the slum dwellers can be transferred. This will be a major problem. The Corporation is continuing to build houses in the face of the ever-increasing difficulty of limitation of suitable building land. It had 7,291 families on its housing register at 31st December, 1957.

It seems certain that, if all the unfit houses are to be demolished, additional sites would have to be found for at least 7,000 houses. Even then, this figure does not allow for any decision the Corporation might take to zone a particular area for industrial purposes. The shortage of building sites is of course, a major problem. There are other problems—the proportion of new houses to be allocated to slum families, the future of shops, places of worship, etc., and the “problem” families. While much progress has been made in the preliminary survey for the City as a whole, shortage of Sanitary Officers has presented difficulties. The survey began in the central areas and will eventually spread outwards to the City boundary in the North, South, East and West Divisions. 38,819 inspections were made in the twelve months ended 31st December, 1957, under the Housing Acts (Northern Ireland) 1956.

During the year 19 individual dwelling houses were reported to the Health Committee by the Medical Officer of Health as being unfit for human habitation and not capable, at a reasonable expense, of being rendered so fit. The Health Committee made Demolition Orders or accepted undertakings in accordance with section 29 of the Planning and Housing Act (Northern Ireland) 1931.

In addition 13 Corporation owned dwelling houses were demolished because they were considered to be unfit for human habitation. All the families were re-housed in new dwellings.

Discretionary Points System for Allocation of Housing Accommodation on Medical Grounds

During the year 199 applications were dealt with. Medical evidence and correspondence from hospitals stressed the hardship and detrimental effect of substandard, damp and overcrowded conditions upon the health of the persons concerned.

Each case was investigated by a Sanitary Officer for consideration by the Medical Officer of Health whose assessment of the circumstances was forwarded to the Estates Superintendent.

Dwelling houses inspected for over-crowding or insanitary conditions ..	199
Rooms in dwelling houses inspected (under the points system) ..	798
Families occupying the dwelling houses	395
Adults	926
Children	498
Houses found to be over-crowded	97
Houses found to be in an insanitary condition	48
Houses where no recommendations were made	54

Planning (General Interim Development) Order (Northern Ireland) 1944

35 applications were received from the City Surveyor's Town Planning Section for proposed conversion of dwelling houses into shops, offices, boot-repairing, garage, licensed premises, etc. Sanitary Officers visited the dwellings and prepared reports. No objections were offered by the Medical Officer of Health in 11 cases. 16 applications were not recommended owing to the acute shortage of dwelling accommodation in the City. 8 applications referred to premises where the proposed business was liable to create a public health nuisance.

Improvement and Conversion Grants for Older Houses

On 1st April, 1957, Part 2 of the Housing (Miscellaneous Provisions) and Rent Restriction Law (Amendment) Act (Northern Ireland) 1956 came into operation. The local authority may assist a private owner to modernise his house by making a grant for improvement or conversion. The local authority must, however, be satisfied that the dwellings as improved or converted will provide satisfactory housing accommodation for a period of not less than 30 years (save in special circumstances),

To obtain a grant the Authority must be satisfied that when the proposed work has been done the dwelling will:—

1. be in a good state of general repair and have walls and floors free from, and roofs impervious to dampness
2. have adequate natural lighting and ventilation;
3. have an adequate supply of wholesome drinking water readily available;
4. be provided with a suitable hot water circulating system;
5. have a bathroom fitted with a bath and washhand basin. A hot press and a water closet must also be provided and may be located in the bathroom. The size of the compartment or compartments must be sufficient to afford adequate space for access to and use of the fittings therein. The compartment containing the watercloset must not communicate directly with a living room, bedroom or kitchen or the scullery accommodation;
6. be provided with a suitable sink and draining board, in the kitchen or scullery accommodation;
7. have a drainage system suitable for the disposal of waste water and rain water and, where a water closet is installed, of soil therefrom;
8. be provided, where gas or electricity services are available, with sufficient points for the adequate lighting of each room, compartment or passage;
9. have suitable arrangements to enable the installation of gas, electric or solid fuel cooker;
10. be provided with a fireplace or some other fixed means of heating in the principal living room and in at least one of the principal bedrooms;

11. be provided with larger accommodation within the house, having a minimum floor space of 4 square feet and a minimum height of 6 feet 6 inches with adequate shelving and effective permanent ventilation directly to the outside air;
12. have reasonable provision for the storage of fuel.

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 improvement, prior to the application being considered by the Housing (Clearance and Re-Development) Committee. 277 cases were referred to the Health Department since 1st April, 1957.

Public Health Nuisances discovered and complained of in dwelling houses, etc., during 1957

TABLE B 8

Nature of Nuisance	Divisions				Total
	North	South	East	West	
Drains, traps, etc., foul or defective	988	533	563	1,217	3,301
Tiling, paving, or flooring defective	711	850	950	1,025	3,536
Sinks defective, or want of; waste pipes foul or defective	150	112	113	160	535
Water closets foul or defective; no water closet accommodation; soil or ventilation pipes defective, or want of	924	948	962	1,377	4,211
Ashbins defective, or want of	193	138	141	289	761
Roofs defective	1,988	2,245	2,384	3,248	9,865
Spouting defective, or want of	1,554	1,361	1,456	1,959	6,330
Damp state	3,087	3,070	3,238	4,739	14,134
Plaster of walls or ceilings defective	830	1,108	941	1,177	4,056
Domestic water supply: want of, or unsuitable	21	9	14	21	65
Lighting or ventilation insufficient, or want of	58	59	43	180	340
Schools overcrowded	5	2	3	3	13
Dwelling houses overcrowded	17	5	15	12	49
Accumulation of manure or offensive matter; offensive smells; premises or passages dirty	229	294	142	514	1,179
Fowl or animals kept so as to be a nuisance	3	4	2	1	10
Schools dirty	3	3	1	2	9
Miscellaneous	1,680	1,739	2,584	2,258	8,261
	GRAND TOTAL				56,655

Public Health Nuisances Abated in Dwelling Houses During 1957

TABLE B 9

Abatement	Divisions				Total
	North	South	East	West	
House drains cleansed	573	468	515	662	2,218
House drains repaired	71	109	54	72	306
Houses had tiling, paving, flooring, etc., repaired	581	776	836	838	3,031
Houses had water closets cleansed or repaired	827	771	710	1,047	3,355
Number of ashbins provided	130	101	68	152	451
Houses provided with new sinks	16	12	10	14	52
Houses had roofs repaired	1,899	2,202	2,257	2,965	9,323
Houses had spouting repaired	1,263	1,324	1,443	1,814	5,844
Passages cleansed	2	3	5	2	12
Houses cleansed	3	4	5	7	19
Houses had minor repairs effected	1,946	2,151	1,907	2,496	8,500
Miscellaneous nuisances	46	131	71	74	322
	TOTAL				33,433
Length in feet of drain pipes laid	498	739	51	493	1,781
Gully and disconnecting traps provided	15	15	4	6	40

Summary for 1957 in Connection with Dwelling Houses

Complaints received and discovered	56,655
Inspections made	99,417
Statutory notices issued	22,688
Sanitary Improvements carried out	33,433
Summonses issued for non-compliance with notices	2,265
Court Orders obtained for the abatement of nuisances	287
Summonses for disobedience of Magistrates' Orders	78
Disobedience convictions	78
Amount of Fines imposed by the Courts	£282 : 12 : 6

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	1,218
Notices issued under the By-laws	609
Summonses issued for non-compliance with notices	81
Summonses for continuing offences	—

Keeping of Animals

Circular letters were sent to occupiers of all piggeries and stabling yards directing attention to the necessity for effective action to exterminate flies. In conjunction with mosquito control, action against the common house-fly commenced with the treating of the manure pits and surrounding areas with water solution of insecticide.

Stabling Yards

Stabling yards within the City were systematically inspected by Sanitary Officers during the year, attention being paid to the frequency of removal of manure. General sanitation was enforced in accordance with the Public Health (Ireland) Acts 1878 to 1946.

Stabling yards on register	180
Inspections during the year	338

Piggeries

These premises were regularly supervised throughout the year. Dealings with owners of piggeries were satisfactory and there were no cases requiring legal proceedings. Two piggeries were demolished to make way for a new road and one piggery was demolished as the site had been acquired for extension of a church. The By-laws extending the prescribed distance between piggeries and houses, etc., as described in the Annual Report for 1956, were still not confirmed by the Ministry of Health and Local Government (Northern Ireland) at 31st December, 1957.

At the end of the year the approximate number of pigs kept in the City was:—

TABLE B 10

North Division	South Division	East Division	West Division	Total
394	839	1,131	744	3,108

Piggeries on Register as at 31st December, 1957	76
Inspection of piggeries during the year	337
Piggeries registered during the year	—
Piggeries removed from register during the year	3
Premises where pigs were kept as at 31st December, 1957	63

Burial Grounds

Under the Public Health (Ireland) Act 1878, inspection of burial grounds were made by Sanitary Officers for the protection of the public health and the maintenance of public decency.

Number of Burial grounds in City	10
Number of inspections during the year	39

Permission was sought to exhume the remains of an adult buried in a grave in the City Cemetery, Belfast, for re-interment in Glendermott Cemetery, Londonderry. The Ministry of Health and Local Government (Northern Ireland) was advised by the Medical Officer of Health to refuse the request on public health grounds and because subsequent interments had taken place in the same grave. During the year steps were taken to transfer the ownership of Shankill Graveyard from the Church Authorities to the Corporation, with the intention of laying it out as a garden of rest. Information was sought of persons who possess the interment rights in the graveyard so that their consent might be obtained to the scheme. A tender has been accepted for gas cremators for the new Crematorium at the Corporation's Cemetery, Crossnacreevy, and the working drawings for the building are now nearing completion.

Cinemas and Theatres

Inspection of cinemas and theatres was continued throughout the year. These visits were to ensure the satisfactory cleansing and maintenance of premises, including sanitary conveniences. 101 special inspections were made during evening performances to check the efficiency of ventilation and heating systems by tests using the Kata Thermometer and a Hygrometer. 177 tests were carried out, and the number of readings recorded in these tests was 885. In 14 cinemas and 1 theatre the readings recorded air conditions below minimum standards necessary to protect public health and the comfort of the patrons. Notices were served on the management of the buildings concerned after an inspection had been made of the ventilating system by a senior Sanitary Officer. In 9 instances alterations or adjustments were made and subsequent tests showed improvements.

Extensive alterations were carried out in one cinema; at the same time additional urinal and water closet accommodation was provided for males and watercloset accommodation for females in both stalls and balcony.

Number of Cinemas and Theatres in City	45
Inspections by Sanitary Officers (including evening inspections)	362
Number of Sanitary defects discovered	41

Dance Halls

There are 69 premises licensed in the City for public dancing, singing, music, boxing and other forms of public entertainment under Section 31 of the Local Government Act (Northern Ireland) 1934. In addition there are approximately 170 premises where entertainment is carried on. Admission to the latter is by membership card. During the year 84 evening inspections were made and 65 air tests carried out during public use. The tests showed unsatisfactory conditions in 10 instances and notices were subsequently served on the owners requiring improvement of the ventilating systems.

Number of inspections (including evening inspections)	152
Number of defects discovered during the year	49

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

TABLE B 11

Nature of Defects	Instances	Notices served	Remedied	Outstanding
Insufficient ventilation	13	3	12	1
Dirty or defective conditions	2	2	2	—
Other damp or defective conditions	3	2	3	—
<i>Sanitary conveniences:—</i>				
Not provided with proper intervening ventilated spaces	2	1	3	1
Not provided for each sex	2	2	2	2
Not properly screened	2	1	3	1
Not properly lighted	2	1	2	—
Not properly ventilated	12	11	9	3
In a dirty state	3	1	2	1
In a defective condition	2	1	4	2
Insufficient urinal accommodation	1	1	2	1
Other defects	3	2	2	1
TOTAL	47	28	46*	13

* Defects remedied include outstanding defects from 1956.

Public Sanitary Conveniences

An old type iron structure was removed from Hamilton's Court.

The City Surveyor reported to the Improvement Committee the lack of suitable public lavatories throughout the City, especially at the Kings' Hall area and on Shankill, Falls and Donegall Roads. Preliminary plans have since been prepared and negotiations are proceeding for the acquisition of sites for public conveniences at Donegall Road and Shore Road. The Medical Officer of Health submitted a report to the Health Committee on the lack of sanitary arrangements at carnivals, etc., which are held in the City from time to time and which are attended by a large number of people. The Committee requested the Town Solicitor to submit a report on the legal aspect of the matter. There are 130 public sanitary conveniences throughout the City (including those in Public Parks and Playgrounds): 85 are provided for males and 45 for females.

Inspections by Sanitary Officers during the year	404
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Drain Tests

From January to December 477 drain tests were carried out by District Sanitary Officers, Pest Control Officer and Factories and Shops Officers. 243 tests were made as a result of complaints of the ingress of rats into buildings. 299 drains showed defects by smoke machine test: of this number 121 had been tested by reason of complaint of rats and the remaining 178 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	101
House drains repaired	306
Drain Pipes, Bends, traps, gullies, etc., used in repair of drains ..	1,821

Provision of Ashbins

Notices served under Section 44, Belfast Corporation Act, 1930 ..	176
Summonses issued for non-compliance with notices	5
Ashbins provided during the year	451

Marine Stores

Inspections during the year	203
Number of defects discovered	56
Number of Notices served	34
Number of defects remedied	52

The periodical treatment of all rag stores to eradicate vermin continued throughout the year. The Pest Officers carried out 246 treatments and the cost was charged to the respective proprietors.

Complaints were received during the year from the Port Medical Officer of Health, Manchester, concerning flea infestations arising from cargoes of bales of waste rags consigned from Belfast and special treatment was given to all rag stores.

The Department has been carrying out treatment to eradicate vermin in rag stores and premises every four weeks since 1953. The treatment could, of course, only be superficial owing to the large amounts of rags stored in the premises. Nevertheless the efforts of the Department's staff were commended by the owners, who have noticed a marked diminution of infestation since the scheme commenced. Some of the firms ship rags weekly: other firms ship irregularly, depending upon the volume of business done in a particular period. This makes the problem of regular treatment more difficult. Letters were sent to local firms informing them of the complaints received and suggestions made that the Department would undertake the treatment of all bales of rags before shipment. The firms readily agreed to this. The defects shown in Table B 12 refer to contravention under the By-laws only. Other matters relating to the welfare of workers are dealt with under the Factories Acts (Northern Ireland), 1938 and 1949, and the Public Health (Ireland) Acts 1878 to 1946, and are not included in the table.

TABLE B 12

Nature of Defect	Instances	Notices Served	Remedied	Outstanding
Walls in rooms not rendered vermin proof	3	3	5	1
Rooms not enclosed or provided with a proper roof or ceiling	2	1	5	—
Rooms not properly lighted	—	—	2	—
Rooms not properly ventilated	3	2	4	—
Rooms not provided with suitable floor	4	3	4	2
Materials stored so as to obstruct lighting or ventilation ..	3	2	2	1
Dustbins not provided or trade refuse not removed weekly	3	2	3	—
Premises not kept in a clean state	7	5	7	—
Walls, ceilings, partitions, etc., required re-decoration ..	8	6	7	1
Premises, apparatus, utensils not kept in a state of repair	2	2	4	1
Yards, loading bays, etc., not properly surfaced	1	1	2	1
Other defects	10	7	7	6
TOTAL	46	34	52*	13

* 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 during the year in respect of the manner in which these trades were carried on.

Number of inspections during the year 76

Primary and Secondary School Buildings

The New Model Secondary School for Boys, Ballygomartin Boys', Orangefield Boys', and Everton Mixed Secondary Schools and three new primary schools were opened during the year. Wheatfield Infants, Ulidia and Greenwood will be completed for occupation at the beginning of the school year. The Education Architect's report details work commenced during the year and the projects in plan but not yet started. Together, these represent a very substantial part of the work required to complete the Development Scheme for Primary and Secondary Education for County Schools and in another two years' time the full commitments of the Scheme should be completed or be in the building stage. Circumstances have delayed progress in the case of two schools, Clara Park Primary and Orangefield Girls Secondary Intermediate, but it is hoped that work will proceed at an early date.

A nursery class for 25 children was opened in Ballygoland School and by arrangement with the Welfare Committee a nursery school was started at Bredne Children's Home, Somerton Road. To meet an increase in school population in the Upper Springfield Road area, caused by the development of the New Barnsley housing estate, Luther Hall, Whiterock Road, was rented as additional accommodation for Ballymurphy Primary School. A permanent solution will be achieved by the erection of a primary school at Springhill, which will be completed in 1958. The Ministry of Education has given approval for the erection of a new Primary School at Salisbury Avenue to accommodate 560 children, replacing Skegoniel School building.

Sanitary Officers regularly inspect school buildings, classrooms, cloakrooms, lighting, ventilation, cleanliness of rooms, heating, and lavatories, as well as the availability of drinking water and the nature of washing facilities. When defects are discovered intimation notices are sent to the Director of Education in respect of provided or transferred schools and to the managers in the case of voluntary schools. In 6 instances it was necessary to issue Statutory notices under the Public Health (Ireland) Acts 1878 to 1946, for failure to cleanse the premises and to provide sufficient and suitable sanitary and washing facilities.

Nursery Primary Schools	7
Nursery Voluntary Schools	1
County Primary Schools	81
Voluntary Primary Schools under School Committees	3

Voluntary Primary Schools under Lay Management	1
Voluntary Primary Schools under Roman Catholic Management ..	63
Special County Schools	6
Special Voluntary Schools	2
County Secondary Schools	14
Voluntary Secondary Schools	18
Premises rented for additional teaching space for County Primary Schools	13
Premises rented for additional teaching space for County Secondary Schools	1
Inspections by Sanitary Officers during the year	278
Defects notified by School Health Service	9
Defects discovered by Sanitary Officers	28
Intimations concerning defects sent to Director of Education ..	18
Intimations concerning defects sent to Managers of Voluntary Schools	25
Sanitary improvements effected	23

Rivers Pollution Prevention Acts, 1876 to 1893

Number of rivers in City	22
Inspections by Sanitary Officers during the year	284
Nuisances discovered and abated	53

Blackstaff River. The contract drawings for the Improvement Scheme have been prepared and have been approved by the Ministry of Health and Local Government. The specification has also been completed and the Bills of Quantities are now being prepared.

The Health Committee further considered complaints of pollution of some reaches of the river, caused by the discharge of inadequately treated effluent from the sewage disposal works of the Belfast Rural District Council at Andersonstown and again drew the attention of the Ministry of Health and Local Government and the Belfast Rural District Council to the Committee's concern at the state of the effluent discharged from the sewage disposal works and insisted that improvements be made as quickly as possible. The Engineer to the District Council subsequently informed the Health Committee that tenders for mechanical equipment for the extension of the sewage works had been submitted to the Ministry of Health and Local Government and that as soon as contractors were chosen, work will proceed on the detailed drawings.

Complaints were received concerning offensive smells in the engine and boiler houses of a large manufacturing concern who draw their boiler feed water from a dam fed by the river. After investigation the firm was informed that there was a heavy deposit of mud and dirt in the dam and that it was in urgent need of cleansing in order to abate the nuisance. During a dry spell of weather in May portion of a stream at Stockman's Lane became silted up giving off an offensive smell. A strong disinfectant was applied to the stream and surrounding ground by the Pests Control Section.

Loop River. An overflow from the Castlereagh Rural District Council sewer at Graham Gardens was discovered to be discharging crude sewage directly into the river. The fault was caused by a blocked sewer which was cleansed on representation to the City Surveyor. Waste matter from a factory situated in the Rural District was found to be discharging into a tributary of the river, thereby causing an offensive smell and discolouration of the water. The complaint was referred to the City Surveyor who subsequently reported that the complaint had been taken up with the Rural District Council's Engineer.

Farset River. Complaints were received from the Belfast and District Trades Union Council of the dirty and unsightly state of the river bed. Efforts were made to trace the owners of the adjoining lands who are responsible for the cleansing of the river, with a view to serving notices requiring them to clean their respective portions, but considerable difficulty was experienced in this.

Connswater River. Complaints were received of an offensive smell and deposits of solid matter on both banks of the river. Investigation by the Sanitary Officer revealed that the discharge causing the nuisance was from the Corporation's Pumping Station, Sydenham, which was undergoing repairs.

The two samples of water taken from the Blackstaff River at the outfall from the sewage disposal Works at Andersonstown, and submitted to the Public Analyst, showed high figures for both oxygen loss and suspended solids. The results showed that they contained much unpurified sewage.

During the year samples of water were taken from the following rivers for bacteriological examination:—Blackstaff 12, Connswater 11, Clowney 8, Carr's Glen 10, Downview 3, Deerpark 3, Falls 4, Farset 5, Forth 9, Glenwood 14, Greencastle 6, Knock 12, Lagan 9, Loop 12, Parkmount 6, Pound Burn 3, Seaview 3.

The samples were returned by the Public Health Laboratory as showing from 35 to 180+ coliform organisms present for 100 ml.; from 13 to 180+ faecal coli present per 100 ml. and from 0 to 100,000 cl. Welchii present per 100ml., indicating that the rivers and streams are subject to pollution.

Barbers and Hairdressers

Routine inspections of these premises were carried out during the year by Sanitary Officers in order to ascertain that the premises were registered, and that the By-laws made under the Hairdressers Act (Northern Ireland) 1939 were being complied with.

Whilst it was not necessary to institute proceedings for any offences under the By-laws, 17 hairdressers were cautioned for failure to comply with requirements. These were found to be satisfied on subsequent visits.

Inspections of registered premises during the year	..	..	532
Registered at 1st January, 1957..	..	..	413
Registered during the year	..	..	15
Deleted during the year	..	..	3
Registered at 31st December, 1957	..	..	425

Common Lodging Houses

There are five registered common lodging-houses in the City, providing accommodation for 766 males. No lodging-houses were closed during the year and no new houses registered. The Health Committee is responsible for ensuring the provision and maintenance of sanitary accommodation and the abatement of public health nuisances. Where breaches were discovered statutory notices were served upon occupiers and remedial measures carried out.

Inspections by Sanitary Officers during the year	27
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Smoke Prevention

Laws to control smoke have existed in Britain for seven hundred years, and in 1273 the use of coal was forbidden in London as being prejudicial to health. It was not however, until the nineteenth century, with the inception of the industrial revolution and the rapid growth of population, that air pollution became a matter for national concern. During the past hundred years a number of Acts of Parliament have been passed in Great Britain in an effort to stop various forms of pollution. The latest of these, The Clean Air Act, 1956, has in part come into operation and gives local authorities greater power to combat this menace, and for the first time gives control over domestic fires.

The Belfast Health Committee is still handicapped by having to enforce legislation 80 years old which controls black smoke only. We still await suitable legislation which will accord with modern combustion practice and prohibit the emission of any smoke denser than the faint colour which is the symbol of nearly perfect combustion and maximum utilisation of heat content of the fuel. At present there is no legislation in Belfast to prohibit the emission of soot, ash or grit, and it is only by interview and advice that a nuisance of this kind can be tackled. The establishment of Air Pollution Advisory Councils in all countries and legal enforcement of measures to prevent air pollution were recommended by an expert committee on air pollution of the World Health Organisation at a recent meeting in Geneva. The Committee stated that much of the air pollution that now imperils the health and well being of peoples throughout the world could be prevented without undue cost and sometimes even at a financial saving.

Air pollution takes many forms—smoke, grit, dust, oxides of sulphur, fumes and other gases. Its sources are numerous—domestic and industrial chimneys, ships and railway locomotives, internal combustion engines, chemical and industrial processes. The ill-effects include detriment to health, corrosion of metals and damage to building materials; cleaning, painting and repair costs; higher laundry bills; damage to soil and plant life and interference with transport. The Beaver Committee estimated the total economic cost to be at least £250 million a year and the cost in human health and happiness cannot be measured.

Through the media of the press, radio and television the public are better informed on the evils of air pollution and are taking a greater interest in the conquest of this menace, but only if the problem

is treated with the same vigour and determination as was applied one hundred years ago to the purification of water can complete elimination be obtained.

During the first full year in which a smoke abatement section has been established in the City, inspections of 224 premises were made and records made of the type of furnace or boiler plant used, and the conditions under which the plant is operated and maintained. All types of premises from large office blocks requiring boiler plant for space heating, to engineering, textile, brickmaking and metallurgical works have been included in the survey, and it is hoped that eventually inspections will be made and records compiled of all fuel users (other than domestic). The number of complaints made by householders and others to the Health Department concerning smoke, grit and noxious gases has increased during the year and some interesting cases have been brought to light. One complaint related to the chimney of a hospital which was emitting an undue amount of gritty matter and smoke. On investigation it was found that a fine coal slack was being used in conjunction with forced draught, and a statutory notice was served requiring the use of a larger graded coal and the exercise of more care in firing the boilers. The notice was complied with and subsequent observations showed an improvement. Another complaint concerned grit and noxious gases emitted from a metallurgical cupola used for iron smelting, consisting of a round metal shaft approximately 25 feet high and 3 feet in diameter, fire-brick lined and open at the top. Alternate layers of metallurgical coke and scrap iron are fed into the shaft, a fire is lit at ground level and a strong air blast turned on. This strong blast carries all the fine particles of coke, etc., into the atmosphere along with the sulphur gases given off from the coke and other impurities adhering to the scrap metal. The only known remedy for this nuisance is a hood incorporating a water spray, through which the gases and solids pass, the solids being washed out and the greater part of the sulphur gases combining with the water to form a diluted sulphuric acid. A request was made to the owner to instal such equipment.

Four summonses were issued during the year, one in respect of a tugboat engaged mainly in Belfast Harbour. This was probably the first prosecution of this kind in Northern Ireland. The Captain, who was defendant, was supported by the chief engineer, the fireman and the company's marine superintendent as witnesses, who endeavoured to prove to the court that the emission of black smoke was necessary for the efficient working of the vessel. The Smoke Inspector stated that there might be times when black smoke was difficult to control for short periods but that the amount observed in this case was excessive and due, in his opinion, to negligence on the part of the boiler room staff. The Resident Magistrate accepted this opinion, imposed a nominal penalty of £1 and ordered the company to seek methods of avoiding the emission of black smoke in the operation of their vessels.

Legal proceedings were instituted against a scrap metal dealer who persisted in burning rubber tyres and other materials in an open space, creating dense smoke within 20 yards of dwelling houses. The Resident Magistrate imposed a penalty of £1. In another court case the defendants, a firm of textile manufacturers, were prosecuted when, after the service of a Statutory notice, no improvement was observed. Nine smoke observations each of 30 minutes duration were taken over a period of 2 months, revealing black smoke emitted from the factory chimney for a total 60 minutes. The Resident Magistrate imposed a penalty of £5.

Records continue to be kept by means of the standard deposit gauges, and lead peroxide and daily volumetric recording instruments, placed at various sites throughout the City. These give the amount of solid matter, sulphur and smoke emitted into the air from various sources and provide a guide for future preventive action and a means of assessing the progress towards a cleaner atmosphere. The deposit gauges collect grit and other coarse particulate matter, but it is left to the daily volumetric recordings to measure the finely dispersed particles of smoke. At present such readings are only taken at the Health Department Headquarters, College Street. Although only one of these instruments is maintained, the results show the smoke concentration for a commercial district, but we have no comparison with industrial areas such as Ormeau Avenue, Falls Road, Station Street or the dock area. By arrangement the Corporation Electricity Department forward monthly to the Health Department results of analysis of nine Lead Peroxide instruments which they have set up in various parts of the City. From these results it is found that a higher concentration of sulphur from the Corporation's Electricity Power Station East is recorded at Sydenham Airport than at the Musgrave Channel Road site, which is in close proximity to the station.

It is not unusual to record approximately 8½ milligrams of sulphur trioxide at Sydenham while the same month's returns from the Health Department's instrument at Musgrave Road shows only 3½ milligrams.

The picture, as shown by the results of analysis from the three types of recording instruments in use varies little from that of the previous two years. There is a gradual downward sweep during the first six months of the year after which it again rises steadily to a peak in December. During 1957 however, this dropping off was not so pronounced as in former years; amounts recorded tended to balance

throughout the year, with a drop in winter and slight rise in summer. One noticeable feature of the smoke and sulphur recordings by the volumetric method is the considerable rise following a period of fog, to as much as 12.5 whereas the average for the particular month may be 3 or 4, and the sulphur may reach a concentration as high as 22.5 parts per 100 million when the average is approximately 5 to 8.

The following table shows the work done in connection with smoke abatement during 1957:—

Timed observations (each over a continuous period of 30 minutes)	..	1,338
Number of minutes of black smoke observed	.. ..	1,876
Average number of minutes black smoke per 30 minutes observation		1.4
Statutory notices served	.. ..	38
Verbal notices given	.. ..	88
Plant inspections and advisory visits	.. ..	522
Complaints investigated	.. ..	42
Prosecutions	.. ..	4
Number of factory chimneys (approximately)	.. ..	300

Locations of Atmospheric Pollution Gauges

Health Department

- 1—Ormeau Avenue
- 2—Blythe Street
- 3—City Cemetery
- 4—North Howard Street
- 5—Tennent Street
- 6—York Road Station
- 7—Bryson Street
- 8—Station Street (U.T.A.)
- 9—Musgrave Channel Road
- 10—Ravenscroft Avenue

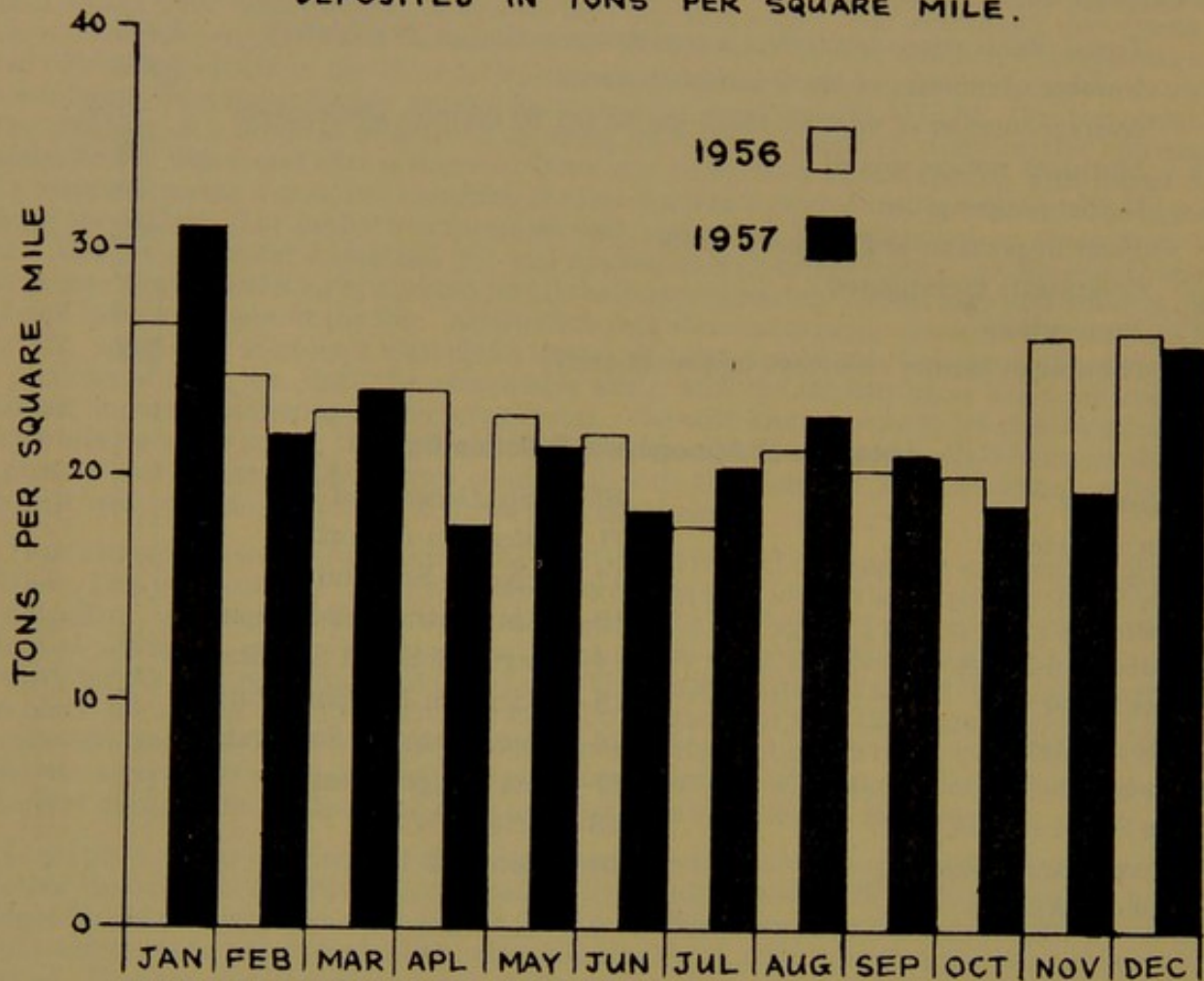
Electricity Department

- 11—Sydenham Airport
- 12—McNeill's Sub-Station
- 13—Main Central Sub-Station
- 14—Skegoneill Street Sub-Station
- 15—Sydenham Pumping Station
- 16—Mountpottinger Sub-Station
- 17—East Bridge Street
- 18—Victoria Works
- 19—Thompson Dock

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 1957—(see also graph 1)

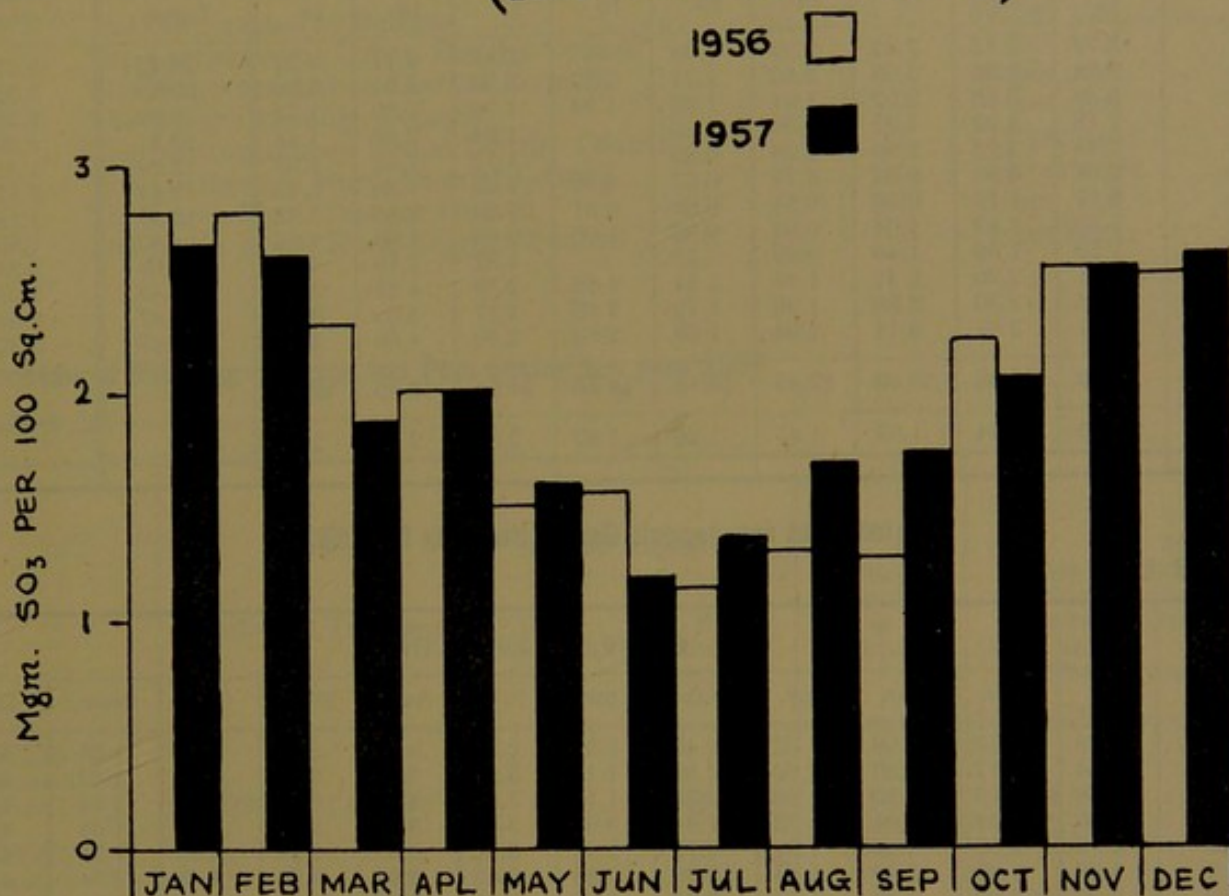
TABLE B 13

MONTH	STATIONS										Totals	Monthly Averages
	1	2	3	4	5	6	7	8	9	10		
Jan. . .	38.69	28.02	18.49	38.59	27.83	37.02	27.12	33.53	39.15	20.10	308.54	30.85
Feb. . .	33.92	20.97	9.83	26.18	15.94	27.71	20.14	25.94	23.15	12.75	216.53	21.65
Mar. . .	42.02	47.99	10.70	23.91	15.87	27.95	17.58	25.91	14.11	11.28	237.32	23.73
Apr. . .	27.87	14.83	10.91	15.78	12.60	16.81	15.81	26.01	24.38	10.97	175.97	17.59
May . . .	44.32	25.44	10.87	19.91	12.09	20.75	16.44	25.77	25.28	12.79	213.66	21.36
June . .	26.31	16.38	11.91	15.64	9.80	21.48	13.66	33.53	25.05	10.84	184.60	18.46
July . .	34.05	19.94	12.02	15.37	23.84	10.98	18.02	22.08	36.09	13.19	205.58	20.55
Aug. . .	35.13	21.41	12.95	16.38	11.49	25.75	21.48	28.73	41.92	14.80	230.04	23.00
Sept. . .	27.57	19.09	11.21	20.38	13.41	26.75	19.77	26.28	30.88	15.37	210.71	21.07
Oct. . .	22.53	16.88	6.01	22.11	13.17	30.02	17.45	25.24	23.10	12.35	188.86	18.88
Nov. . .	33.50	16.01	8.36	21.34	14.02	30.75	18.36	23.29	17.70	11.41	194.74	19.47
Dec. . .	36.41	22.58	14.13	27.81	19.90	38.02	23.83	34.63	27.61	17.28	262.20	26.22
Totals . .	402.32	269.54	137.39	263.40	189.96	313.99	229.66	330.94	328.42	163.13		
Averages	33.52	22.46	11.45	21.95	15.83	26.16	19.14	27.58	27.37	13.59		

Sulphur Pollution

GRAPH 2

MONTHLY AVERAGE OF WEIGHT OF SO₃ PER 100 SQUARE CENTIMETRES EXPOSED SURFACE PER DAY.
(LEAD PEROXIDE METHOD)



Sulphur determination by the lead-peroxide method at the ten stations during 1957—(see also graph 2

TABLE B 14

Month	STATIONS										Totals	Monthly Averages
	1	2	3	4	5	6	7	8	9	10		
Jan. ..	2.5	2.2	0.6	4.1	2.1	2.9	3.1	3.4	3.4	2.2	26.50	2.65
Feb. ..	2.6	1.9	0.8	3.7	2.3	3.1	3.0	3.0	3.1	2.0	25.50	2.55
Mar. ..	2.0	1.5	0.55	3.2	2.1	2.1	2.2	2.2	1.4	1.4	18.65	1.86
Apr. ..	1.5	1.6	0.9	2.5	1.3	2.3	2.3	2.2	4.0	1.3	19.90	1.99
May ..	1.4	1.0	0.57	1.8	1.1	1.5	1.5	1.6	4.2	1.0	15.67	1.56
June ..	0.9	0.85	0.41	1.0	0.54	1.5	1.0	1.4	3.1	0.8	11.50	1.15
July ..	0.9	0.9	0.4	1.1	0.6	1.4	1.0	1.4	5.0	0.7	13.40	1.34
Aug. ..	1.5	1.1	0.5	1.4	1.1	1.7	1.5	1.7	4.9	1.1	16.50	1.65
Sept. ..	1.4	1.2	0.6	1.7	1.0	2.5	1.5	1.6	4.1	1.3	16.90	1.69
Oct. ..	2.0	1.7	0.27	3.0	1.6	2.3	2.4	2.2	2.9	1.8	20.17	2.01
Nov. ..	2.4	2.0	1.0	3.4	2.3	3.2	3.0	2.9	2.6	2.1	24.90	2.49
Dec. ..	2.6	2.0	0.7	3.8	2.1	3.5	3.0	2.7	2.8	2.1	25.30	2.53
Totals	21.7	17.9	7.3	30.7	18.1	28.0	25.5	26.3	41.5	17.8		
Averages	1.8	1.5	0.6	2.5	1.5	2.3	2.1	2.2	3.4	1.5		

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

TABLE B 15

Month	STATIONS										Monthly Averages
	11	12	13	14	15	16	17	18	19	Totals	
Jan. ..	8.77	2.52	2.82	2.27	1.70	—	2.87	5.11	3.37	29.43	3.27
Feb. ..	7.82	2.96	3.03	2.50	1.74	2.77	3.56	2.34	3.86	30.58	3.39
Mar. ..	5.39	2.18	2.07	1.91	1.28	1.94	1.70	1.60	1.75	19.82	2.20
Apr. ..	2.18	1.02	1.71	1.09	1.26	—	1.94	2.87	1.44	13.51	1.50
May ..	2.44	1.73	1.50	1.26	0.95	—	1.12	1.91	1.98	12.89	1.43
June ..	2.04	0.90	0.84	0.77	0.67	0.80	1.22	1.83	1.47	10.54	1.17
July ..	3.17	1.19	0.96	0.54	0.68	0.81	0.84	1.16	1.32	10.67	1.18
Aug. ..	5.10	1.83	1.04	0.83	0.82	1.00	0.99	1.40	1.66	14.67	1.63
Sept. ..	7.59	1.86	1.46	0.96	1.13	—	1.52	2.19	4.28	20.99	2.33
Oct. ..	7.01	2.20	2.31	1.48	1.54	1.98	2.59	4.22	3.10	26.43	2.93
Nov. ..	2.75	2.30	2.80	1.90	1.72	2.66	2.77	3.60	3.37	23.87	2.65
Dec. ..	5.67	2.67	3.14	1.94	1.69	2.60	2.89	4.66	4.61	29.87	3.32
Totals	59.93	23.36	23.68	17.45	15.18	14.56	24.01	32.89	32.21		
Averages	4.99	1.94	1.97	1.45	1.26	1.82	2.00	2.74	2.68		

Rainfall at ten deposit Gauge Stations for 1957

TABLE B 16

Station	RAINFALL IN INCHES											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
No. 1 ..	5.28	2.13	2.68	1.62	2.40	0.95	3.39	3.90	5.24	3.98	1.65	5.24
No. 2 ..	5.44	2.17	2.80	1.69	2.52	1.10	3.66	3.98	5.71	4.06	1.65	5.20
No. 3 ..	5.48	2.09	2.96	1.86	2.64	1.18	3.62	4.26	5.95	4.14	1.97	5.28
No. 4 ..	5.00	2.01	2.84	1.73	2.64	0.95	3.51	3.39	5.48	3.70	1.65	4.96
No. 5 ..	4.93	2.09	2.92	1.81	2.72	0.91	3.62	3.07	5.24	3.66	1.77	4.85
No. 6 ..	4.65	1.89	2.40	1.54	2.36	0.83	3.59	3.07	4.65	3.63	1.54	4.73
No. 7 ..	5.20	2.09	2.40	1.34	2.32	0.83	3.55	3.66	5.04	3.51	1.81	5.08
No. 8 ..	4.57	2.01	2.44	1.62	2.32	0.87	3.39	3.66	4.93	3.74	1.46	4.65
No. 9 ..	4.02	1.34	2.05	1.18	1.89	0.83	2.99	3.03	4.65	3.35	1.06	4.18
No. 10 ..	4.61	1.93	2.13	1.06	2.29	0.71	3.55	3.39	4.49	2.96	1.54	4.61
Monthly Average	4.91	1.97	2.56	1.54	2.41	0.91	3.48	3.54	5.13	3.67	1.61	4.87

Volumetric Method

Concentration of smoke and sulphur dioxide

TABLE B17

Month	Smoke (Milligrams per cubic metre)		Sulphur Dioxide (Parts per million)	
	Monthly Average	Highest Daily Value	Monthly Average	Highest Daily Value
January ..	0.244	0.831	0.017	0.034
February ..	0.252	0.701	0.019	0.045
March ..	0.206	0.321	0.053	0.099
April ..	0.123	0.237	0.044	0.088
May ..	0.048	0.082	0.018	0.028
June ..	0.041	0.043	0.016	0.027
July ..	0.043	0.052	0.014	0.020
August ..	0.042	0.082	0.012	0.025
September ..	0.065	0.340	0.018	0.037
October ..	0.231	0.350	0.053	0.086
November ..	0.321	1.062	0.081	0.223
December ..	0.353	0.890	0.086	0.158

Location of Instrument—16 College Street, Belfast.

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 1957

TABLE B 18

	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 }	972	1,040,555	83	972	78	76	8
COASTWISE: Steamers } Motors }	7,188	4,717,920	25	1,068	104	99	16
TOTAL	8,160	5,758,475	108	2,040	182	175	24

II. Character of Trade of Port

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

TABLE B 19

Passengers	Aliens		British		Total		Refused leave to land
	Forces	Civilians	Forces	Civilians	Forces	Civilians	
Inwards by ship	—	58	—	290	—	348	6
Inwards by Aircraft ..	606	71	—	771	606	842	—
TOTAL	606	129	—	1,061	606	1,190	6
Outwards by ship	—	73	—	1,197	—	1,270	—
Outwards by Aircraft ..	107	923	—	660	107	1,583	—
TOTALS	107	996	—	1,857	107	2,853	—

(b) Cargo Traffic:

Principal Imports—Wheat, Barley, Oats, Linseed, Pollards, Timber, Flax, Ores, Paper, Iron, Steel, Coal, Fertilisers, Oil, Flour, Bran, Cattle Fodder, Tobacco, Fruit, Wines, Ales.

Principal Exports—Machinery, Ropes, Linen, Yarns, Tobacco, Cigarettes, Potatoes, Grass Seed, Poultry, Apples, Live Cattle, Whiskey, Eggs.

(c) Foreign Ports from which vessels arrived:

Abo 2; Aden 1; Ajaccio 2; Albany W.A. 1; Albany 4; Alexandria 1; Almeria 2; Amsterdam 15; Antwerp 35; Archangel 6; Augustenborg 1; Baltimore 8; Ballina 3; Bari 1; Bayonne 1; Beirut 6; Beira 13; Bona 4; Bordeaux 15; Boston 11; Boulogne 2; Bremen 15; Brest 2; Buncrana 3; Buenos Aires 1; Burriana 1; Caen 11; Calcutta 1; Calais 7; Calabar 2; Capetown 3; Cartagena 6; Casablanca 9; Chalna 3; Chicago 2; Chittagong 1; Colombo 1; Cagliari 1; Concarneau 1; Cork 2; Crete 1; Curacao 1; Dakar 15; Dar-es-Salaam 3; Donges 1; Drogheda 5; Dublin 29; Dunclair 3; Dunkirk 14; Durban 2; Esbjerg 8; Famagusta 3; Fecamp 1; Fremantle 6; Frederikshavn 1; Frederikssund 1; Galveston 5; Gandia 1; Geelong 3; Gefle 1; Genoa 10; Geraldton 4; Gothenberg 21; Guernsey 46; Ghent 53; Hafnarfjord 1; Halmstad 2; Hamburg 23; Helsinki 7; Honfleur 9; Hornafjord 1; Houston 2; Huelva 4; Ibis 1; Izmir 1; Jacksonville 1; Karachi 1; Koilthothan 1; Kotka 7; Latakia 1; Leixoes 5; Le Havre 4; Le Legue 3; Le Guildo 2; Letterkenny 3; Limerick 1; Libourne 2; Lisbon 4; Lisjune 1; Liverpool, N.S. 3; Limassol 4; Loctudy 1; Lourenco Marques 1; Lubeck 2; Lyndiana 2; Madras 2; Malaga 1; Mantyluoto 2; Marans 3; Melbourne 1; Miriamichi 1; Mobile 1; Mombasa 3; Montreal 23; Mostaganem 8; Muskegon 1; Murmansk 2; Nantes 3; Naples 4; Nemours 1; Newport News 3; Newcastle, N.B. 1; New Ross 1; New York 2; Norfolk 10; Norsundet 1; Odda 1; Odense 2; Oran 12; Oslo 7; Ostend 2; Panama 1; Paimboeuf 6; Parrsboro 1; Philadelphia 8; Philippeville 3; Piraeus 1; Porto Alegre 1; Portland 1; Port Elizabeth 1; Port Albernie 1; Port Sudan 1; Port Sulphur 1; Prince Rupert, B.C. 4; Rangoon 2; Reykjavik 1; Riga 3; Rockefeller 1; Rotterdam 111; Rouen 65; Sables D'Clonne 6; Safi 1; Sapele 2; Sheephaven 1; Skagen 2; Skein 2; Skaw 1; Sligo 1; Sorel 1; St. Johns 12; St. Valery 2; St. Malo 2; Stookton 1; Stockholm 1; Sydney 1; Takoradi 1; Three Rivers 4; Thyboron 1; Thorlakslofn 1; Tonny Chaurente 12; Toronto 1; Trequier 1; Valencia 17; Vancouver 6; Ventspils 3; Visagapatam 3; Waterford 5; Warri 1; Wismar 7; Wicklow 1; Windau 1; Wilmington 1; Wormerver 10; Zanzibar 1; Zxipla 1.

The nationalities of the ships which arrived at the port and were inspected were as follows:—

American 1; Belgian 10; British 1266; Canadian 3; Costa Rican 6; Danish 28; Dutch 492; Finnish 7; French 9; German 78; Greek 5; Hondurian 1; Indian 1; Italian 4; Israeli 2; Liberian 4; Norwegian 52; Panamanian 9; Republic of Ireland 18; Russian 5; South African 1; Spanish 7; Swedish 31.

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	..	36 inwards; 39 outwards.
Aircraft carrying aliens	..	11 inwards; 27 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

12 samples of water were taken on board ships and submitted to the Public Health Laboratory for bacteriological examination. 9 of these samples were reported as highly satisfactory and 3 samples as unsatisfactory because of the presence of coliform organisms.

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 2 contacts of Dysentery, 1 contact of Typhoid and 3 contacts of Asiatic Influenza, 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.

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.

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 20

DISEASE	Cases during 1957		Ships Concerned	Average cases for previous five years
	Passengers	Crew		
Influenza	—	8	7	4
Jaundice	—	1	1	—
Typhoid	—	1	1	—
Tuberculosis	6	1	7	17

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

TABLE B 21

DISEASE	Cases during 1957		Ships Concerned	Average cases for previous five years
	Passengers	Crew		
Influenza	—	34	4	—
Infectious Jaundice	—	1	1	—
Typhoid	—	1	1	—
Malaria	—	2	1	—
Scabies	—	2	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 22

Species	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Black.. ..	—	5	8	—	—	—	7	12	—	2	—	6	40
Brown	—	—	—	1	—	2	—	4	—	—	—	—	7

Note: In addition to above, 21 mice were destroyed.

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

TABLE B 23

Species	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Black.. ..	—	1	—	—	—	1	—	—	—	—	—	—	2
Brown	—	3	1	3	5	2	4	—	3	1	8	2	32

The numbers of rats to be destroyed in the docks, as recorded in table F refers only to those which came to the notice of the Port Sanitary Officers.

The sheds and stores on the Harbour Commissioners estates, those of the Ship Building Yards, and the Belfast Corporation Harbour Power Stations, are baited regularly by a firm who are engaged in rat and insect pest control. This firm has been putting down poisoned baits with effective results and a marked reduction in rat population.

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 24

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	16	—	—	—	—	—	16	16
From 301 tons to 1,000 tons	17	—	—	—	—	—	17	17
From 1,001 to 3,000 tons	11	4	—	—	—	4	7	11
From 3,001 to 10,000 tons	32	8	—	—	—	8	24	32
Over 10,000 tons	3	—	—	—	—	—	3	3
TOTALS	79	12	—	—	—	12	67	79

VI. Hygiene of Crews Spaces:

Classification of Nuisances:—

TABLE B 25

Nationality of Ship	Inspected during 1957	Defects of Original Construction	Structural Defects through wear and tear	Dirt, vermin, and other conditions prejudicial to health
British	1,266	—	33	217
Other Nationalities	774	—	13	42

The defects found consisted of:—

TABLE B 26

Defects due to wear and tear:—	British	Other Nationalities
W.C. joints	3	1
W.C. soil pipe	1	—
W.C. flushing valves	3	—
W.C. basins	1	1
W.C. seats	—	1
Scupper pipe (renewed)	1	—
Flue pipes to stoves	3	2
Door to W.C. apartment	1	—
Ventilators	2	1
Decks	8	3
Portlights	9	4
Galley Stove	1	—
Drinking water filters (overhauled)	6	—
Other Conditions:—		
Quarters, washplaces, galleys and messrooms required cleansing	51	19
Water closets required cleansing	61	8
Quarters, washplaces, W.C. apartments, messrooms, galleys, pantries and provision storerooms required painting	18	3
Scuppers required cleaning	30	7
Tanks required cleaning (attended to during refit)	22	—
Bilges required cleaning (attended to during refit)	19	1
Vermin. bugs, weevils, cockroaches, steam flies and ants	16	4
Drinking water tanks chlorinated	3	—

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 27

Description	Tons	Cwts.	Qrs.	Lbs.
Barley Sugar	—	—	2	5
Biscuits (mixed)	—	5	2	—
Brussel Sprouts	—	7	—	16
Cheese (Gorgonzola)	—	6	—	—
Dried Milk (140x14 oz. tins)	—	1	—	10
Fish Cakes	—	—	—	20
Fish (mixed)	1	7	1	14
Flour	—	12	—	—
Macaroni	—	—	1	10
Margarine	—	—	2	—
Mint Imperials	—	—	—	15
Raspberry Jam	—	—	2	4
Spaghetti	—	—	2	4
Sponge Mixture	—	—	1	—
Tea	—	12	—	—

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

Beans 1; Beer 1; Coffee & Chicory Essence 1; Corned Beef 1; Celery 1; Dates 1; Flour 2; Fruit Salad 1; Green Peas 1; Ginger Bread Mix 1; Ham 1; Hamburger 1; Herbs 1; Lentils 1; Luncheon Meat 2; Pineapple Pieces 1; Peaches 1; Sardines 1; Sauce 1; Salmon 1; Sultanas 1; Tongue 1; Rice 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—79 (each of 30 minutes). Number observed discharging black smoke over 2 minutes in a continuous period of 30 minutes—5. Number of Statutory Notices served—5. Legal proceedings were taken in 1 case (details of which will be found under the heading Atmospheric Pollution). Verbal notice was given to 7 masters regarding the volume of dark brown smoke being emitted.

Routine and other inspections not included in main report:—

1,039 Visits to cross-channel (passenger) ships.

216 re-inspections regarding defects, etc.

125 inspections regarding deratting and deratting exemption certificates.

FACTORIES

The principal powers administered by the local authority are contained in the Factories Act (Northern Ireland), 1938. There is, however, a division of duties between Her Majesty's Inspectors and the Local Authority's Inspectors in that the first named deal with the provision of adequate lighting in all factories and cleanliness, prevention of overcrowding, maintenance of reasonable temperature, provision of adequate ventilation and drainage of floors of factories where mechanical power is used, while the Local Authority Inspectors deal with these items only in factories where no mechanical power is employed. The local authority, does, however, enforce the provisions of the Act concerning sanitary conveniences in all factories, whether or not mechanical power is used. During the year the Chief Inspector of Factories notified the Department of 15 instances in which insanitary conditions had been observed by H.M. Factory Inspectors. These were dealt with by the Department's Inspectors. In 16 factories where sanitary officers discovered that Abstract Notices, etc., were not exhibited in accordance with Section 120 of the Factories Act (N.I.), 1938, the Chief Inspector of Factories was notified.

Inspections for Health Provisions of the Factories Acts

TABLE B 28

PREMISES	Inspections	Notices Issued	Occupiers Prosecuted
Factories with mechanical power	2,394	67	1
Factories without mechanical power	307	15	3
*Other premises under the Act (including works of building and engineering construction, but not including outworkers' premises) ..	244	5	—
TOTALS	2,945	87	4

*Electrical stations reckoned as factories.

CONDITIONS FOUND

TABLE B 29

PARTICULARS	Instances	Remedied	Referred to Chief Factory Inspector	Prosecutions Instituted	Outstanding at end of year
Want of Cleanliness (S.1)	11	10	2	—	2
Overcrowding (S.2)	3	3	—	—	—
Unreasonable temperature (S.3)	2	2	2	—	—
Inadequate temperature (S.4)	9	9	2	—	2
Ineffective drainage of floors (S.6)	1	1	1	—	—
Sanitary Conveniences (S.7):					
Insufficient	37	35	—	1	8
Unsuitable or Defective	394	424	—	—	57
Not separate for sexes	16	12	—	4	7
Other Offences (excluding offences relating to Homework which are reported in Table B 30)	13	19	7	6	8
Breaches of special sanitary requirements for bakehouses (S.56 to S.59)	1	1	—	—	—
TOTALS	487	516	14	11	84

In addition to the work outlined in the above tables surveys are made of workplaces and warehouses. Nuisances discovered are dealt with under the provisions of the Public Health (Ireland) Acts 1878 to 1946, and the Belfast Corporation Acts 1878 to 1956, e.g., damp and defective conditions which are considered public health nuisances are dealt with by the issue of Statutory notices for their abatement in factories and workplaces.

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

Nuisances discovered	124
Statutory Notices issued	50
Nuisances abated	119
Dangerous structures, risk of fire, etc., reported to City Surveyor for action	10
Special Surveys and reports to City Surveyor under Planning Acts ..	32
Plans examined concerning new works and alterations	77

Factory Outworkers

The supervision of premises in which certain classes of outwork are carried on is exercised under the provisions of Part VIII of the Factories Act (Northern Ireland) 1938, and the Public Health (Ireland) Acts, 1878 to 1946, and is designed to prevent the employment of persons in unwholesome premises and the spread of infectious disease.

INSPECTION OF OUTWORKERS' PREMISES

TABLE B 30

Nature of Work	Inspections	Unwholesome premises (Section 115)			Infected premises (Sections 116/117)		
		Instances	Statutory Notices Served	Prosecutions	Instances	Orders made	Prosecutions (Sections 116/117)
1. Making, Cleaning, Washing, Altering, Ornamenting, Finishing and Repairing of Wearing Apparel	18	—	—	—	1	—	—
2. Making-up, Ornamenting, Finishing and Repairing of Table Linen, Bed Linen, or other Household Linen (including in the term "linen" articles of cotton and linen mixtures)	491	3	3	—	6	3	—
3. Textile weaving and any process incidental thereto	3	—	—	—	—	—	—
4. Others	—	—	—	—	—	—	—
TOTALS	512	3	3	—	7	3	—

Outworkers' premises within the City, notified during the year ..	818
Notices sent to factories employing outworkers	94
Notices for failing to keep or send list of outworkers	25
Outworkers' returns received	1,096
Outworkers notified from other districts	5
Outworkers notified to districts outside City	278

Bakehouses

Bakehouses on register at 1st January, 1957	259
Inspections during the year	737

Conditions discovered during year.

TABLE B 31

Nature of Defects	Instances	Notices Served	Remedied	Out-standing
Want of cleanliness in food rooms	5	2	5	—
Cleanliness of persons handling foodstuffs not observed ..	2	2	2	—
Unreasonable temperature (or ventilation inadequate or not being maintained)	14	6	5	7
Inadequate provisions for rendering fumes, etc., harmless ..	5	3	3	2
Inadequate provisions for drainage of floors	2	1	2	—
Drain inlets within food rooms	2	2	2	—
Sanitary conveniences communicating directly with food rooms ..	5	2	4	3
Ceilings, walls, floors, doors, etc., in disrepair	162	45	109	67
Ceilings, walls, floors, doors, windows, etc., requiring cleansing ..	16	9	29	1
Preparation or cooking rooms structurally defective	13	7	12	8
Suitable and sufficient washing facilities not provided	8	5	16	6
Suitable cloakroom accommodation not provided	2	1	2	—
Cleanliness of utensils, machinery, benches, etc., not observed ..	3	2	3	—
Suitable and sufficient lighting not provided or not maintained ..	3	1	4	3
Preparation rooms overcrowded	3	2	2	1
Other defects	5	—	10	9
TOTALS	250	90	210*	107

* Defects remedied include outstanding defects from the previous year.

During the year it was found necessary in twelve instances to institute legal proceedings against occupiers or 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:—

- Failed to finish the walls in food preparation rooms with a hard, smooth and durable material which can be readily cleansed;
- Sold food which contained foreign matter;
- Failed to observe due cleanliness of rooms where food was prepared for sale;
- Failed to abate Public Health Nuisances.

Insanitary Bakehouses

During the year three bakehouses were found to be in such defective structural condition as to be unfit for use or occupation 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 one instance the structural state of the building was considered to be dangerous, and in the remaining instances, apart from the

structural state, the volume of business carried on resulted in overcrowding in food preparation rooms, food storage rooms, etc., consequently proper food hygiene could not be observed. The firms concerned moved to larger and more up-to-date premises. Four new bakehouses were erected during the year and three were in course of construction at 31st December, 1957.

Bread Delivery Vehicles

The inspection of bread delivery vehicles and bread containers for cleanliness was maintained during the year. A reasonably good standard of hygiene was observed by most bakery managements. The rota system of cleansing vehicles at regular intervals has proved satisfactory. In only two instances was it found necessary to take action against unsatisfactory methods of bread delivery. In one instance the vehicle was so dilapidated that it was impossible to protect the bread against contamination by dust and dirt, in the other instance bread was transported in an open vehicle without any protection.

Bread Shops

Bread shops on register at 1st January, 1957	..	..	..	86
Inspections during the year	..	..	..	193

Conditions discovered during the year:—

TABLE B 32

Nature of Defects	Instances	Notices Served	Remedied	Out-standing
Want of cleanliness in food rooms	—	—	2	—
Want of cleanliness of persons handling food	2	1	2	—
Unreasonable temperature (ventilation inadequate or not being maintained)	7	4	27	1
Drain inlets within food rooms	2	2	1	1
Sanitary conveniences communicating directly with food rooms	1	1	2	—
Ceilings, walls, floors, windows, doors, etc., in disrepair	13	5	11	4
Ceilings, walls, floors, windows, doors, etc., required cleansing	4	1	6	3
Suitable and sufficient washing facilities not provided	1	1	18	1
Suitable and sufficient cloakroom accommodation not provided	4	2	2	2
Cleanliness of utensils, benches, food containers, etc., not observed	14	4	10	4
Suitable and sufficient lighting not provided or maintained	8	2	5	4
Other defects	7	4	8	7
Totals	63	27	94*	27

* Defects remedied include outstanding defects from the previous year.

Non-Industrial Premises

Inspection of non-industrial premises continued during the year and appropriate action has been taken in places where structural defects and unsatisfactory environmental conditions have been discovered. The general conditions in offices have recently become increasingly unsatisfactory, often to the extent of being definitely prejudicial to the health of the occupants. These conditions have been brought about by various factors, amongst which is the present acute shortage of proper office accommodation, leading to the use of unsuitable premises (including old converted dwelling houses). In these makeshift congested offices it is difficult to effect improvements, short of total reconstruction.

As previously reported present public health legislation does not require full welfare facilities such as lighting, heating, taking of meals, etc., for office workers as provided for workers in other sections of industry. It is hoped that suitable legislation will eventually be enacted to enforce adequate standards of comfort in offices.

Office buildings inspected	..	..	..	..	806
Office suites inspected	..	..	..	..	1,580
Inspections during the year	..	..	..	..	1,648

Conditions discovered on inspection:—

TABLE B 33

Nature of conditions	Instances	Remedied	Out-standing
Offices overcrowded	21	12	12
Offices inadequately ventilated	45	23	31
Offices inadequately lighted	4	2	2
Offices inadequately heated	—	—	—
Offices dirty	—	17	—
Stairways and passages dirty	4	24	11
Offices, etc., requiring re-decoration	12	26	6
Offices not free from noxious fumes	—	—	—
Offices in a damp state	3	16	2
Offices in a defective condition	16	34	23
Unsuitable provision for taking of meals	—	—	—
Unsuitable or no drinking water	6	10	1
Unsuitable or no washing facilities	10	9	2
<i>Sanitary Accommodation—</i>			
Insufficient	11	9	27
Not separate for the sexes	10	28	17
Dirty state	33	151	32
No intervening ventilated spaces, screening, etc.	74	96	22
Defective conditions, etc.	32	40	26
Unsuitable urinals	14	4	10
Separate means of approach not provided	—	3	—
TOTALS	295	504*	224

* Defects remedied include outstanding defects from the previous year.

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

In last year's Annual Report reference was made to the introduction of the Pharmacy and Poisons Act (Northern Ireland), 1955, and the Poisons Regulations (Northern Ireland), 1956. These amended the legislation relating to the sale of poisons to the public. Prior to 1955, the sale of poisons was as far as the local Authority was concerned, mainly confined to persons and premises exclusively engaged in the business of selling agricultural or horticultural products and the poisons under control were sheep dips, weed killers and preparations for the destruction of fungi and bacteria. The new Act and Regulations changed the method of granting annual licences by the Local Authority to such establishments and substituted registration and annual renewal of registration. The Poisons Schedules were amended to include other more common household preparations such as household ammonia, carbolic disinfectants, hair dyes, paint removers, etc., which hitherto had had unrestricted sale and which were stocked and sold to the public by most grocers, hardware merchants, etc. Consequently it was necessary for the Department, in order to compile the "Register" as laid down in the Act, to make a comprehensive survey of all the shops likely to stock and sell poisons. This survey was completed during the year by the Shops Section of the staff. It involved visits to shops within the City, giving advice to those shop-keepers coming within the scope of the Act and Regulations, and observing that the terms and conditions attached to their registrations were complied with.

The principal alterations under the new legislation which affect business premises and traders are:—

(1) All shop-keepers and traders, who sell or intend to sell any of the preparations in the list of poisons in Part Two of the Poisons Schedule, must—

- (a) obtain and complete the form of application for registration by the Local Authority;
- (b) pay a fee of 10 shillings for registration and thereafter pay a fee of 5 shillings per annum for retention on the register;
- (c) comply with the requirements of the Act and Regulations regarding the storage, labelling, type of container, etc., for poisons;
- (d) take the necessary precautions to prevent contamination of foodstuffs by poisons.

(2) No person is to be considered suitable for registration unless he has suitable premises, and the sale of poisons must take place from such named premises; the sale of any of the poisons listed in the schedule of the Regulations, from travelling vans, street trading or automatic machines, is prohibited.

(3) Apart from Ammonia, none of the scheduled poisons may be sold in any manner other than the container in which it is supplied: breaking bulk is not allowed.

There are other special requirements, in the case of persons who are engaged in the trade or business of agricultural or horticultural products, with which the ordinary shop-keeper has no concern.

The following are particulars of the work done during the year in connection with the preparation of the Poisons Register:—

Inspections	2,658
Applications received	449
Reports in connection with applications	458
Persons registered	437
Persons refused registration on the grounds of unsuitability	6
Contraventions of the Act and Regulations discovered	69
Contraventions referred to Ministry of Home Affairs (Northern Ireland)	7

Rag Flock Act 1911

Premises on register where Rag Flock is used	40
Inspections of premises	51
Samples of Rag Flock submitted to Public Analyst	38
Samples certified as not being in compliance with the Rag Flock Regulations, 1912	—

The purpose of the Rag Flock Act, 1911, and the Rag Flock Regulations, 1912, is to ensure that flock fillings manufactured from rags and used in the bedding and upholstery trades are of a prescribed standard of cleanliness.

Shops Act (Northern Ireland), 1946

Report on Administration of Section 22 in connection with the provisions for the health and welfare of persons employed in shops.

Shops on the register	6,350
Complete surveys during the year	1,119
Inspections during the year	4,118
Contraventions discovered	153
Statutory Notices served	67
Exemption certificates issued since 1946 with respect to alternative Sanitary accommodation	27
Exemption certificates issued since 1946 with respect to alternative washing facilities	17
Summonses issued during the year	Nil

Conditions Found:—

TABLE B 34

Nature of conditions	Instances	Remedied	Out-standing
Suitable and sufficient ventilation not provided	2	1	9
Suitable and sufficient ventilation not maintained	2	9	12
Efficient means for securing a reasonable temperature not provided	1	1	1
Suitable temperature not maintained	1	—	2
Suitable and sufficient means of lighting not provided or maintained	6	6	—
Insufficient and unsuitable washing facilities	24	26	7
Unsuitable facilities for the taking of meals	2	2	—
<i>Sanitary Accommodation—</i>			
Insufficient	5	4	7
Not provided separate for sexes	6	5	3
Ventilation inadequate	7	11	3
Lighting inadequate	5	7	—
Floors, walls, basins, seats, cisterns, etc., defective or dirty	73	77	37
Screening, doors, fasteners, etc., defective or not provided	13	9	11
Absence of an intervening ventilated space	4	4	1
Separate means of approach not provided	2	2	1
TOTALS	153	164*	94

* 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	152
Statutory Notices served	75
Nuisances abated	163
Notices outstanding at 31st December, 1957	3

Food and Drugs

Report on the Administration of the Food and Drugs Act in relation to sampling to check the nature, substance and quality of food sold within the City.

During the year 1,407 samples were taken by the Food and Drugs Inspectors in fulfilment of the duties imposed upon them by the Sale of Food and Drugs Acts, 1875 to 1939. The samples taken represented approximately 150 different varieties of food, thus ensuring a good coverage of food sold within the City. The samples procured were submitted to the Public Analyst and reported upon by him as to their compliance with prescribed or generally accepted standards. Of the 1,407 samples taken, 54 were reported as adulterated, representing 3.84 per cent. of the total. As happened in the previous year, the majority of the adulterations were found in what can be generally termed "butchers products" i.e., meat (minced), sausage meat and sausages. The reasons for these samples being certified were the addition of preservatives where prohibited and preservative in excess of permitted amounts, contrary to the Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland), 1927. The butchers products accounted for 38 of the 54 samples certified as adulterated. In legal proceedings arising from these contraventions of the Regulations the Courts imposed fines totalling £158 0s. 0d. Home made jam, "country" or farm produced butter and ice-cream accounted for a further nine of the samples found to be adulterated. From the analysis of the adulterated samples it can be readily seen that the sampling of food for chemical analysis is an important and very necessary part of the Food and Drugs Inspector's duties.

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

TABLE B 35

Year	Number taken			Number adulterated			Percentage adulterated		
	Formal	Informal	Total	Formal	Informal	Total	Formal	Informal	Total
1953	1,319	7	1,326	46	2	48	3.48	28.57	3.61
1954	1,388	13	1,401	50	2	52	3.60	15.39	3.71
1955	1,410	9	1,419	24	1	25	1.70	11.11	1.76
1956	1,400	3	1,403	53	1	54	3.79	33.33	3.85
1957	1,398	9	1,407	52	2	54	3.72	22.22	3.84

Nature of samples of Food and Drugs analysed

TABLE B 36

Article	Number Examined	Article	Number Examined
Ale	2	Cheese, Lemon	1
Almonds, Ground	7	Cherries, glace	5
Aspirin	1	Chocolate, drinking	9
Barley	11	Chocolate, liqueur	1
Beans, Baked	4	Chutney	1
Beans, Butter	2	Cinnamon, ground	5
Beef, Corned	1	Cloves, ground	1
Beef, Minced	68	Cockles	1
Beer	2	Cocoa	5
Brandy	7	Coconut, dessicated	7
Bread and Butter	5	Coffee	3
Breadcrumbs, golden	1	Condiment, non-brewed	43
Browning	1	Cornflour	11
Butter	34	Crab, dressed	1
Butter, peanut	1	Cream	25
Buttermilk	24	Cream of Tartar	4
Cakes, fish	1	Curd, Lemon	6
Cheese	2	Drink, blackcurrant	1

TABLE B 36 (continued)

Article	Number Examined	Article	Number Examined
Drink, glucose	6	Pickles	1
Dripping	3	Pie, steak and kidney	1
Ducks, savoury	1	Pies, meat	2
Essence of Coffee and Chicory	20	Potato, instant	1
Essence of lemon flavouring	1	Powder, baking	11
Essence, raspberry	1	Powder, boracic	1
Essence, raspberry wine	1	Powder, curry	5
Farola	8	Powder, custard	7
Fat, cooking	19	Powder, dessert	1
Feet, pigs	2	Powder, milk	1
Flour	7	Powder, seidlitz	1
Flour, pea	1	Powder, soft drinks	3
Flour, self-raising	9	Pudding, rice	1
Food, baby	1	Pudding, steamed	1
Fruit, dried	30	Rice	11
Fruit, tinned	1	Rice, creamed	1
Gin	2	Rice, ground	1
Ginger, ground	3	Rissoles	2
Glycerine	1	Rum	2
Herbs, dried	1	Salad, cream	13
Honey	4	Salt, liver	1
Ice-Cream	69	Salt, epsom	2
Jam	26	Salt, glauber	1
Jelly, aspic	1	Sardines	1
Jelly, table	20	Sauce	18
Jelly, table, diabetic	1	Sausages	136
Juice, fruit	15	Sausage, liver	7
Ketchup, tomato	1	Semolina	4
Lard	17	Sherry	3
Lentils	5	Shortening	2
Lollipops	27	Soda, bicarbonate of	19
Macaroni	2	Soft, drinks	58
Macaroni and Cheese	1	Soup	2
Margarine	23	Spaghetti	1
Marmalade	7	Spice, mixed	10
Marmalade, sugarless	1	Spread, chocolate	4
Mayonnaise	1	Spread, fish	1
Meat, luncheon	4	Spread, sandwich	1
Meat, sausage	58	Steak, minced	23
Milk, condensed	2	Stuffing, sage and onion	2
Milk, evaporated	8	Suet, Beef	6
Mincemeat, sweet	7	Sugar, Demerara	1
Mix, cake	5	Sugar, icing	1
Mix, soup	15	Sweetmilk	143
Mustard	12	Syrup, blackcurrant	1
Nutmeg, ground	2	Syrup, strawberry	1
Oats, milled	1	Tabioca	4
Oil, olive	7	Tea	24
Ointment, boracic	1	Veal, jellied	1
Ointment, zinc	3	Vinegar, cider	1
Paraffin, liquid	5	Vinegar, malt	25
Paste, fish	2	Whiskey	12
Paste, meat	6	Wine	8
Peas	6	Wine, ginger	1
Pectin, fruit	1	Yorkshire Relish	2
Peel, mixed	7		
Pepper	16		
Peroxide, hydrogen	1		
Piccalilli	1		
		Total	1,407

Legal proceedings in respect of adulterated foods

TABLE B 37

Nature of Sample	Total No. of Samples Taken	Adulterations	Prosecutions	Convictions	Fines
Minced Beef	68	16	16	16	£74 0 0
Butter	34	3	2	2	£3 0 0
Condiment, non-brewed	43	1	1	1	£2 0 0
Ice-Cream	69	3	3	3	£18 0 0
Jam	26	3	3	3	£2 10 0
Fruit Juice	15	1	—	—	—
Sausage Meat	58	7	7	7	£25 0 0
Zinc Ointment	3	1	1	1	£2 0 0
Rice	11	1	—	—	—
Sausages	136	12	12	12	£51 0 0
Soft Drinks	58	2	2	2	£1 5 0
Minced Steak	23	3	3	3	£8 0 0
Whiskey	12	1	1	—	—

Cases of adulteration in which no legal proceedings were instituted, but the owner was cautioned.
Butter 1; Fruit Juice 1; Rice 1.

Cases of adulteration in which legal proceedings instituted against the offender were pending at the end of the year.
Whiskey 1.

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

Barley. A sample of barley was found to be slightly dusty and attention was drawn to the presence of dead meal mites in the dust.

Beef Sausages. Seven samples of beef sausages contained respectively 530, 580, 590, 600, 730, 1,300 and 2,100 parts per million of sulphur dioxide as a preservative. Three samples of beef sausages, which were not declared as containing preservatives, contained respectively 150, 200 and 560 parts per million of sulphur dioxide. Beef sausages may contain a maximum of 450 parts of sulphur dioxide, when declared, in accordance with the Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927.

Black Currant Jam. One sample of black currant jam was deficient in soluble solids. The soluble solid content was 59 per cent. against the required minimum of 68½ per cent.

Butter. An excess of water was found to be present in three butter samples. The samples contained 17 per cent. 17.4 per cent. and 32 per cent., of water respectively, whereas the water content of Butter must not be more than 16 per cent., under the Sale of Butter (Ireland) Regulations, 1902.

Damson Jam. Two samples of Damson jam contained only 63 per cent. of soluble solids. Damson Jam should contain not less than 68½ per cent. of soluble solids.

Flour. One sample of Flour possessed a "musty" or "nutty" odour, although otherwise of normal composition.

Grape Fruit (Canned). A sample of canned grape fruit contained white particles which were found to consist of a glucoside (Naringin) naturally present in that fruit.

Ice Cream. Three samples of ice cream were reported as of inferior quality, being slightly low in fat content. One sample was deficient in fat content to the extent of 36 per cent. of the minimum quantity imposed by the Ice Cream Order, which is 5 per cent. One sample was 44 per cent. deficient and another 20 per cent. deficient of fat, calculated on the 5 per cent. fat standard.

Kali Water. A sample of Kali Water contained only ½ grain per pint of bicarbonate. The bicarbonate present was in the form of the sodium salt, whereas, Kali Water should contain potassium bicarbonate, and the amount present should not be less than 5 grains per pint. A sample of Kali Water, slightly low in bicarbonate, was marked as "inferior".

Lemon Juice. One sample of Lemon Juice contained 600 parts of sulphur dioxide per million as preservative. Fruit juices must not contain more than 350 parts of sulphur dioxide per million in accordance with the Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927.

Marrow and Ginger Jam. One sample of Marrow and Ginger Jam was slightly low in soluble solids, and was reported as being of "inferior" composition.

Minced Beef. 15 samples of Minced Beef contained respectively 100, 130, 160, 220, 250, 260, 370, 450, 460, 550, 650, 680, 700, 900 and 1,100 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. One sample contained 160 parts of sulphur dioxide per million, also 2 per cent. of starchy matter. Two samples sold as Minced Beef contained starchy matter amounting to 11 and 23 per cent., respectively, and one sample containing 370 parts per million sulphur dioxide was also adulterated by the incorporation of 3 per cent. of starchy matter. Minced Beef should be entirely composed of meat.

Minced Steak. Two samples of Minced Steak contained respectively 350 and 380 parts per million of sulphur dioxide. Minced Steak must be entirely free from preservatives (Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927). One sample contained 5 per cent. of starchy matter. Minced Steak should be composed entirely of meat.

Non Brewed Condiment. Attention was drawn to the high acidity of a sample of non-brewed condiment. This condiment contained 10.1 per cent. of acetic acid, which is in excess of the 8 per cent. level of acidity which constitutes a reasonable maximum. One sample contained only 3.0 per cent. of acetic acid, which is less than the minimum of 4.0 per cent. acetic acid agreed for this commodity. Another sample contained a certain amount of woody matter.

Pork Sausages. One sample of pork sausages contained 1,000 parts per million of sulphur dioxide as preservative. Pork sausages may contain a maximum of 450 parts of sulphur dioxide per million, when declared, in accordance with the Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland), 1927.

Sausage Meat. One sample of sausage meat contained 540 parts per million sulphur dioxide as preservative. Two samples not declared as containing preservative contained respectively 250 and 1,000 parts per million sulphur dioxide. Sausage meat may contain a maximum of 450 parts of sulphur dioxide per million, when declared. Two samples purchased as sausage meat were found to have the composition of minced beef. Sulphur dioxide was present amounting to 200 and 650 parts per million respectively, whereas preservative is not permitted in minced beef (Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927).

Sausage Meat Roll. Two samples of sausage meat roll (one with vegetables) contained 850 and 1,200 parts per million respectively of sulphur dioxide as preservative. Sausage meat roll may contain a maximum of 450 parts per million of sulphur dioxide, when declared (Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927).

Soda Water. One sample of Soda Water contained only 1.2 grains per pint of sodium bicarbonate instead of the customary 5 grains per pint.

Steak Sausages. One sample of steak sausages, which was not declared as containing preservative, contained 100 parts per million of sulphur dioxide contrary to the Public Health (Preservatives, etc., in Food) Regulations (Northern Ireland) 1927.

Synthetic Whipping Cream. Glucose was not present in a sample of Whipping cream which was claimed, by label, to contain that sugar in appreciable quantity.

Rice. An informal sample of rice containing 0.3 per cent of clay was reported as unfit for use for human food in its existing condition.

Whiskey. One sample of whiskey was 41.3 degrees under proof and below the statutory minimum of 35 degrees under proof as prescribed in the Intoxicating Liquor Act (Northern Ireland) 1923.

Zinc Ointment B.P. A sample of zinc ointment (B.P.) contained 12.0 per cent. zinc oxide, showing a deficiency of 14.3 per cent. of the minimum quantity of zinc oxide which is 14 per cent. (British Pharmacopoeia, 1953).

With the exception of the samples specially reported, all other samples analysed during the year were found to be in accordance with the descriptions given to them, and were therefore reported as being of genuine composition.

Milk Control

Surveillance over the milk sold within the City during the year was maintained by sampling for chemical analysis and bacteriological and biological examination, allied to inspections of dairies, cowsheds and milkshops, and vehicles used in transporting milk for sale. It has been stated that cow's milk is an almost perfect food for human beings. This perfection, however, is in itself a source of weakness as the food value of milk enables it to support bacterial life which, under favourable conditions, flourishes rapidly. The object of inspection is to prevent the occurrence of conditions which would favour the growth and development of bacteria. Dairies, cowsheds and milkshops are frequently inspected and on an average 20 samples of sweet milk per week are collected throughout the year and forwarded to the Central Laboratory of the Northern Ireland Hospitals Authority.

Licensed Producers of milk	6
Cows on licensed producers premises (average)	159
Dairies where milk is pasteurised	4
Gallons of milk pasteurised per day (approx.)	53,000
Wholesale distributors of milk	27
Retail distributors of pasteurised milk	1,154
Retail distributors of grade A (T.T.) milk	32
Inspections of dairies, cowsheds and milkshops	671
Samples of sweet milk taken under Sale of Food and Drugs Acts	143

Particulars of Sweetmilk Samples taken for Chemical Analysis during the five years 1953—1957

The results of the samples taken for chemical analysis during the year revealed a good standard of quality. All the 143 samples taken were in compliance with the prescribed standards as to fat and solids not fat.

TABLE B 38

Year	Number Taken	Number adulterated	Percentage adulterated
1953	187	—	—
1954	209	1	0.47
1955	174	1	0.57
1956	168	1	0.60
1957	143	—	—

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

TABLE B 39

Month	Number	Total Solids per cent	Fat per cent	Solids Not Fat per cent
January	8	12.28	3.75	8.53
February	9	12.22	3.66	8.56
March	19	12.38	3.84	8.54
April	17	12.08	3.56	8.52
May	25	12.20	3.43	8.77
June	2	12.37	3.60	8.77
July	3	12.38	3.73	8.65
August	7	12.45	3.70	8.75
September	16	12.72	3.93	8.79
October	24	12.75	4.00	8.75
November	1	12.75	4.00	8.75
December	12	12.54	3.80	8.74

Bacteriological Examination of Milk

947 samples of Grade "A" (T.T.) and pasteurised sweetmilk were taken during the year from dairymen, milkshops and milk bars by the Food Inspectors. The samples are taken by the bottle, and placed in a refrigerated container and after completion of the round of sampling the bottles are delivered to the Central Laboratory of the Northern Ireland Hospitals Authority for examination. If an adverse report is received from the Laboratory the necessary follow-up action is taken by the Food Inspectors. In addition to the samples mentioned above, 144 samples were taken and forwarded to the Pathological Laboratory at Purdysburn for biological examination.

Particulars of Bacteriological Examinations

TABLE B 40

Test	Grade of Milk	Samples Examined	Satisfactory		Unsatisfactory	
			Number	Percentage	Number	Percentage
Plate Count ..	*"A" (TT)	92	86	93.48	2	2.17
	Pasteurised	—	—	—	—	—
Coliform ..	"A" (TT)	92	82	89.10	10	10.90
	Pasteurised	855	817	95.56	38	4.44
Phosphatase ..	Pasteurised	855	855	100.00	—	—
Biological ..	"A" (TT)	144	141	97.91	—	—

* 4 tests were invalidated by spreading organisms.

Provision of Milk in Schools

During the year 185 samples of milk delivered to schools were taken by Food Inspectors for bacteriological examination. 168 samples were in compliance and 17 samples were unsatisfactory due to because of the presence of coliform organisms.

TABLE B 41

Test	Grade of Milk	Samples Examined	Satisfactory		Unsatisfactory	
			Number	Percentage	Number	Percentage
Plate Count ..	Pasteurised	185	185	100	—	—
Coliform ..	Pasteurised	185	168	90.81	17	9.19
Phosphatase ..	Pasteurised	185	185	100	—	—

Mineral Waters

Systematic sampling for bacteriological examination of mineral waters produced in the City was carried out during the year. Simultaneously, samples of the water supply used in the manufacture were collected for the same purpose. 324 samples of mineral waters were delivered to the Central Laboratory of which 317 were reported as being highly satisfactory. The remainder (see Table B 42) were classified as unsatisfactory due to the presence of coliform organisms, some of which were of faecal origin.

TABLE B 42

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

3 samples contained both faecal and non-faecal coli.

In these instances follow-up action took place, the premises were inspected and the whole process of manufacture checked. Subsequent samples were then taken. Mineral waters manufactured elsewhere and sold in the City were also taken for bacteriological examination.

Frozen Confectionery

This type of confectionery is becoming increasingly popular particularly amongst young children, and because of its nature and constituents it is considered necessary to maintain close supervision over conditions of manufacture and sale. Consequently, during the year 165 samples of the various types sold under the heading of lollipops or iced lollies were collected and delivered to the Central Laboratory for bacteriological examination. 154 of the samples were reported upon as being satisfactory and the remaining 11 as unsatisfactory. Arising from these unsatisfactory reports Food Inspectors visited the premises concerned and investigated the conditions of storage and manufacture where applicable. 27 samples were submitted to the Public Analyst for chemical analysis, all of which were reported as genuine.

Bacteriological Examination of Imported Eggs, Egg Powder and Egg Albumen

In the Annual Report for 1956, reference was made to the association of paratyphoid fever with imported Chinese eggs, and the need for systematic sampling of consignments reaching the City. During the year 1957 it can be reported that all of the 105 samples taken for bacteriological examination were certified by the Bacteriologist as satisfactory.

The samples taken were as follows:—61 of frozen eggs; 32 of dried eggs and 12 of egg albumen.

The Departments' recommendations to the trade, regarding the temperatures to which mixtures containing Chinese eggs should be raised, were strictly adhered to.

Merchandise Marks Acts 1887 to 1953

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

The Orders made under the above Acts have a dual purpose. On the one hand the home producer is protected, and on the other hand the general public are made aware of the country of origin in the case of imported foodstuffs. The Food Inspectors on their daily rounds take action on non-compliance with the provisions of the Orders by giving verbal warnings. If these are found ineffective, legal proceedings are instituted and this was found to be necessary in 8 instances.

Margarine Factories and Wholesale Dealers

There were 79 premises on the register at the end of the year, at which the Food Inspectors made 106 inspections. It was not found necessary to institute legal proceedings. 4 contraventions were remedied on receipt of written notice from the Department.

Citrus Fruits

During the year samples of citrus fruits were examined by the Public Analyst for the presence of diphenyl from contact with wrapping paper treated with this preservative. None of the samples contained excessive amounts of diphenyl.

The Control of Food Unfit for Human Consumption

This aspect of the Food Inspectors' duties occupies a considerable part of their time. Frequent calls are made by wholesalers and retailers for foods to be examined. In many instances, particularly in the case of imported tinned goods, the damage has been caused during transit: burst seams and badly dented tins are common features of any consignment. Canned fruits in large tins seem to be particularly prone to damage and "hydrogen swell". A glance at the table of unsound foodstuffs surrendered after inspection will show that over 22 tons of tinned fruit were found to be unsound. This is a considerable loss of foodstuffs and it is obvious that the whole question of canning, packaging and transit requires more thought. Traders are very anxious that the Food Inspectors examine all these goods, because, if a condemnation certificate is issued, the trader can obtain credit for the goods condemned.

During the year the number of certificates issued was 6,116, an increase of 745 over the previous year and of 1,113 over 1955. It will be seen from these figures that much of the Inspectors' time is taken up on this one aspect of the control of food unfit for sale for human consumption.

Table B 44 shows the various articles of food seized and destroyed in pursuance of Magistrates Orders, and the analysis of Legal Proceedings shows fines amounting to £75 10s. 0d. imposed by the Courts in cases arising from these seizures. These instances arise from routine inspections of shops, cafes, etc. Where the Food Inspector is satisfied that the unsound food is exposed for sale, or is in

course of preparation for sale, or is deposited with a view to future sale, the unsound food is seized and taken before a Magistrate and an order for its destruction sought. Other instances arise through members of the public bringing to the Department articles of food purchased, which are either unsound or contain extraneous matter liable to render the food unsound, unwholesome and unfit for the food of man.

(Unsound foodstuffs seized by Port Sanitary Officers will be found under the heading "Port Sanitary").

Unsound Foodstuffs Surrendered by Traders after inspection and destroyed or disposed of otherwise than for the food of man

TABLE B 43 (a)

Article	Tins, Jars, Packets, Bottles	Article	Tins, Jars Packets, Bottles
Asparagus	23	Milk	3,258
Baby foods	7	Miscellaneous	924
Baking Powder	2	Mustard	1
Beans	3,556	Paste	5
Beetroot	122	Peas	4,697
Cheese	74	Pickles	7
Cheese spread	197	Potato crisps	900
Coffee	20	Puddings and dumplings	108
Cordial	9	Rice	325
Corn	48	Salad cream	8
Cream	8,063	Sandwich spread	8
Fish	1,348	Savoury straws	1,110
Fruit	6,709	Soup and broth	1,863
Fruit jellies	12	Soup mixture	504
Fruit juice	657	Spaghetti	489
Ham	5	Stew	17
Jam	278	Syrup	6
Jellies	19	Tomatoes	1,319
Macaroni	19	Tomato juice	280
Marmalade	354	Treacle	6
Mayonnaise	1	Vegetables	841
Meat, brawn, veal and pork	4,344		

TABLE B 43 (b)

Article	Tons	Cwt.	Qrs.	Lbs.	Article	Tons	Cwt.	Qrs.	Lbs.
Beans	—	—	—	15	Margarine	—	—	—	5
Butter	—	—	—	7	Meat (tinned)	1	5	3	9
Cheese	—	6	3	20	Meat, Brawn, Veal and Pork	1	18	—	11
Confectionery	—	1	—	19	Meringue powder	—	—	—	19
Cooking fat	—	—	—	6	Peas	—	1	—	6
Dried eggs	—	2	1	6	Piping jelly	—	—	1	—
Dried fruit	4	13	1	21	Rice	3	14	1	10
Flour	30	4	3	24	Salt	—	7	3	16
Fruit (large tins, lbs.)	22	1	—	16	Shortening	—	—	1	—
Fruit pulp	—	5	—	4	Sugar	—	—	—	3
Ham	3	—	1	3	Walnuts	—	—	1	23
Liquid eggs	—	1	2	18	Jam	—	—	—	14

Unsound Foodstuffs seized and destroyed in pursuance of Magistrates' Orders

TABLE B 44 (a)

Article	Number	Type of Container	Article	Number	Type of Container
Beans	5	Tins	Jelly crystals	100	Packets
Beetroot	15	Tins	Meat	11	Tins
Brisling	7	Tins	Miscellaneous	24	Tins
Browning	20	Bottles	Mushrooms	2	Baskets
Carrots	6	Tins	Orange drink	1	Bottle
Cereal food	2	Packets	Peas	152	Tins
Chocolate	1	Bar	Pickles	17	Jars
Chocloate roll	1	Loose	Salad dressing	12	Jars
Custard	1	Tin	Sauce	3	Bottles
Dessert powder	36	Packets	Soup	4	Tins
Egg powder	10	Packets	Soup mixture	5	Packets
Fruit	33	Tins	Suet	3	Packets
Fruit juice	12	Tins	Swiss rolls	5	Loose
Jam	43	Jars	Swiss rolls	5	Packets
Jellies	86	Loose	Tomatoes	3	Tins

TABLE B 44 (b)

Articles	Tons	Cwts.	Qrs.	Lbs.	Article	Tons	Cwts.	Qrs.	Lbs.
Bananas	—	—	—	1	Luncheon meat	—	—	—	4
Brussels sprouts	—	6	1	—	Peas	—	—	—	15
Butter	—	—	—	1	Raisins	—	—	1	18
Cheese	—	—	—	7	Rice	5	18	1	—
Confectionery	—	—	1	3	Semolina	—	—	—	6
Flour	—	—	—	16	Sweet mince	—	—	3	7
Ham	—	—	—	4					

43 Fowl, 10 gallons of sweetmilk.

Food containing Extraneous 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:—

- *Dirt in Sweetmilk.
- Rodent droppings in rice (3 instances).
- A piece of tobacco in a fruit cake.
- *Dead insects in a wheaten farl.
- *A piece of wood in a bar of chocolate.
- Dirt in a chocolate iced cake.
- *Mouse droppings in a pastry.
- *Mould growth in chocolate cream roll.
- Rodent droppings in a barmbrack.
- Dead fly in a pastry.
- Hessian sacking in a fruit malt loaf.
- A piece of metal in a bottle of orange juice.
- Wire nail in a currant square.
- *Dirt in butter.
- Dead insects in butter.
- *Mould growths in a fruit malt loaf.
- *Dead insect in a cream chocolate pastry.
- Steel screw nail in a brown fruit loaf.
- *Dead insect in a chocolate iced pastry.
- *A piece of glass in a plum cake.
- *Dead insects in pineapple cream.
- *Cigarette tobacco in a Paris bun (2 instances).
- *Dead insect in a wrapped sliced loaf.
- *A piece of jute sacking in a sliced pan loaf.

* Denotes legal proceedings taken.

In cases where the extraneous matter was of a minor nature or for other reasons, a visit by the Food Inspector to the premises where the food was sold and the issue of a warning letter were considered suitable action.

Sale of Ice Cream Acts (Northern Ireland) 1937 and 1950

Registration of Premises used for Manufacture for Sale, and Sale of Ice Cream

During the year 108 applications were received for registration. 68 of the applicants were from new owners of premises that had changed hands, and the remaining 40 were for registration of premises for the first time. On receipt of an application the premises are visited by the Food Inspector and the applicant is advised as to suitability or otherwise of the premises. If the premises require work done to make them suitable, the applicant is advised accordingly. When the premises are satisfactory the application is submitted to the Health Committee with the Inspector's recommendation for registration. If the nature of the business carried on is not considered suitable to be associated with the sale of ice cream the conditions are reported to the Health Committee. At other times, routine inspection of premises reveals changes in the business carried on, making them unsuitable for the sale of ice cream. It was found necessary in 15 instances to recommend the Health Committee to refuse an application or cancel a registration on the grounds that public health was likely to be endangered.

TABLE B 45

Particulars	Manufacture and Sale	Sale Only	Total
Premises registered at 1st January, 1957	50	814	864
Deletions during the year	2	66	68
Registered during the year	2	106	108
On register at 31st December, 1957	50	854	904

Inspections of registered premises	2,116
Summonses for selling ice cream in unregistered premises	12
Summonses for obstructing an Inspector in the execution of his duties under the Sale of Ice Cream Acts (Northern Ireland) 1937 and 1950	1
Samples submitted for bacteriological examination	915
Samples submitted for chemical analysis	69
Cautionary letters sent	58
Orders made refusing or cancelling registration	15

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

69 samples were taken during the year, representative of all the ice cream manufactured in the City and also of ice cream sold in the City which was manufactured elsewhere.

Table B 46 shows the results of examination of the samples taken.

TABLE B 46

Complied with Standards		Did Not Comply with Standards			
Number	%	Fat		Total Solids	
		Number	%	Number	%
66	95.65	3	4.35	—	—

**The Ice Cream (Heat Treatment, etc.) Regulations (N.I.) 1954
Methylene Blue Test (915 samples)**

TABLE B 47

Grade	Number	Percentage
1	806	88.09
2	75	8.20
3	10	1.09
4	24	2.62

Conditions discovered on inspection of Ice Cream premises

TABLE B 48

Nature of Conditions	Instances	Remedied	In Progress	Out-standing
Walls, ceilings, floors, etc., in disrepair	3	4	4	—
Walls, ceilings, doors, windows, etc., required cleansing or re-decoration	1	2	—	—
Lighting and ventilation not provided or insufficient	6	10	—	—
Sink: defective, worn, or not provided	5	11	—	—
Sink: hot and cold water not provided or insufficient	6	7	—	—
Sink: wastepipe untrapped or connected direct to drain	5	5	—	—
Personal washing facilities not provided or insufficient	7	7	—	—
Soap and towels not provided or insufficient	4	4	—	—
Failure to prevent risk of contamination of food	11	14	—	—
Proper bins not provided for storage of refuse	2	2	—	—
Yards, Paving, walls, etc., defective	2	2	—	—
Other defects	14	4	4	6
<i>Sanitary Accommodation</i>				
Sanitary conveniences within or communicating directly with the food room	2	2	—	—
Not provided or insufficient for males	3	3	—	—
Floors, basins, seats, walls, etc., dirty or defective	2	2	—	—
Lighting and ventilation not provided or inadequate	1	1	—	—
Totals	74	*80	8	6

* Defects remedied include outstanding defects from the previous year

Food Hygiene

During the year a large volume of work was carried out in food premises to improve the conditions under which food is prepared, stored and sold in the City. Many of the improvements were of a major nature, requiring plans to be lodged for approval. Approximately 90 plans concerning food premises were received by the Department, for comment and approval. A number of new premises were erected during the year representing different branches of the food trade and, in co-operation with the architects engaged in the work, opportunity was taken to eliminate many of the faults found in the older type of premises. Many of the faults found in existing premises are born of the war and immediate post-war periods, when, due to building restrictions, premises were adapted for uses other than those for which they were originally constructed. In premises of this type, such things as lack of open areas for drain inlets and storage of bins, lack of rear passage access for removal of refuse, and lack of light and ventilation direct to the external air, all present problems which require much thought and ingenuity to overcome.

The problem of the street hawker and the mobile van trader is still very acute, and the long awaited legislation to deal effectively with this problem is a handicap and a source of embarrassment when dealing with owners of premises who have carried out extensive structural alterations. Reference was made in this section of the 1956 Annual Report to the requirement to enclose the front of fishmongers' premises. At the end of 1957, it can be reported that only one fish shop now remains in the City Centre with an open front. Plans have been lodged and approved for the necessary alterations which are to commence shortly.

Inspection of Food Premises

Inspections by trade or business (excluding bakehouses)

TABLE B 49

Trade or Business	Inspections	Trade or Business	Inspections
Bacon Curers	58	Industrial Canteens	29
Butchers	1326	Markets	518
Chemists	9	Meat Factories	11
Cold Stores	7	Milk Retailers	671
Confectioners	3427	Mineral Water Factories	224
Fish	279	Poulterers	232
Fish and Chip	526	Provisions	1252
Food Manufacturers	107	Public Houses	546
Fruiterers	1481	Restaurants	564
Grocers	3787	Wholesalers	658
Hawkers' Carts	443	Bread Shops	138
Ice Cream	2116	Pastry	43
Bottling Stores	41	Dairies	671
		Total	19,164

Occupiers of premises carrying on the business of Butcher, Manufacture and Sale of Ice Cream, and the preparation and sale of Fried Fish and Fried Potatoes are required to register with the Local Health Authority. Statistics concerning these trades are set out in other parts of this report under the relevant headings.

Butchers' Premises

Premises registered at 1st January, 1957	365
Deleted during year	12
Registered during year	17
Premises on register at 31st December, 1957	370
Inspections of registered premises	1,326

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 50

Nature of Condition	Instances	Remedied	In Progress	Out-standing
No proper preparation room	2	—	—	3
Walls, ceilings, floors, doors, etc., in disrepair	7	9	—	43
Walls, ceilings, floors, windows, doors, etc., required cleansing or re-decoration	2	2	—	—
Lighting and ventilation not provided or insufficient	—	5	—	15
Sink: wastepipe untrapped or connected direct to drain	4	3	—	1
Sink: hot and cold water not provided or insufficient	4	4	—	5
Fixtures and fittings in a state of disrepair	2	7	—	15
Drain inlets within the food room	—	—	—	1
Failure to prevent risk of contamination of food	—	—	—	1
Cold storage facilities not provided	2	3	—	5
Cold storage improperly sited	—	2	—	1
Equipment worn or defective: required repair or renewal	4	3	—	13
Cutlery and other accessories defective or worn	—	4	—	12
Proper bins not provided for storage of bones and refuse	—	4	—	1
Yards, surface defective or dirty	—	—	—	2
Other defects	2	2	—	8
Suitable and sufficient personal washing facilities not provided	5	10	—	30
Supply of soap and clean towels not sufficient or not provided	4	10	—	28
Sanitary accommodation not in compliance or not provided	9	11	—	31
Totals	47	79*	—	215

* 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 51

Nature of Conditions	Instances	Remedied	In Progress	Out-standing
Ceilings, walls, doors, windows, floors, etc., in disrepair	127	79	3	94
Ceilings, walls, doors, windows, required cleansing and re-decoration	34	37	—	—
Lighting and ventilation not provided or insufficient	69	69	4	95
Sink: hot and cold water not provided or insufficient	18	12	1	58
Sink: wastepipe untrapped or connected direct to drain	29	18	1	13
Drain inlets within the food room	24	11	—	49
Failure to prevent risk of contamination of food	38	38	4	—
Equipment worn or defective: required repair or renewal	14	8	1	25
Cleanliness of utensils, machinery, tables, etc., not observed	—	1	—	—
Unsuitable cloakroom accommodation	1	1	—	2
Bottlewashing facilities not provided or insufficient	2	—	—	2
Cold storage facilities not provided	3	2	—	4
Fixtures and fittings in a state of disrepair	8	4	—	7
Yards, paving, walls, etc., defective	2	—	—	2
Yards, paving, walls, etc., dirty	2	4	—	—
Proper bins not provided for storage of bones and refuse	11	8	—	7
Refuse bin accommodation unsatisfactory	10	4	—	6

TABLE B 51 (continued)

Nature of Condition	Instances	Remedied	In Progress	Out-standing
Suitable and sufficient personal washing facilities not provided ..	48	50	1	—
Soap and clean towels insufficient or not provided ..	23	18	—	12
Sanitary conveniences within or communicated direct with food room	8	7	—	18
Other defects	13	8	1	21
<i>Sanitary Accommodation</i>				
Sanitary accommodation not provided or insufficient	13	7	1	13
Light and ventilation not provided or insufficient	9	5	—	7
Separate means of approach not provided	—	2	—	—
Floors, basins, walls, seats, etc., dirty or defective	23	16	2	9
Flush to water closet defective or inadequate	1	2	—	—
Screens, doors, fasteners, etc., defective or not provided ..	9	9	—	5
Urinals, absence of or insufficient flush	1	—	—	2
Totals	540	420*	19	451

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

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

TABLE B 52

Nature of conditions	Instances	Remedied	In Progress	Out-standing
No proper preparation room	5	1	—	4
No provision to prevent solid matter entering drains	—	1	—	—
Dining rooms: walls, ceilings, windows, etc., required cleansing ..	2	—	—	5
Dining rooms: walls, ceilings, floors, etc., in disrepair	5	1	—	9
Dining rooms: ventilation not provided and maintained	4	—	—	9
Kitchens: walls, ceilings, floors, etc., in disrepair	5	2	—	3
Kitchens: walls, ceilings, floors, windows, etc., required cleansing	3	—	—	3
Kitchens: ventilation not provided or maintained	2	2	—	2
Foodstores: walls, ceilings, floors, etc., in disrepair	7	1	—	8
Foodstores: walls, ceilings, floors, windows etc., required cleansing	2	—	—	5
Foodstores: ventilation not provided and maintained	2	—	—	2
Preparation rooms: walls, ceilings, windows, etc., required cleansing	2	—	—	2
Preparation rooms: walls, ceilings, floors, etc., in disrepair ..	7	1	—	6
Preparation rooms: lighting and ventilation not provided	1	1	—	1
Fixtures and fittings in a state of disrepair	4	2	—	4
Suitable and sufficient personal washing facilities not provided ..	8	1	—	11
Soap and towels not sufficient or not provided	4	—	—	4
Supply of hot and cold water not sufficient or not provided	5	2	—	3
Equipment defective, worn, required repair or renewal	4	2	—	6
Swill-bin accommodation unsatisfactory or bins not provided ..	4	—	—	4
Cold storage facilities not provided or insufficient	1	—	—	3
Cooking ranges not provided with means for removal of fumes or accessible for cleansing	6	1	—	6
Sink: wastepipe untrapped or connected directly to the drain ..	4	4	—	—
Sanitary conveniences, dustbins etc., within or communicating direct	3	—	—	4
Unsuitable cloakroom accommodation	3	—	—	3
Drain inlets within, or communicating direct with a food room ..	1	1	—	—
Yards, surface, wall, etc., defective or dirty	1	—	—	1
Failure to prevent risk of contamination of food	1	1	—	—
<i>Sanitary Accommodation</i>				
Lighting and ventilation inadequate	3	2	—	1
Floors, basins, seats, walls, etc., dirty or defective	6	3	—	3
Not provided or insufficient for males	4	—	—	4
Not provided or insufficient for females	2	—	—	3
Totals	111	29*	—	119

*Defects remedied include outstanding defects from the previous year.

Conditions discovered in licensed premises and bottling stores.

TABLE B 53

Nature of Conditions	Instances	Remedied	In Progress	Out-standing
Sanitary conveniences, dustbins, etc., within or communicating directly	13	12	1	—
Drain inlets within or communicating directly	12	14	7	—
Bars and Parlours: walls, ceilings, floors, windows, etc., required cleansing	6	4	—	4
Bars and Parlours: walls, ceilings, floors, etc., in disrepair	6	6	—	—
Bars and Parlours: ventilation not provided and maintained	10	14	—	7
Beer Cellars & Bottling Stores: walls, ceilings, floors, windows, etc., in disrepair	22	32	4	—
Beer Cellars & Bottling Stores: walls, ceilings, floors, windows, required cleansing	7	10	—	—
Beer Cellars & Bottling Stores: ventilation not provided and maintained	7	10	—	—
Preparation rooms: ceilings, walls, doors, floors, etc., in disrepair and required cleansing	4	3	1	1
No proper room for preparation of snacks	—	—	1	4
Sink: wastepipe untrapped or connecting directly to drains	11	18	1	8
Suitable and sufficient personal washing facilities not provided	19	24	—	—
Soap and towels insufficient or not provided	15	18	1	30
Glasses: unsatisfactory method of cleansing	9	14	—	—
Failure to prevent risk of contamination of food	5	5	—	14
Beer pipes, trays, drainers, or sinks: defective, worn, or cleanliness not maintained	8	10	—	15
Cold storage facilities not provided or improperly sited	1	—	—	2
Fixtures and fittings in a state of disrepair	2	5	3	—
Cooking ranges inaccessible etc.	1	1	—	2
Bottle washing facilities insufficient or not provided	2	6	—	4
Proper bins not provided for refuse, etc., or refuse bin accommodation unsatisfactory	1	3	3	—
Other defects	2	1	2	7
<i>Sanitary Accommodation</i>				
Not provided or insufficient for males	3	1	—	2
Not provided or insufficient for females	4	1	—	3
Separate means of approach not provided	—	1	—	2
Screens, doors, fasteners, etc., defective or not provided	3	7	—	2
Lighting and ventilation not provided or inadequate	3	3	—	—
Floors, basins, seats, walls, etc., dirty or defective	5	6	—	—
Yards, paving etc., dirty or defective	—	—	—	4
Urinals: defective or insanitary	5	10	—	5
Urinals: absence of or insufficient flush thereto	11	11	—	—
Totals	197	250*	24	116

*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, 1957	196
Registered during the year	17
Registrations refused during the year	1
Registrations cancelled during the year	1
Summonses issued during the year for unregistered premises	2
Deleted during the year	13
Registered at 31st December, 1957	199
Inspections of registered premises	526

Conditions discovered on inspection:—

TABLE B 54

Nature of Condition	Instances	Remedied	In Progress	Out-standing
No preparation room and/or no potato store	—	1	—	—
Ceilings, walls, floors, doors, etc., in disrepair	13	3	2	9
Ceilings, walls, doors, windows, etc., required cleansing and re-decoration	6	—	1	5
Lighting or ventilation not provided or insufficient	2	—	1	1
Sink: hot and cold water not provided or insufficient	1	1	—	1
Sink: wastepipe untrapped or connected directly to drain	—	1	—	—
Sanitary accommodation: floors, walls, basins, etc., dirty or defective	3	—	—	3
Sanitary accommodation: lighting or ventilation not provided or insufficient	2	1	—	3
Sanitary accommodation: Screens, doors, fasteners, etc., defective or not provided	1	—	—	1
Sanitary conveniences within or communicating directly with a food room	1	1	—	—
Suitable and sufficient personal washing facilities not provided	7	1	—	7
Soap and clean towels not sufficient or not provided	5	1	—	5
Other defects	2	4	—	—
Yards: paving, walls, etc., defective	1	1	—	1
Equipment unsatisfactory, required repair or renewal	—	1	—	—
Fixtures and fittings in a state of disrepair	1	1	—	—
Failure to prevent risk of contamination of food	1	—	—	1
Totals	46	17*	4	35

*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 55

Type of Business	Public Health (Prevention of Contamination 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	12	3	7	6	28
Licensed Premises	23	5	14	5	47
Butchers	8	3	4	—	15
Fish and Chips	12	2	5	—	19
Bacon Curing, Bottling Stores and Chemists	2	—	2	—	4
Confectionery	19	7	10	—	36
Fish	7	1	2	—	10
Food Manufacturers	3	—	—	—	3
Fruit	8	—	6	—	14
Grocers	38	14	17	—	69
Provisions	1	—	1	—	2
Pastry	—	1	—	—	1
Mineral Water Factories	4	—	1	—	5
Wholesale Stores	1	1	2	—	4
Totals	138	37	71	11	257

Pests Control

Rodents

During the past year there was no change in the legislation affecting rodent control. The primary responsibility for taking 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, is still that of the occupier. "Land" includes any building, and other erection on land, and any cellar, sewer, drain or culvert in or under land. Under the Rats and Mice (Destruction) Act, 1919, 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 rodent control.

It is of the utmost importance in all cases of infestation to locate the source, otherwise the problem cannot be dealt with effectively. Rats and even mice, may be brought into premises in 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 policy has always been to concentrate on locating the source of the infestation, if at all possible, and taking action accordingly. The reasons for re-infestation of premises are frequently not understood by occupiers who in many cases does not like the idea of paying the cost of more than one treatment. It should be made clear that there can be no final guarantee that premises once treated will not become re-infested. A few words on the nature of the rat population may help to clarify this point. Rats need secluded places for breeding and defence, and by nature's standards they are shrewd, suspicious creatures, night prowlers, sleeping by day in nests which they construct from any available material—incidentally doing much damage to fabrics in warehouses and shops. They emerge at dusk to forage for food and water. Once they establish themselves in any spot, they tend to regard it as their permanent home, their numbers being limited only by the capacity of the place to supply their needs. They are cannibalistic, consequently the female seeks a safe place to have a litter. This is usually in some form of cul-de-sac, as for instance in cases of outward burrowings from buildings to places under public footways, from defective drains to under yard surfaces—always bearing in mind that food must be available. They are prolific breeders and have several breeding seasons during the year, this being dependent, to a large extent, on available food supply. Every kind of food, either in course of preparation, or in storage, or every-day use, is subject to attack by rats and, apart from that which is actually devoured, considerable quantities are otherwise ruined or contaminated. Were it not for the cannibalistic habits of the male, natural enemies, limitation of food supply and disease amongst the colonies, the rat population would reach fantastic figures.

The extermination of rats goes on. It may be impossible to effect a complete clearance, but it is possible to control them and reduce economic loss to a minimum. A systematic campaign must be carried on at all times by means of continuous survey and the community in this way convinced of the necessity of treating the rat as an enemy of man. In every case a thorough inspection of the premises, together with those adjoining, is made to obtain an idea of the infestation conditions prevailing in the entire block. This is necessary because rodents may be harbouring in one place and visiting others in search of food and water. In any case collective action is essential if the appropriate treatment is to be put on a comprehensive basis. Frequent visits are made to check the efficiency of work carried out at premises where infestation has been discovered and appropriate measures have been taken. In this way re-infestation can be promptly dealt with and occupiers advised of necessary proofing measures. Extermination measures are carried out continuously at the Corporation's Tipping Grounds, and the Gas Works, and at school meals kitchens when necessary. The costs are charged to the respective Departments.

Statistical Details:

Surveys of land and premises	18,971
Lands, premises, etc., found infested	687
Rat infestation:	
1. Food premises	65
2. Non-food premises	241
Mouse infestation:	
1. Food premises	168
2. Non-food premises	213
Premises treated by Pests Officers	403

Poison campaigns carried out by Pests Officers on request of the occupier who undertook to pay costs	391
1. For rats	211
2. For mice	180
School buildings and meals kitchens treated at the request of the Director of Education	21
Poison campaigns carried out in school buildings and meals kitchens (For rats—7; For mice—5)	12
Premises cleared of rats or mice by Pests Officers	325
Premises where the clearing process was not completed at the end of the year	78
Premises test baited	5,865
Premises wherein the occupier undertook to eliminate rats and mice on statutory or verbal notice under the Rats and Mice (Destruction) Act, 1919	284
1. Action taken by rat destruction firms	13
(a) For rats	8
(b) For mice	5
2. Action by occupiers	271
(a) For rats	80
(b) For mice	191
Premises having no evidence of rats and mice at time of surveying but with rat and mouse destruction firms on contract	109
Premises where rat-proofing and other work was done to prevent re-infestation	43
Statutory Notices served under the Rats and Mice (Destruction) Act, 1919	205
Summonses issued under the Rats and Mice (Destruction) Act, 1919	1
Premises where the drains were tested	477
Premises where drains were defective on test	199
Drains repaired	306
Drains re-laid	101
Number of Rat Destruction Campaigns carried out at Corporation Tipping Grounds	21

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 which is employed is similar to that of previous years as recommended by the Ministry of Agriculture, Fisheries and Food. This consists of poison baiting with either zinc phosphide or arsenious oxide, at all manholes in areas which have not been 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—Alliance Avenue, Cliftonville Road, Hughenden Avenue, Salisbury Avenue and Skegoneill Avenue.

SOUTH—Donegall Road, Olympia Drive, Capstone Street, Windsor Park, Botanic Gardens, Ormeau Park and River Lagan.

EAST—Station Street, Holywood Road, Earlswood Road, Sandown Road, North Road, Loop River and Ardenlee Avenue.

WEST—Woodvale Road, Woodvale Avenue, Forfar Street, Oakman Street and Falls Road.

This area is divided into 57 sewer areas involving the treatment of 4,900 manholes.

Rat destruction campaigns carried out in the sewerage system	..	213
Manholes treated in the sewer area	.. .. .	4,904
Pre baits laid	.. .. .	15,522
Pre baits taken by rats	.. .. .	9,460
Poison baits laid in manholes	.. .. .	4,710
Poison baits taken by rats	.. .. .	4,344

Mosquito Control

The annual routine work within the City boundary began on 8th April and continued until 12th October, 1957. The method of control consisted of the application of waste oil with D.D.T. added, by the Todd Insecticidal Fog Applicator, or, where this machine could not be used, by hand spraying.

Detailed information of the various areas which were visited is as follows:—

Duncrue Street Area. Slight mosquito breeding was found here, but frequent oil fogging was successful in keeping the area under control.

Shore Road and Greencastle. The ditches adjoining the Ulster Transport Authority's Railway from the rear of Downview Bungalows to Greencastle were treated. Little evidence of mosquito larvae was discovered.

Water Works, Antrim Road. Investigation of complaints revealed no evidence of mosquito breeding in the ponds and water-courses. The hedges and bushes at the upper pond near the Cavehill Road were treated with an insecticidal fog. After this was done, no further complaints were received.

Pond at Antrim Road. As a result of a complaint in 1956, the pond in the garden of No. 769 was oiled several times as a precautionary measure.

Bog Meadows. Moderate breeding existed in this area, but satisfactory control was maintained from several operational positions.

Musgrave Park and Stockman's Lane. The investigation of two complaints failed to reveal any mosquito larvae in the pond in Musgrave Park. An area adjoining the Blackstaff river, at the rear of Stockman's Lane, was treated as a routine measure as well as the Musgrave Park Pond.

The Lagan Valley Area (which includes Newforge, South of Deramore Park, Annadale Embankment, and Stranmillis Training College grounds). Mosquito larvae in small numbers were found in this area, but the larvicidal work was effective in curtailing the breeding. Nevertheless there persisted in the Newforge district the presence of a man-biting mosquito which was identified as *Theobaldia Annulata*, there being so many places, such as water containers in private gardens, where the mosquito could breed, that it would be extremely difficult to trace all the possible breeding spots. There is also the possibility that some of the mosquitoes may come from areas outside the City boundary.

Orangefield and Castlereagh Areas. Several applications of oil fog were made to the swampy ground at the rear of Sandhill Parade and between the Loop river and Orby Road as a routine measure.

Holywood Road and Tillysburn. Slight breeding of the salt marsh mosquito persisted in this area but was kept under control by oiling applications.

Garden plots at Annadale, Beechmount and Whiterock Road, Channing Street, Flora Street, Holywood, Malone Road, Monarch Street and Westland Road were visited several times and insecticide was, where necessary, applied to the water containers.

During the seasonal period, the following inspections were made, treatments carried out and materials used:—

Surveys of mosquito areas	157
Areas treated with larvicide	146
Mileage run by vehicle	511
Petrol used by vehicle and Tifa machine	108½ gallons
Waste transformer oil	1,040 "
Larvicide used	43 "
Paraffin oil used	34 "

Other Insect Pests

During the year complaints regarding various kinds of insects such as bugs, cockroaches, fleas, flies, spider beetles, steam flies and Pharaoh Ants, were investigated and complainants advised on the best methods 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 was intensified during the seasonal period. Circular letters were sent by the Medical Officer of Health to occupiers of all piggeries and stabling yards within the City Boundary directing their attention to the need for taking effective action to destroy flies. Over 4,000 letters were delivered to occupiers of all kinds of food premises, manufacturing, wholesale and retail centres appealing for co-operation in the extermination of the common house fly, and focussing attention on the manner by which flies may contaminate food. 759 visits were made to food premises and advice given on fly control and in many instances demonstrations were given of an aerosol spray especially suitable for use in most food shops. Special attention was given to the Corporation's Tipping Grounds. Effective control was maintained by the efforts of the Cleansing Section's staff. A fly control scheme was operated for houses wherein young children under one year resided. These homes were treated with an insecticide on complaint from the Health Visitor.

Rag merchants' premises were given, as usual, the monthly application of insecticide. Treatments were carried out and the cost charged to the respective occupiers. Corporation houses were, on request from the Estates Superintendent, disinfested of fleas and bugs and this usually occurred when there was a change of tenancy. During the year it was necessary to treat 27 houses for bugs and 12 for cockroaches. 31 treatments for steam flies were carried out in meal kitchens. One row of very old terrace dwellings which are scheduled for demolition were heavily infested with Pharaoh Ants. As the occupiers were unable to deal effectively with the problem and in the interests of public health, the premises were treated with insecticide (Gammexane).

Inspections of premises on complaint from Sanitary Officers, Health Visitors, Occupiers, etc.	2,269
Premises found to be infested	499
(a) Bugs	27
(b) Cockroaches and steam flies	43
(c) Fleas	258
(d) Flies	139
(e) Other insects	32
Premises treated with insecticide	497
Stables, cattle yards and piggeries treated	723
Rag stores treated	246
Aerosol spray demonstrations in food shops	759

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—3.

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	45
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Disinfection

The Disinfecting Station, situated at the Lagan Bank 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 and provided with male and female attendants. There are two high pressure steam disinfectors installed 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 Northern Ireland Tuberculosis Authority and 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	4,332
By Formalin	1,775

In addition:—

Articles destroyed on request	197
Library books withdrawn from circulation and destroyed	237
Library books disinfected	11
Persons bathed and disinfected at the station	100
Visits to premises where infectious disease occurred	1,277
Premises disinfected	897
Miles covered by vehicles in the disinfection of premises, bedding, etc.	4,249

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 82 verminous persons were deloused and 679 articles of clothing and bedding were disinfected at the Clinic.

The Table shows the number of persons treated at the Clinic for Scabies during six years 1952—1957.

TABLE B 56

Year	First Treatment	Subsequent Treatment	Total
1952	17	10	27
1953	36	24	60
1954	41	21	62
1955	66	80	146
1956	105	125	230
1957	100	66	166

Analysis of legal proceedings, 1957

TABLE B 57

Proceedings	Offences	Summonses	Orders	Fines
Belfast Corporation Acts, 1845 to 1948	Failed to provide ashbin	5	—	£1 0 0
	Failed to register premises as Butcher's shop	1	—	2 0 0
	Failed to give notice before repairing a drain	1	—	2 0 0
	Failed to register premises as a vendor of fried fish or fried potatoes	2	—	3 0 0
	Burned rubbish adjacent to dwelling Houses	1	—	1 0 0
	Failed to cleanse and/or repair drains	27	—	—
	Factories Acts (N.I.) 1938 and 1949	Failed to provide separate sanitary accommodation for both sexes	4	—	32 0 6
Merchandise Marks Acts, 1878 to 1953 and Orders made under the Act of 1926	Exposed for sale imported raw tomatoes not bearing an indication of origin	6	—	5 0 0
	Exposed for sale imported fresh apples not bearing an indication of origin	1	—	1 0 0
	Applied a false trade description to imported raw tomatoes	1	—	1 0 0

TABLE B 57 (continued)

Proceedings	Offences	Summonses	Orders	Fines	
Public Health (Ireland) Act 1878, and the Housing (Ireland) Act, 1920	Contravention of Bye-laws in respect of houses occupied by workers and let in lodgings or occupied by members of more than one family	132	—	133 3 4	
	Disobedience (continuing offences)	36	—	114 3 9	
Public Health (Ireland) Acts 1878 to 1946	Failed to abate public health nuisances	2,265	287	124 6 0	
	Disobedience of Magistrates' Orders to abate Public Health nuisances	78	—	158 6 6	
	Water closets not provided with sufficient water for flushing purposes	81	—	28 10 0	
	Sold or exposed for sale food unfit for the food of man which was seized and destroyed by order of resident Magistrate	21	—	75 10 0	
	Nuisance arising from the emission of black smoke	4	—	8 0 0	
	Failed to provide additional sanitary accommodation	2	—	9 0 0	
	Obstructed an authorised officer in the execution of his duties	2	—	2 0 0	
	Sold foods containing prohibited preservatives	26	—	100 0 0	
	Sold foods containing preservatives in excess of the amount allowed	12	—	58 0 0	
	Public Health (Preservatives, etc., in food) Regulations (Northern Ireland) 1927 to 1953	Food prepared and stored in a room communicating directly with a sanitary convenience	5	—	12 5 0
Food prepared or stored in a room where there was an outlet for ventilation of a drain		11	—	14 0 0	
Failed to finish with a hard, smooth and durable material, walls and ceilings in rooms where food was prepared for sale		9	—	24 19 0	
Failed to keep in proper repair walls, ceilings, floors, windows and doors in a room where food was prepared for sale		7	—	14 10 0	
Used a room as a living room or sleeping place in which food was prepared or stored for sale		16	—	12 15 0	
Failed to secure and maintain suitable and sufficient means of ventilation in rooms used as food rooms		6	—	9 1 0	
Failed to provide adequate washing facilities		11	—	12 19 0	
Failed to observe due cleanliness of rooms where food was deposited for sale		7	—	11 10 0	
Failed to secure cleanliness of apparatus, utensils, etc., used in the preparation of food for sale		2	—	6 0 0	
Failed to take all reasonable precautions to protect food deposited for sale against contamination by animals and dirt		9	—	14 15 0	
Failed to observe due cleanliness of person and clothing while engaged in the preparation of food for sale		3	—	6 5 0	
Failed to secure the cleanliness of vehicle used in the conveyance of food for sale		2	—	1 0 0	
Rats and Mice (Destruction) Act 1919		Failed to take necessary steps to destroy rats on premises	1	—	1 0 0
		Adulteration of foodstuffs	21	—	53 15 0
Sale of Food and Drugs Acts 1875 to 1899		Adulteration of foodstuffs	12	—	22 10 0
	Obstructed an authorised officer in the execution of his duties under the Acts of 1937 and 1950	1	—	4 0 0	

During the year two District Sanitary Officers resigned to take up duty with other Health Authorities, and one District Sanitary Officer, appointed in 1956, took up duty with the Belfast Health Authority. Four Sanitary Officers were successful in qualifying as Inspectors in Meat and other Foods. The examination was held in Belfast in June, 1957, by the Royal Society of Health, London. The number of pupil Sanitary Officers engaged in practical training in the Department as at 31st December, 1957, was 14. Three Pupils are in their final year, and it is hoped that they will be successful in Qualifying as Sanitary Officers during 1958. With the number of Pupils in training the staffing problem should be overcome in the course of time. The present establishment of Sanitary Officers in Belfast is 61: there are 11 vacancies.

In addition to the above there are 14 unqualified personnel employed as assistants in the various sections of the Department.

My comments would not be complete without an acknowledgement of the enthusiastic support of the Medical Officer of Health and all members of the Sanitary and Clerical staffs, to whom I again convey my grateful thanks.

JOSEPH WALKER, M.A.P.H.I.,
Chief Sanitary Officer

RAINFALL IN INCHES

TABLE B 58

Month	1950	1951	1952	1953	1954	1955	1956	1957
January ..	2.27	3.60	4.73	1.78	3.05	3.05	4.19	4.85
February ..	4.27	3.52	1.04	1.61	4.57	3.87	1.31	2.52
March ..	1.83	3.16	1.61	0.41	4.96	1.27	1.77	3.78
April ..	5.35	2.08	1.77	2.09	0.75	3.03	1.50	2.04
May ..	1.76	2.94	1.25	2.49	4.03	3.15	1.85	2.95
June ..	2.52	2.32	3.19	1.53	3.05	5.26	3.27	1.20
July ..	6.08	4.99	2.19	6.39	4.17	1.64	3.77	4.39
August ..	6.07	5.61	6.16	3.30	2.87	1.18	6.69	3.93
September ..	7.97	3.10	2.26	2.67	5.15	4.79	4.19	5.93
October ..	3.24	1.36	4.39	2.17	7.08	2.83	3.15	4.55
November ..	3.11	8.11	3.42	4.23	7.27	3.31	2.12	2.10
December ..	3.53	5.75	5.05	3.62	6.66	6.69	6.10	5.53
	48.00	46.54	37.06	32.29	53.61	40.07	39.91	43.77

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 1957

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 ..	536	45	20	6,467	139	14,064	18	83
February ..	412	36	53	4,932	172	8,898	25	134
March ..	367	37	83	4,407	216	7,705	15	144
April ..	517	47	71	4,610	119	11,225	43	74
May ..	457	36	34	5,176	46	13,602	22	95
June ..	232	36	6	4,135	30	12,679	21	131
July ..	274	18	3	5,081	44	18,344	11	389
August ..	271	87	8	4,783	33	19,228	15	121
September ..	160	28	12	6,294	53	19,917	13	114
October ..	223	65	6	6,216	117	17,384	42	123
November ..	198	37	2	5,555	46	15,875	11	156
December ..	282	17	8	5,087	40	14,358	13	262
	3,929	489	306	62,743	1,055	173,279	249	1,826

TOTAL OF ANIMALS SLAUGHTERED—243,876

Compared with 1956, cattle show an increase of 4,508, calves a decrease of 908, sheep and lambs an increase of 18,357, goats a decrease of 2 and pigs a decrease of 2,440.

Carcases condemned from all causes in 1957, compared with 1956.

TABLE C 2

Description	1956	1957
Cows	195	134
Heifers	35	33
Bulls	3	2
Bullocks	79	74
Calves	95	53
Sheep and Lambs	488	434
Goats	22	9
Pigs	100	58
	1,017	797

The percentage of carcases condemned from all causes at the Public Abattoir during the year 1957 was 0.32.

Diseased conditions which involved seizure and total destruction of carcasses in 1957.

TABLE C 3

	CATTLE					Sheep	Goats	Pigs	Total
	Cows	Heifers	Bulls	Bullocks	Calves				
Abscesses	—	—	—	—	—	2	1	7	10
Anaemia	1	—	—	—	—	2	—	1	4
Cysticercus Bovis ..	—	1	—	1	—	—	—	—	2
Decomposed	—	—	—	—	2	13	3	2	20
Dropsical	3	—	—	2	7	262	3	2	279
Fevered	7	5	—	7	3	55	—	9	86
Gangrene	1	1	—	—	—	4	—	—	6
Injured	6	1	—	1	1	22	1	2	34
Immature	—	—	—	—	22	—	—	—	22
Jaundice	—	—	—	—	—	1	—	1	2
Joint Ill	—	—	—	—	9	—	—	—	9
Lymphadenitis	—	—	—	—	—	1	—	—	1
Neoplasms	4	—	—	—	—	4	—	—	8
Oedema	4	—	—	—	2	6	—	5	17
Pyæmia	2	—	—	1	—	4	—	5	12
Red Water	—	—	—	1	—	—	—	—	1
Salmonellosis	—	—	—	1	—	—	—	—	1
Septicaemia	—	3	—	3	2	11	1	10	30
Septic Mastitis	12	—	—	—	—	3	—	—	15
Septic Metritis	1	—	—	—	—	4	—	1	6
Septic Pericarditis ..	2	2	1	1	—	—	—	—	6
Septic Peritonitis ..	—	—	—	1	—	1	—	4	6
Septic Pleurisy	1	—	—	—	2	8	—	—	11
Septic Pneumonia	1	—	—	—	2	27	—	5	35
Toxaemia	2	1	—	2	—	4	—	1	10
Tuberculosis	87	19	1	53	1	—	—	3	164
Total	134	33	2	74	53	434	9	58	797

In addition to the above there were 6 tons 7 cwt. 3 qrs. 14 lbs. of injured beef; 10 tons 13 cwt. 3 qrs. 18 lbs. beef for other causes (tuberculosis, etc.); 3 tons 11 cwt. 2 qrs. 13 lbs. mutton; and 2 tons 13 cwt. 1 qr. 23 lbs. of pork seized as being unsound and unfit for human food.

Comparison between (a) Tuberculosis and (b) other diseases as causes of condemnation.

TABLE C 4

(a) Tuberculosis

	CATTLE			Sheep & Lambs	Goats	Pigs	Total
	Cows	Other Cattle	Calves				
Total Seizure	87	73	1	—	—	3	164
Partial Seizure	89	240	—	—	—	17	346
Total & Partial	176	313	1	—	—	20	510

(b) Other Diseased Conditions

	CATTLE			Sheep & Lambs	Goats	Pigs	Total
	Cows	Other Cattle	Calves				
Total Seizure	47	36	52	434	9	55	633
Partial Seizure	354	637	13	1,282	—	427	2,713
Total & Partial	401	673	65	1,716	9	482	3,346

It will be seen from the above table that tuberculosis in cattle is a most fruitful source of total seizure, accounting for about 66 per cent of the seizures, as compared with other diseased conditions.

Percentage by age periods of carcasses condemned because of Tuberculosis in 1957.

TABLE C 5

	AGE							
	From one month to one year	Per Cent	From one to three years	Per Cent	From three to six years	Per Cent	Over six years	Per Cent
Cows	—	—	—	—	3	3.44	84	96.55
Heifers	—	—	14	73.68	5	26.31	—	—
Bulls	—	—	—	—	—	—	1	100.00
Bullocks	—	—	9	16.98	42	79.24	2	3.77
Calves	1	100.00	—	—	—	—	—	—
Pigs	3	100.00	—	—	—	—	—	—

Percentage by condition of carcasses condemned because of Tuberculosis in 1957.

TABLE C 6

	BY CONDITION							
	Good		Fair		Indifferent		Poor	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Cows	1	1.14	56	64.36	23	26.43	7	8.04
Heifers	2	10.52	16	84.21	1	5.26	—	—
Bulls	—	—	—	—	1	100.00	—	—
Bullocks	3	5.66	48	90.56	2	3.77	—	—
Calves	—	—	1	100.00	—	—	—	—
Pigs	—	—	3	100.00	—	—	—	—

Diseased organs seized and destroyed in 1957 compared with 1956.

TABLE C 7

	1956	1957	Increase	Decrease
Beef:				
Heads	1,600	1,807	207	—
Tongues	1,511	1,708	197	—
Hearts	468	514	46	—
Lungs	2,311	2,344	33	—
Livers	18,516	19,848	1,332	—
Stomachs	489	485	—	4
Udders	1,499	1,015	—	484
Mesenteries	465	466	1	—
Omentum	456	476	20	—
Diaphragm	23	58	35	—
Kidneys	114	178	64	—
Mutton:				
Hearts	65	84	19	—
Lungs	224	309	85	—
Livers	11,874	10,802	—	1,072
Kidneys	28	22	—	6
Pork:				
Heads	94	29	—	65
Tongues	94	29	—	65
Hearts	40	25	—	15
Lungs	297	164	—	133
Livers	245	123	—	122
Kidneys	10	6	—	4
Goats:				
Livers	3	8	5	—

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

Percentage incidence of generalised Tuberculosis in animals slaughtered in 1957 compared with 1956.

TABLE C 8

	1956	1957
Cows	1.45	2.21
Other Cattle	0.14	0.11
Cattle (all classes)	0.49	0.23
Calves	—	0.09
Pigs	0.11	0.16

Amount of Beef, Mutton, Pork, etc., presented for examination.

TABLE C 9

BEEF	2,623 sides, 1,566 quarters, and 53 cuts examined; 9 cwt., 1 qr., 22 lbs. seized and destroyed.
MUTTON	2,865 carcasses and 36 cuts examined; 3 carcasses, 2 qr., 8 lbs. seized and destroyed.
VEAL	1 carcass examined; 1 carcass seized
PORK	644 carcasses examined; 56 carcasses and 6 cwt., 3 qrs., 20 lbs. seized and destroyed.
FOWL	75 examined; 75 seized.
TINNED MEATS	266 Examined; 266 seized.
FISH	1 ton 13 cwts. cod, plaice, etc., seized or surrendered

CYSTICERCUS BOVIS

During the year cysticercus bovis infections were shown to be present to the extent of 1.21 of all bovines slaughtered at the Abattoir: compared with the previous year 1956 this shows an increase of 0.1.

During the year there were two instances 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".

SERVICES RENDERED TO OTHER DEPARTMENTS

During the year a general supervision of health of the animals of several Committees of the Corporation was exercised. Fortunately most of the work during the year was in the nature of preventive veterinary medicine.

There are no private Slaughter Houses in the City: all animals to be slaughtered in Belfast for human consumption must be brought to the Public Abattoir, situated in Stewart Street adjacent to the Cattle Market and Cattle Yards.

The Slaughter of Animals Act (Northern Ireland), 1932, makes it compulsory for all animals slaughtered for human food to be stunned by means of a mechanically-operated instrument and rendered insensible to pain until death supervenes.

The abattoir is designed so that the slaughter of cattle, sheep, and pigs is carried out in three different departments. The lairages for the different animals are quite convenient to the killing booths, yet the animals cannot see their fellows being slaughtered. The cooling halls are situated quite close to the slaughter halls and all carcasses can be easily conveyed there by means of an overhead rail system.

The cattle slaughter halls are a combination of the open halls and booth system. An extensive cold storage plant is attached to the Abattoir, and during the summer months this is utilised to a great extent by the trade.

According to the By-laws, all persons employed in the slaughtering and dressing of animals must be licensed and during the year 115 such licences were issued.

All the larger animals at the Abattoir are stunned by means of a Cash Captive Bolt Gun prior to bleeding and in the case of smaller animals an electrical apparatus known as an Electrolethaler is used.

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, 1957**

Notification of Births Act.

The total number of births notified as occurring in the area during the year was 11,066, and in addition 1 was discovered by a Health Visitor and 2 by Registrar making a total of 11,069. Of these 5,684 were males, 5,385 were females, 314 were still-births.

TABLE D 1

Births Occurring in		
Hospitals		7,093
Private Nursing Homes		431
Other Institutions		121
Home		3,035
Home (Hosp. Dist. Cases)		389
Total		11,069

Infant Mortality

During the year, 275 children died under the age of 12 months giving an infant mortality rate of 32. The rate for the previous year was 29.

The increase in the rate was due largely to an increase in the number of deaths from prematurity, 91 against 53 for the previous year. The majority of these premature infants died during the first 24 hours following birth.

Neonatal and Perinatal Mortality

Deaths occurring during the first month of life numbered 186 giving a neonatal rate for the year of 22. The rate for the previous year was 18. There was a reduction however in the number of infants stillborn, the stillbirth rate falling from 30 to 26, so that a higher percentage of children were born alive but did not survive the first month. The perinatal rate i.e. stillbirths and deaths during the first week per 1,000 total births (live and still) was only slightly raised, 45 against 44 for the previous year.

Maternal Mortality

The number of women who died from pregnancy, childbirth and the puerperal state during the year was 8, giving a maternal mortality rate of 0.95 per 1,000 live births. The rate for the previous year was 0.73. Table D13 shows the Maternal Mortality per 1,000 live births analysed according to the cause of death.

Health Visiting

48 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 visitor's time. Certain cases are assisted with their diet.

Regular liaison visits are made once or twice weekly to hospitals by certain members of the staff, the information exchanged being most helpful.

Advice regarding the prevention of home accidents is also a normal part of the health visitor's work.

The Health Visitors continue to 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 certain members gave lectures in connection with training courses for girl students.

Visits paid during the year were as follows:—

- (1) To expectant mothers: First visits, 1,137; Re-visits, 1,403; Total, 2,540.
- (2) To children under one year of age: First visits, 8,214; Re-visits, 47,943; Total, 56,157.
- (3) To children between 1 and 5 years: 63,252.

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 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 Gas and Air 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
Spier's Place, Shankill Road (Monday)	14	160
Grovefield School, Mount Street	125	985
Mersey Street, Church Hall	94	776
Mountcollyer Street	58	397
Spier's Place, Shankill Road (Wednesday)	82	430
Ariel Street	51	386
Hawthorne Street (R. M. Hosp.)	110	874
	534	4,008

1,413 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)	..	..	..	..	2,050	1,115
York Street	"	..	..	..	..	1,915	727
Ariel Street	"	..	..	..	..	2,439	520
Bloomfield	"	..	..	..	..	4,292	1,443
Stranmillis	"	..	..	..	..	2,824	1,227
Donegall Road	"	..	..	..	..	3,496	1,124
Glenard	(Tuesday)	..	..	..	..	3,063	1,160
Havelock Place	"	..	..	..	..	3,126	1,224
Mersey Street	"	..	..	..	..	3,448	986
Donegall Road	"	..	..	..	..	2,934	569
Bread Street	"	..	..	..	..	2,503	984
Woodstock	"	..	..	..	..	3,425	857
Ariel Street	"	..	..	..	..	2,647	1,198
Avoca Street	(Wednesday)	..	..	..	..	1,630	399
Bread Street	"	..	..	..	..	2,707	1,213
Ligoniel	"	..	..	..	..	1,783	478
Seaview	"	..	..	..	..	3,484	1,118
Windsor	"	..	..	..	..	2,306	767
Woodstock	"	..	..	..	..	2,937	928
Palmerston Road	"	..	..	..	..	1,749	1,168
Avoca Street	(Thursday)	..	..	..	..	3,520	1,076
Kimberley Street	"	..	..	..	..	3,501	1,297
Greencastle	"	..	..	..	..	2,754	1,507
Mountcollyer	"	..	..	..	..	2,953	892
Spier's Place	"	..	..	..	..	2,800	740
Bread Street	"	..	..	..	..	2,296	991
Susan Street	"	..	..	..	..	4,447	1,973
Woodstock	"	..	..	..	..	4,008	1,088
Malone	(Friday)	..	..	..	..	1,545	1,583
Ariel Street	"	..	..	..	..	3,516	548
Bread Street	"	..	..	..	..	2,540	1,134
Joanmount	"	..	..	..	..	2,131	563
Spier's Place	"	..	..	..	..	2,337	531
Sydenham	"	..	..	..	..	4,015	1,709
Woodstock	"	..	..	..	..	2,152	793
Ballymurphy	"	..	..	..	..	1,882	1,504
Total Attendances						101,155	37,134

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	8-10 months
(b) Thorndale	3	4	2	1	25	16	6 weeks	12 weeks

The total number of City cases admitted during the year was 28.

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).	Both	19	31	45	23	49

170 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	—	—	—	—	—	—	1	48
Number of cases visited by Officers of the Local Authority	—	—	—	—	—	—	1	34
Number of cases—Home Nursing Provided	—	—	—	—	—	—	—	1
Number of cases removed to hospitals	—	—	—	—	—	—	1	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 ..	56	20	107	12	195

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

(i) For domiciliary cases	5
(ii) For cases in Institutions other than Hospitals	2
Total	7

Domiciliary Midwives

17 Midwives were employed on a salaried and 39 on a fee-per-case basis. There is still difficulty in recruiting suitable midwives for employment on a whole-time salaried basis and the bulk of the work continues to be done by the older part-time midwives. During the year hostel accommodation was made available in the District Nurses Home, Springfield Road, and three midwives are resident there. Accommodation for a number of midwives has also been provided in a hostel in Templemore Avenue, and if sufficient staff can be recruited for this hostel it should be able to deal with a large amount of the midwifery in East Belfast.

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 3,231 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 thus 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	3,354
Number of women confined at home who were examined ante-natally	3,277
Total number of ante-natal examinations made of women confined at home	25,398
Number of women referred to institutions for confinement who were examined ante-natally	410
Total number of ante-natal examinations made of women confined in institutions	2,458
Total number of final pelvic examinations made of women confined at home	3,048
Total number of final pelvic examinations made of women confined in institutions	121
Number of cases of abortion attended	589
Number of anaesthetics given by second practitioner	82

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	15	49	60	109

Action during 1957:

Number of applications for registration refused	—
Number of exemptions granted	—
Number of exemptions withdrawn	—
Number of registrations cancelled	3
Number of appeals by aggrieved persons to a Court of Summary Jurisdiction	—
Number of cases in which fines were imposed	—
Number of inspections	195
Number of registered homes not inspected	—

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

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.

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

	1948		1949		1950		1951		1952		1953		1954		1955		1956		1957	
	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 ..	118	12.11	126	13.72	107	12.11	102	11.61	108	12.69	84	9.85	74	8.91	78	9.62	53	6.45	91	10.8
Diarrhoea and Enteritis	61	6.26	101	11.00	37	4.19	45	5.12	57	6.70	65	7.62	24	2.89	29	3.58	8	0.97	10	1.2
Pneumonia, Broncho-Pneumonia and Bronchitis ..	80	8.21	88	9.58	88	9.96	52	5.91	40	4.70	56	6.57	49	5.90	35	4.32	28	3.41	26	3.1

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 ..	—	—	—	—	—	—	—	—	—
Scarlet Fever and Streptococcal sore throat ..	—	—	—	—	—	—	—	—	—
Typhoid ..	—	—	—	—	—	—	—	—	—
Diphtheria ..	—	—	—	—	—	—	—	—	—
Whooping Cough ..	—	—	—	—	1	—	1	1	0.12
Meningococcal Infections ..	—	—	—	—	—	—	—	—	—
Other Disease of Heart ..	—	—	—	—	—	—	—	—	—
Measles ..	—	—	—	—	—	—	—	—	—
Other Infectious and Parasitic Diseases	—	—	—	—	2	1	3	3	0.35
Benign and Unspecified Neoplasms ..	—	—	—	—	—	—	—	—	—
Non-meningococcal Meningitis ..	—	1	1	0.12	—	—	—	1	0.12
Influenza ..	—	—	—	—	1	1	2	2	0.23
Pneumonia ..	—	—	—	—	13	10	23	23	2.72
Bronchitis ..	—	—	—	—	1	2	3	3	0.35
Intestinal Obstruction and Hernia ..	—	—	—	—	2	2	4	4	0.47
Gastritis, Duodenitis, Enteritis and Colitis, except Diarrhoea of the new born ..	—	—	—	—	4	6	10	10	1.2
Cirrhosis of Liver ..	—	—	—	—	—	—	—	—	—
Nephritis and Nephrosis ..	—	—	—	—	—	—	—	—	—
Congenital Malformations ..	15	17	32	3.66	14	14	28	60	7.1
Birth Injury, Post-natal Asphyxia and Atelectasis	—	—	—	—	—	—	—	—	—
(a) with prematurity ..	20	14	34	4.02	—	—	—	34	4.02
(b) without prematurity ..	24	8	32	3.66	—	—	—	32	3.66
Infections of New-Born	—	—	—	—	—	—	—	—	—
(a) with prematurity ..	3	3	6	0.7	—	—	—	6	0.7
(b) without prematurity ..	7	7	14	1.6	—	—	—	14	1.6
Other Diseases peculiar to Early Infancy	—	—	—	—	—	—	—	—	—
(a) with prematurity ..	20	31	51	6.03	—	—	—	51	6.03
(b) without prematurity ..	5	3	8	0.94	1	2	3	11	1.3
All other Causes ..	1	2	3	0.35	4	4	8	11	1.3
Accidents ..	1	3	4	0.47	—	4	4	8	0.94
Unknown Causes ..	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 ..	43	40	14	10	10	15	8	140	4
Females ..	49	27	13	6	10	19	11	135	7
Total ..	92	67	27	16	20	34	19	275	11

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

TABLE D 13

Cause of Death	No. of Deaths	Rate per 1,000 live births
Toxaemia of Pregnancy	4	0.47
Etopic Pregnancy	1	0.12
Puerperal Pulmonary Embolism	1	0.12
Delivery complicated by other Post-partum haemorrhage	1	0.12
Cerebral Haemorrhage in the Puerperium	1	0.12

Infant Mortality Rate, 1937—1956

TABLE D 14

YEAR	Deaths per 1,000 Births	YEAR	Deaths per 1,000 Births
1938	96	1948	45
1939	85	1949	56
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

Home Nursing Service

The Home Nursing Staff consists of 1 Superintendent, 2 Assistant Superintendents, 1 Senior Nurse, 43 Queens Nurses and 7 trainee staff.

There were 17 nurses in training during the year. 11 were Staff candidates and 6 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 in June.

The First Assistant Superintendent attended a course on "Body Dynamics."

The Second Assistant Superintendent attended a Refresher Course at Guildford.

6 Home Nurses attended a Refresher Course arranged by the Royal College of Nursing in November.

The demand for the services of the District Nurse for nursing attention to patients in their own homes continues to increase. The total number of visits paid during the year was 212,599, in comparison with 203,904 in 1956.

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, 1957

TABLE D 15

A.	Number of Cases:—				
	(i)	Brought forward from 1956	.. .. .	1,155
	(ii)	New cases taken on during 1957	.. .. .	5,474
		(Analysis of new cases:—			
		Tuberculosis ..	199		
		Cancer ..	287		
		Diabetes ..	138		
		Gynaecological ..	20		
		Pneumonia ..	104		
		Surgical ..	602		
		General Medical ..	4,124)		
	(iii)	Removed during 1956	.. .. .	5,436
		(Cause of removal:—			
		Convalescent ..	3,415		
		Died ..	664		
		To Hospital ..	863		
		Other Causes ..	494)		
		Remaining on books at end of 1957	.. .. .	1,215
<hr/>					
B.	Analysis of Visits made to all cases in 1957:—				
		Tuberculosis ..	11,054		
		Cancer ..	15,374		
		Diabetes ..	44,124		
		Gynaecological ..	609		
		Pneumonia ..	874		
		Surgical ..	22,234		
		General Medical ..	118,330		
		Total Visits ..	212,599		

REPORT OF THE SENIOR MEDICAL OFFICER, SCHOOL HEALTH DIVISION, FOR THE YEAR 1957

In 1957 the principal changes in the work of the School Health Service were caused by the coming into operation on 1st January of the Education (Amendment) Act (N.I.) 1956.

Belfast Grant-Aided Schools

Table E 1 shows the grant-aided schools in the City, and the number of pupils attending them; once again there has been a slight rise in the school population. Compared with 1956 the table shows one more nursery school which was opened at Brefne, one of the Welfare Committee's Homes. There are seven fewer county primary schools, eleven having been closed and four new ones opened; the county secondary schools have increased to 17 with the opening of Ballygomartin Boys' and Orange-field Boys' schools and the conversion of Everton to a Secondary school. Two new Roman Catholic secondary schools were opened during the year, St. Thomas' Boys' and St. Louise's Girls'. Strathearn school which hitherto had operated its own scheme of medical and dental inspections under Section 42 (6) of the Education Act (N.I.) 1947, began to participate in the School Health Service.

A new special school for spastics, The Fleming Fulton School, was opened in 1957 and the two hospital schools at the Dufferin and Ava and the Ulster Hospitals are now listed, bringing the number of grant-aided special schools in the City to 8.

School Medical Inspections

Again this year the number of examinations shown in Table E 2 is somewhat higher than the previous year. The number of routine examinations done was 417 more than in 1956 and the re-examinations rose by 357. Again Group II, the 8 to 9 year olds, was omitted. This continues the present day trend to concentrate on children known to be defective at the expense of routine examinations.

In Great Britain some advocate the virtual abandonment of routine medical examinations as practised at present in favour of a very thorough examination for entrants, after which the child would receive attention only if he evidently needed it. Sight and hearing would be tested at regular intervals, but for other defects the teacher and school nurse would be relied upon to report trouble to the doctor. The English Ministry of Education has recently indicated its willingness to approve schemes by Local Authorities to experiment with departures from the time-honoured practice. Although we are not fully convinced that the routine inspection has outlived its usefulness, similar approval to experiment would be welcomed in Belfast. As Table E 11 shows, routine inspections in 1957 revealed a formidable list of items, over 5,000 in all, requiring attention not already being given; sight and hearing defects account for nearly half of these, and it is possible that the remainder might be detected by a less formal approach.

Attendance of parents at medical inspections remains disappointingly low, as seen in Table E 4.

Nutrition

Compared with the previous year the examining medical officers' assessment of the children's nutritional state shows a decided improvement (Table E 6). It is now rare to find a seriously undernourished child; only 46 were found at this year's routine inspections compared with 121 in 1956. The number of moderately undernourished children is also substantially less.

These findings are supported by the average heights and weights of the pupils examined (Table E 3), which have shown a small but steady increase at all ages over the past ten years.

Defects discovered at Routine Medical Inspections

Table E 7 shows the numbers of defects found at routine inspections in 1957. Comparison with 1956 shows for most defects a fall in the numbers found. The rate per thousand children examined has declined slightly for defects of eye, ear, nose and throat, and of heart and circulation. Enlarged cervical glands continue to become rarer; for the past three years the numbers per thousand children needing treatment and observation respectively were; 1955, 6.3 and 15.1; 1956, 1.3 and 9.8; 1957, 1.1 and 5.3. "Other defects" also show a marked decline compared with the year before. The most outstanding improvement, however, is the decline in defects of lungs from 13.2 per thousand needing treatment and 31.9 needing observation in 1956, to 11.5 and 18.9 in 1957.

Visual Acuity

In Table E 7 is shown the numbers of children found to need treatment or observation for defects of vision, and Table E 8 shows the distribution of visual acuities in the children examined. The number of children whose visual acuity could not be accurately assessed has again been reduced this year to 404 at primary schools and none at secondary schools; last year's figures were 521 and 16.

Table E 9 shows the results of colour vision testing of school leavers. The incidence of defective-unsafe colour vision, 4.0% in boys and 0.4% in girls, is about the usual level reported from other parts of the world, and similar to our findings in 1956 of 4.3% and 0.2%.

Tuberculin Tests

Table E 10 shows the results of tuberculin tests on school children at Routine Medical Inspections in 1957. The percentage of positive reactors found is 16.6%; this compares with 11.4% for 1956, the difference being due to our having ceased routine testing of entrants, most of whom are found to be negative.

The steadily increasing percentage of positive reactors with each year of age is again evident this year.

Handicapped Pupils

Table E 14 sets out the numbers of boys and girls in the various categories of educational handicaps. The coming into effect on 1st August of the Handicapped Pupils and Special Schools Regulations (N.I.), 1957 has removed anomalies from the legislation, and made the classification of these children easier; the handicaps appearing in Tables E 14 and E 15 conform with the definitions given in this latest version of the Regulations. Again this year we have several hundreds of children on the borderline for inclusion in one category or another of handicapped pupils; these children are kept under observation by the school medical officers until they leave school or are cured. Some of them will deteriorate so as to require special educational treatment and will then come within the scope of the Regulations.

In practically all categories of handicap the numbers show an increase compared with last year. This is partly due to the rise in the school population, partly to the revised definitions in the new Regulations, and partly to improved ascertainment. We are paying a great deal of attention to the handicapped to-day, and facilities for dealing with them are being improved. It is unfortunately true, however, that improvements in medical skill result at least initially in an increased number of handicapped children rather than a reduction. Many children can now be kept alive in a defective condition who in earlier days would have died. This may be illustrated by tuberculous meningitis which until about twelve years ago was invariably fatal; a range of new drugs, beginning with streptomycin, has greatly reduced this 100% mortality, but many survive at the expense of defects of mind or body. The premature infant can now be kept alive by treatment which included the use of oxygen; this oxygen may damage the eyes of the infant, and yet without it he will certainly die. We have in Belfast several children blinded from this cause before medicine acquired the skill to keep premature infants alive without sacrificing their vision. We cannot, therefore, look forward to a reduction in the numbers of handicapped pupils in the near future, and increasingly elaborate special arrangements for their education and rehabilitation will be necessary.

Multiple Handicaps

Table E 15 lists handicaps rather than pupils. This is necessary because of the frequency with which more than one handicap is present in the same child; if an attempt is made to include each child once only the compiler of a table such as E 15 is faced with an impossible choice when presented, for example, with a child who is blind and deaf. The 3,270 handicaps listed are distributed amongst 2,961 pupils, of whom 269 have more than one handicap, each of which if it existed alone would qualify the child for inclusion as a handicapped pupil.

These children with multiple handicaps present problems of the greatest difficulty. The severity of each handicap is difficult to assess because of the presence of the other; the children are very hard to place in school, and their teachers have an unenviable task. A special school exists at Conover Hall in England to treat blind children with additional handicaps, and we have placed several Belfast children there; for the most part, however, our special schools are reconciled to accepting children with one or more handicaps in addition to the one they profess to treat.

Table E 15 sets out the relationships between the multiple handicaps in the 269 children affected; like E 14 this table shows handicaps and not pupils. Thus 232 children have two handicaps and appear once in the table, while 34 children have three handicaps and appear three times in the table; for example a partially sighted epileptic with defective speech is shown as Partially Sighted + Epileptic, Epileptic + Speech Defect, and Speech Defect + Partially Sighted. Similarly three children have four handicaps and appear six times each. The figures on the lowest diagonal of the table indicate the total number of occasions when a given handicap occurs in association with another.

Fleming Fulton School

In March 1957 the Education Committee opened The Fleming Fulton Special School for spastic children, in the premises previously occupied by Taughmonagh Primary School. The special school opened with 25 pupils, and the number was raised to 40 in November by the transfer of a complete class of spastics with their teacher and housemother from Malcolm Sinclair House, the voluntary school run by the Northern Ireland Council for Orthopaedic Development. Now that there are two schools for spastics the intention is that Malcolm Sinclair House will be a nursery school dealing with children under five years old who will be transferred to Fleming Fulton School on reaching compulsory school age.

The two schools offer a combination of educational and medical treatment for the spastic child with the object of overcoming his handicap or at least minimising it. The schools are furnished with special equipment; each child receives daily physiotherapy and occupational therapy appropriate to his disability, and he receives speech therapy also if necessary. For this purpose the school curriculum is designed so that each child may leave his class for therapy on a rota system. The staff also includes a number of housemothers who assist the teachers and deal with the many toilet, feeding and other problems which are presented by disabled children. A resident married couple at Fleming Fulton School act as caretakers; they keep the premises in good order and assist with feeding and lifting the children, and the man is able to modify furniture or equipment and construct appliances to meet the special needs of individual cases. The physiotherapists, occupational therapists and speech therapists work in both schools, achieving continuity of treatment, and ensuring that the children when they move from one school to the other are not in the hands of strangers. Provision of therapy at the Fleming Fulton School is the responsibility of the Health Committee.

School Medical Officers visit the schools each week, as does a Consultant provided by the Hospitals Authority who examines the children regularly and decides on the treatment required in consultation with the staff of the school.

The results already achieved with these children are good and plans for greatly extending the present facilities are under consideration. The present arrangement is an encouraging example of co-operation between the Health and Education Committees, the Hospitals Authority and a voluntary body, the Orthopaedic Council.

The Fleming Fulton school is named after the previous Senior Medical Officer for Schools, Dr. T. F. S. Fulton in recognition of his long and devoted work in creating and developing the School Health Service in Belfast between 1923 and 1953. Dr. Fulton continues to serve as a member of the management committee of the new school.

Cleanliness Inspection

After showing a welcome fall in 1955 and 1956, the percentage of children found to be infested with vermin has risen slightly this year. Of 174,464 examinations of children's heads by health visitors, 5.0% showed infestation with nits and another 1.6% with nits and vermin. The school clinics cleansed 4,679 heads during the year.

Tables E 1 to E 17 and the report of the Chief Dental Officer which follows them summarise the work of the School Health Service for the year 1957.

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		9	343
Primary†	County Primary Schools	74	31,618
	Voluntary Primary Schools under School Committees	3	585
	Voluntary Primary Schools under Lay Manager	1	132
	Voluntary Primary Schools under Roman Catholic Management	63	21,274
	Special Schools	8	951
Secondary‡	County Secondary Schools	17	11,554
	Voluntary Secondary Schools †(Participating)	17	9,410
	Voluntary Secondary Schools †(Non-participating)‡†	3	2,075

† 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							Specials	Re-examinations	Totals
		Age Groups						Totals			
		Nursery	Entrants	II	III	IV	V				
Primary Schools	Boys	217	3,303	—	3,157	1,395	—	8,072	317	5,102	13,419
	Girls	180	2,872	—	2,876	1,647	—	7,575	268	4,864	12,707
Secondary Schools	Boys	—	120	—	223	1,821	524	2,688	14	1,219	3,921
	Girls	—	139	—	185	1,417	399	2,140	36	1,319	3,495
Totals	Both	397	6,434	—	6,441	6,280	923	20,475	635	12,504	33,614

Average Heights and Weights

TABLE E 3

Boys						
Age	Number Examined		Average Weight Pounds		Average Height Inches	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
4	154	21	40.7	43.8	41.8	43.5
5	1,933	77	42.8	47.1	43.4	45.6
6	1,029	23	45.2	52.0	44.8	47.7
7	151	—	49.5	—	46.8	—
8	35	—	54.0	—	49.2	—
9	594	65	66.6	71.6	53.0	54.2
10	1,771	150	70.2	75.8	54.2	56.0
11	894	22	74.4	85.4	55.3	57.0
12	685	210	82.0	91.8	57.6	59.5
13	516	1,245	87.2	96.0	58.8	60.7
14	91	387	93.9	103.3	60.5	62.3
15	1	188	94.2	128.9	62.0	67.0
16	1	236	98.6	137.2	64.3	68.1
17	—	59	—	141.8	—	68.6
18	—	5	—	141.9	—	68.9
19	—	—	—	—	—	—

Girls						
Age	Number Examined		Average Weight Pounds		Average Height Inches	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
4	110	29	39.1	40.4	41.5	44.2
5	1,631	64	41.1	44.1	42.8	44.6
6	976	38	43.2	48.1	44.2	46.6
7	130	7	46.4	53.6	46.1	50.0
8	36	22	55.2	64.5	49.2	53.2
9	493	53	63.8	69.8	52.5	54.1
10	1,596	95	69.2	73.7	53.8	55.2
11	888	18	74.7	77.5	55.4	57.8
12	821	194	86.3	95.0	58.1	60.5
13	609	1,005	93.9	103.2	59.4	61.4
14	102	238	99.3	103.9	60.8	61.6
15	3	149	101.5	120.7	61.3	63.6
16	—	195	—	124.1	—	63.7
17	—	33	—	133.9	—	64.0
18	—	—	—	—	—	—
19	—	—	—	—	—	—

Attendance of Parents at Routine Medical Inspections

TABLE E 4

Age Group	Primary		Secondary	
	Boys	Girls	Boys	Girls
Entrants	2,112 (63.9%)	1,987 (69.2%)	53 (44.2%)	61 (43.9%)
II	—	—	—	—
III	1,013 (32.1%)	1,310 (45.5%)	22 (9.9%)	52 (28.1%)
IV	176 (12.6%)	301 (18.3%)	72 (4.0%)	161 (11.4%)
V	—	—	2 (0.4%)	16 (4.0%)
Totals	3,301 (42.0%)	3,598 (48.7%)	149 (5.5%)	290 (13.6%)
	6,899 (45.2%)		439 (9.1%)	
	7,388 (36.5%)			

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	3,303	905 (27.4%)	—	—	3,157	892 (28.3%)	1,395	360 (25.8%)	—	—	7,855	2,157 (27.5%)
	Girls	2,872	806 (28.1%)	—	—	2,876	756 (26.3%)	1,647	399 (24.2%)	—	—	7,395	1,961 (26.5%)
	Both	6,175	1,711 (27.7%)	—	—	6,033	1,648 (27.3%)	3,042	759 (25.0%)	—	—	15,250	4,118 (27.0%)
Secondary	Boys	120	25 (20.8%)	—	—	223	31 (13.9%)	1,821	339 (18.6%)	524	99 (18.9%)	2,688	494 (18.4%)
	Girls	139	34 (24.5%)	—	—	185	30 (16.2%)	1,417	251 (17.7%)	399	73 (18.3%)	2,140	388 (18.1%)
	Both	259	59 (22.8%)	—	—	408	61 (15.0%)	3,238	590 (18.2%)	923	172 (18.6%)	4,828	882 (18.3%)
Totals	Both	6,434	1,770 (27.5%)	—	—	6,441	1,709 (26.5%)	6,280	1,349 (21.5%)	923	172 (18.6%)	20,078	5,000 (24.9%)

Nutrition

TABLE E 6

Age Group	Type of School	NORMAL (A)		SUB-NORMAL (B)		BAD (C)	
		Boys	Girls	Boys	Girls	Boys	Girls
Entrants	Primary	3,000 (90.8%)	2,525 (87.5%)	283 (8.6%)	331 (11.6%)	20 (0.6%)	16 (0.5%)
	Secondary	117 (97.5%)	130 (93.5%)	2 (1.7%)	9 (6.5%)	1 (0.8%)	—
II	Primary	—	—	—	—	—	—
	Secondary	—	—	—	—	—	—
III	Primary	2,918 (92.4%)	2,621 (91.1%)	236 (7.5%)	253 (8.8%)	3 (0.1%)	2 (0.1%)
	Secondary	215 (96.4%)	179 (96.8%)	8 (3.6%)	6 (3.2%)	—	—
IV	Primary	1,314 (94.2%)	1,563 (94.9%)	79 (5.7%)	84 (5.1%)	2 (0.1%)	—
	Secondary	1,710 (93.9%)	1,377 (97.2%)	110 (6.0%)	39 (2.7%)	1 (0.1%)	1 (0.1%)
V	Primary	—	—	—	—	—	—
	Secondary	518 (98.9%)	395 (99.0%)	6 (1.1%)	4 (1.0%)	—	—
TOTALS	Primary	7,232 (92.1%)	6,709 (90.7%)	598 (7.6%)	668 (9.0%)	25 (0.3%)	18 (0.3%)
	Secondary	2,560 (95.2%)	2,081 (97.2%)	126 (4.7%)	58 (2.7%)	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 ..	113	7.4	163	10.7	
	Secondary ..	43	8.9	62	12.8	
	Total ..	156	7.8	225	11.2	
Eyes	(a) vision	Primary ..	1,775	116.4	2,969	194.7
		Secondary ..	533	114.5	959	198.6
		Total ..	2,328	115.9	3,928	195.6
	(b) squint	Primary ..	219	14.4	436	28.6
		Secondary ..	15	3.1	69	14.3
		Total ..	234	11.7	505	25.2
	(c) other	Primary ..	32	2.1	81	5.3
		Secondary ..	15	3.1	22	4.6
		Total ..	47	2.3	103	5.1
Ears	(a) hearing	Primary ..	77	5.0	67	4.4
		Secondary ..	13	2.7	14	2.9
		Total ..	90	4.5	81	4.0
	(b) otitis media	Primary ..	49	3.2	101	6.6
		Secondary ..	3	4.5	19	3.9
		Total ..	52	2.6	120	6.0
	(c) other	Primary ..	43	2.8	38	2.5
		Secondary ..	24	5.0	14	2.9
		Total ..	67	3.3	52	2.6
Nose and Throat	Primary ..	337	22.1	1,503	98.6	
	Secondary ..	41	8.5	149	30.9	
	Total ..	378	18.8	1,652	82.3	
Speech	Primary ..	72	4.7	157	10.3	
	Secondary ..	15	3.1	14	2.9	
	Total ..	87	4.3	171	8.5	
Cervical glands	Primary ..	18	1.2	90	5.9	
	Secondary ..	4	.8	16	3.3	
	Total ..	22	1.1	106	5.3	
Heart and circulation	Primary ..	64	4.2	225	14.7	
	Secondary ..	25	5.2	60	12.4	
	Total ..	89	4.4	285	14.2	
Lungs	(a)	Primary ..	198	13.0	316	20.7
		Secondary ..	32	6.6	63	13.0
		Total ..	230	11.5	379	18.9
	(b) pulmonary tuberculosis	Primary ..	—	—	26	1.7
		Secondary ..	—	—	5	1.0
		Total ..	—	—	31	1.5
Development	Primary ..	23	1.5	59	3.9	
	Secondary ..	7	1.4	17	3.5	
	Total ..	30	1.5	76	3.8	
Orthopaedic	(a) posture	Primary ..	116	7.6	31	2.0
		Secondary ..	47	9.7	12	2.5
		Total ..	163	8.1	43	2.1
	(b) feet	Primary ..	221	14.5	187	12.3
		Secondary ..	99	20.5	74	15.3
		Total ..	320	15.9	261	13.0
	(c) other	Primary ..	44	2.9	77	5.0
		Secondary ..	6	1.2	19	3.9
		Total ..	50	2.5	96	4.8

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 ..	3	.2	24	1.6
		Secondary ..	—	—	4	.8
		Total ..	3	.1	28	1.4
	(b) other	Primary ..	5	.3	33	2.2
		Secondary ..	—	—	8	1.7
		Total ..	5	.2	41	2.0
Psychological	(a) development	Primary ..	7	.5	100	6.5
		Secondary ..	—	—	9	1.9
		Total ..	7	.3	109	5.4
	(b) stability	Primary ..	17	1.1	22	1.4
		Secondary ..	5	1.0	4	.8
		Total ..	22	1.1	26	1.3
Tuberculosis—non-pulmonary	Primary ..	1	.1	8	.5	
	Secondary ..	2	.4	—	—	
	Total ..	3	.1	8	.4	
Other defects	Primary ..	201	13.2	301	19.7	
	Secondary ..	30	6.2	77	15.9	
	Total ..	231	11.5	378	18.8	

The numbers of children examined were:—Primary 14,853; Secondary 4,828; Total 19,681.

The visual acuity could not be accurately assessed in 404 primary schoolchildren; for "Eyes (a) vision", therefore, the numbers examined were:—Primary 14,449; Secondary 4,828; Total 19,277

Visual Acuity

TABLE E 8

(a) Primary 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	10,699	439	121	99	53	54	25	14	11,504
	6/9	321	908	133	57	37	28	9	7	1,500
	6/12	108	160	330	84	27	18	5	3	735
	6/18	73	58	83	172	50	20	6	4	466
	6/24	51	37	27	48	95	29	1	—	288
	6/36	42	26	19	24	39	88	5	2	245
	6/60	16	6	2	3	5	11	32	1	76
	<6/60	12	3	1	3	1	1	11	—	32
Left Eye	Totals	11,322	1,637	716	490	307	249	94	31	14,846

(b) Primary 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	376	77	29	28	18	13	6	3	550
	6/9	68	118	37	17	9	10	3	—	262
	6/12	41	38	38	15	8	2	3	2	147
	6/18	14	9	12	28	5	4	—	—	72
	6/24	10	4	6	11	10	1	—	—	42
	6/36	6	5	1	6	—	—	—	—	18
	6/60	5	3	2	1	2	—	—	1	14
	<6/60	5	—	—	—	—	—	—	—	5
Left Eye	Totals	525	254	125	106	52	30	12	6	1,110

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	3,414	133	46	29	12	28	8	3	3,673
	6/9	110	185	37	21	13	10	7	2	385
	6/12	36	38	60	23	10	6	2	1	176
	6/18	21	19	24	67	15	5	2	—	153
	6/24	21	9	9	22	58	15	5	—	139
	6/36	13	11	4	10	18	87	16	2	161
	6/60	8	—	1	3	5	9	69	6	101
	<6/60	6	1	1	1	1	—	5	25	40
Left Eye	Totals	3,629	396	182	176	132	160	114	39	4,828

(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	250	57	23	8	6	10	2	1	357
	6/9	48	80	21	8	3	—	3	—	163
	6/12	20	23	20	6	4	3	—	—	76
	6/18	7	7	11	17	5	1	1	—	49
	6/24	3	3	3	3	6	—	—	—	18
	6/36	4	1	2	—	1	1	1	—	10
	6/60	1	—	—	—	—	—	1	—	2
	<6/60	—	1	1	—	—	—	—	—	2
Left Eye	Totals	333	172	81	42	25	15	8	1	677

Colour Vision

TABLE E 9

Colour Vision	Type of School	Boys	Girls	Total
Normal	Primary	1,254 (91.6%)	1,575 (96.7%)	2,829 (94.4%)
Defective—safe		54 (3.9%)	51 (3.1%)	105 (3.5%)
Defective—unsafe		71 (4.5%)	3 (0.2%)	64 (2.1%)
Total		1,369 (100.0%)	1,629 (100.0%)	2,998 (100.0%)
Normal	Secondary	1,791 (93.5%)	1,583 (98.5%)	3,374 (95.8%)
Defective—safe		54 (2.4%)	14 (0.9%)	68 (1.9%)
Defective—unsafe		71 (3.7%)	9 (0.6%)	80 (2.3%)
Total		1,916 (100.0%)	1,606 (100.0%)	3,522 (100.0%)
Normal	All Schools	3,045 (92.7%)	3,158 (97.6%)	6,203 (95.1%)
Defective—safe		108 (3.3%)	65 (2.0%)	173 (2.7%)
Defective—unsafe		132 (4.0%)	12 (0.4%)	144 (2.2%)
Total		3,285 (100.0%)	3,235 (100.0%)	6,520 (100.0%)

Tuberculin Tests

TABLE E 10

Age	Number of children available	Offered* tuberculin test	Refused	Tested	Negative	Positive
4	313	10	—	10	9 (90.0%)	1 (10.0%)
5	3,705	258	15 (5.8%)	243	238 (97.9%)	5 (2.1%)
6	2,066	51	7 (13.7%)	44	43 (97.7%)	1 (2.3%)
7	288	7	—	7	7 (100.0%)	—
8	93	33	8 (24.2%)	25	22 (88.0%)	3 (12.0%)
9	1,205	852	74 (8.7%)	778	683 (87.8%)	95 (12.2%)
10	3,612	2,585	252 (9.7%)	2,333	2,047 (87.7%)	286 (12.3%)
11	1,822	1,167	88 (7.5%)	1,079	936 (86.7%)	143 (13.3%)
12	1,910	477	60 (12.6%)	417	322 (77.2%)	95 (22.8%)
13	3,375	1,002	118 (11.8%)	884	663 (75.0%)	221 (25.0%)
14	818	365	32 (8.8%)	333	234 (70.3%)	99 (29.7%)
15	341	105	4 (3.8%)	101	61 (60.4%)	40 (39.6%)
16	432	105	13 (12.4%)	92	39 (42.4%)	53 (57.6%)
17	92	49	9 (18.4%)	40	21 (52.5%)	19 (47.5%)
18	5	2	—	2	2 (100.0%)	—
19	—	—	—	—	—	—
Totals	20,077	7,068	680 (9.6%)	6,388	5,327 (83.4%)	1,061 (16.6%)

* 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 ailment making tuberculin testing undesirable.

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	135	115	17	32	264	160	306	215	33	13	32	25	—	2	56	51	22	7	13	8	24	42
II	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
III	172	149	16	14	200	146	418	396	19	10	14	19	—	4	63	86	11	4	6	4	30	27
IV	60	72	1	5	56	76	164	214	6	10	3	10	—	—	18	38	6	8	3	4	9	15
V	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	367	336	34	51	520	382	888	825	58	33	49	54	—	6	137	175	39	19	22	16	63	84
	703		85		902		1,713		91		103		6		312		58		38		147	

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	2	—	3	5	1	4	5	1	—	—	—	—	—	—	2	1	1	1	—	1	—	6	6
II	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
III	1	3	7	14	4	4	3	6	—	—	—	—	—	—	6	5	—	—	—	—	2	3	
IV	31	48	18	20	74	66	223	158	5	7	1	6	—	—	27	34	6	2	—	3	51	27	
V	—	4	3	6	12	13	62	36	2	—	1	1	—	—	1	—	—	—	—	1	16	14	
Totals	34	55	31	45	91	87	293	201	7	7	2	7	—	—	36	39	7	3	—	5	75	50	
	89		76		178		494		14		9		—		75		10		5		125		

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	54	86	72	14	32	55
Eyes (a) vision	1,554	3,034	1,011	421	1,147	158
(b) squint	215	539	28	13	71	9
(c) other	10	13	23	3	4	6
Ears (a) hearing	46	80	72	5	14	21
(b) otitis media	8	29	48	3	4	8
(c) other	21	27	43	2	9	8
Nose and throat	298	1,082	1,125	23	89	237
Speech	100	213	143	11	25	22
Cervical glands	22	76	30	1	6	9
Heart and circulation	35	170	95	3	23	31
Lungs (a)	68	244	374	4	37	60
(b) pulmonary tuberculosis	—	8	2	—	5	4
Development	14	33	22	—	3	5
Orthopaedic (a) posture	31	40	64	7	13	18
(b) feet	57	137	133	23	58	107
(c) other	12	38	33	5	20	18
Nervous system (a) epilepsy	4	21	2	—	4	1
(b) other	9	23	19	1	—	2
Psychological (a) development	20	167	16	—	3	4
(b) stability	3	10	2	1	—	1
Tuberculosis—non-pulmonary	—	29	3	—	3	1
Other defects	165	329	422	24	58	136
Totals	2,746	6,428	3,782	564	1,628	921
	12,956			3,113		
	16,069*					

* 16,069 defects in 12,504 children (Primary 9,966; Secondary 2,538).

Clinic Examinations

TABLE E 13

Reason for examination	Number of examinations carried out	Per cent
Skin	1,940	6.9
Eyes (a) vision	837	3.0
(b) squint	143	.5
(c) other	198	.7
Ears (a) hearing	241	.9
(b) otitis media	233	.8
(c) other	107	.4
Nose and throat	706	2.5
Speech	186	.7
Cervical glands	14	—
Heart and circulation	277	1.0
Lungs (a)	646	2.3
(b) pulmonary tuberculosis	19	.1
Development	60	.2
Orthopaedic (a) posture	33	.1
(b) feet	129	.4
(c) other	58	.2
Nervous system (a) epilepsy	32	.1
(b) other	71	.3
Psychological (a) development	664	2.4
(b) stability	120	.4
Tuberculosis non-pulmonary	15	.1
Other defects	1,191	4.2
B.C.G. vaccination	4,123	14.7
Tuberculin skin test	9,437	33.5
Pre-anaesthetic examination	6,659	23.6
Total	28,139	100.0

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	—	—	6	7	—	2	2	2	—	1	8	12
Partially Sighted ..	2	3	6	6	16	18	3	1	—	1	27	29
Deaf	—	—	18	17	—	—	—	1	—	—	18	18
Partially Deaf ..	6	6	15	20	41	43	6	5	—	—	68	74
Delicate	65	62	2	—	16	25	4	2	3	2	90	91
Educationally Subnormal	310	174	12	3	548	414	42	25	4	6	916	622
Epileptic	11	9	1	4	47	41	6	3	1	1	66	58
Maladjusted ..	10	7	2	1	55	26	2	1	1	2	70	37
Physically Handicapped	54	44	15	5	38	29	10	9	22	27	137	114
Speech Defect ..	25	17	—	2	385	370	7	2	—	7	417	398
Totals ..	481	322	77	65	1,146	968	82	51	31	47	1,817	1,453
	803		142		2,114		133		78		3,270*	

*3,270 handicaps in 2,961 pupils (1,649 boys, 1,312 girls). Of these, 232 children have 2 handicaps, 34 have 3 handicaps, and 3 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	—	3	—	8	36	3	4	3	4	61
Speech defect	—	2	—	8	40	1	8	11	74	
Physically handicapped ..	1	7	2	4	40	3	1	72		
Maladjusted	—	3	—	1	56	4	77			
Epileptic	—	3	1	—	46	61				
E.S.N.	1	13	—	33	265					
Partially deaf	1	1	—	56						
Deaf	—	—	3							
Partially sighted	—	32								
Blind	3									

Showing the distribution of 578 handicaps among the 269 children who have multiple handicaps. 232 children have two handicaps and appear once in the table; 34 children have three handicaps and appear three times; 3 children have four handicaps and appear six times each.

TABLE E 16

Graymount Open-Air School

Reasons for Admission	Boys	Girls	Total
Anaemia	1	—	1
Asthma	7	2	9
Bronchiectasis	1	3	4
Bronchitis	3	1	4
Coeliac disease	—	1	1
Congenital deformities	—	1	1
Debility	11	9	20
Eczema	—	1	1
Heart lesion	6	3	9
Late effects of poliomyelitis	2	—	2
Late effects of primary tuberculous complex	1	1	2
Lobectomy for sarcoma	1	—	1
Malnutrition	—	2	2
Muscular dystrophy	1	—	1
Nervousness	3	3	6
Rheumatism	1	—	1
Number admitted during 1957	38	27	65
Number discharged during 1957	29	28	57
Average duration of stay in months	30	34	32

TABLE E 17

Miscellaneous

Ultra violet light treatments	4,081	
Physiotherapy:		
Children treated	975	
Total attendances	12,449	
Cases discharged	282	
Waiting list	37	
Speech Therapy:		
Total attendances	2,033	
Audiometry:		
Children tested at school	67	
Children individually tested	220	
Children referred to specialist	40	
Cleanliness:		
Children inspected	174,464	
Children found to have nits	8,799	(5.0%)
Children found to have vermin	2,823	(1.6%)
Children cleansed at clinics	4,679	
B.C.G. Vaccinations:	4,076	
Children given tuberculin test	6,388	
Children showing positive reaction	1,061	(16.6%)
Children showing negative reaction	5,327	(83.4%)
Vaccinated children retested—positive	450	
Vaccinated children retested—negative	Nil	
Nurses' Home Visits	7,062	
Nurses' School Visits	959	
Medical Officers' Visits	145	
Eye Specialist:		
Children refracted	4,584	
Children given post-mydratic examination	1,828	
Children examined for other eye conditions	182	
Children referred for orthoptic treatment	115	
E.N.T. Specialist:		
Children examined	303	
General Anaesthetics	6,586	
Children examined for fitness to attend Camp School	900	

REPORT OF THE CHIEF DENTAL OFFICER FOR THE YEAR 1957

Report covering the work of the Dental Section during the year 1957. A summarised statistical report in the form required by the Ministry of Health and Local Government is appended.

Dental Inspection in Schools

It is now the firmly established policy of the department to provide yearly a dental inspection of all children attending schools in the City area. With the exception of a few, five in all, which do not as yet participate directly in the Health Authority's School Service, all schools to this end were visited by the Committee's dental officers during the year. The effective outcome was that 86.37% of the children on rolls were examined, a total of 66,088. All parents are notified prior to the date of the inspection and it is rare for one to refuse inspection on behalf of a child. The static percentage of absenteeism in schools at any given time, and due to varying causes, prevents attainment of a 100% inspection, and to follow up such absentees yearly is economically difficult. Many of these do however acquire inspection either by subsequent attendance at our clinics or by a visit to a private dentist. Additionally, inspection in respect of the non-participating schools is provided privately by the schools in this category, and is subject to the requirements of the Health Committee. Thus a combined total of 67,837 children attending schools in the City were dentally inspected during the year.

Dental condition of Children Inspected

Of the total children inspected by the Committee's dental officers, 47,082 or 71.24% were reported as dentally defective. A further 1,176 in respect of the non-participating schools gave a gross figure of 48,258 school children defective in the area. In spite of the enormity of this total, it is fair to recognise that the yearly dental defect percentage for the City as a whole is gradually tending to fall, due no doubt to the increasing ratio of treatment acceptance by parents on behalf of the children. Nevertheless the picture gleaned from the statistical tables gives emphasis to such fundamentals as the importance of treatment in the lower age groups, and further indeed on behalf of the pre-school child. Irregularity of development in dentition, found present in approximately 2,000 cases, stresses the importance of search for the underlying predisposing causes, and a pathway to their elimination. Although, in the commoner terms of dental repair, statistics showed, as saveable, a percentage as low as 8% of the total teeth examined, in hard fact it meant that each individual concerned had an average of 2.7 carious, although saveable teeth, and that 115,000 teeth would require careful and costly conservation to render them structurally sound.

Post Inspection Notification and Parents' Reponse

With the exception of those children known to be currently in attendance at a clinic, the parents of all children found defective at school inspection were duly advised of the necessity for treatment. In this respect 42,102 were notified during the year. Approximately 78% agreed to secure treatment, 52.4% indicating their intention of attending a dentist privately, and 47.6% asking for treatment to be provided at the Committee's clinics. Although there is a yearly section, in the neighbourhood of 21%, who either do not respond to defect notification, or refuse outright to agree to treatment, and who obviously have still to be convinced of the benefit therefrom, it can none the less be regarded as reasonably satisfactory that four out of every five parents voluntarily appreciate the importance of family dental fitness.

Attendance at City Clinics

Of the total of 15,676 individuals who applied for treatment at the Committee's dental clinics, and who were duly given appointments, 14,224 subsequently attended during the year. These children made an aggregate total of 44,661 attendances, and were rendered currently fit by an approximate average of three attendances per child. New patients totalled 3,477. The percentage of patients returning for additional treatment during the year at 92% can be taken as complimentary in respect of the treatment provided by the Committee.

Dental Treatment in Clinics

All normal branches of treatment were provided during the year, with emphasis on those of a conservative nature. In this aspect, the endeavour to secure a high ratio of filling treatment, as compared to extraction, was well maintained, filling treatments during the year exceeding the total of extractions by over 15,000. The figures for these two types of treatment were 12,421 and 27,613 respectively. The over all picture however in regard to treatments shows a much lessened activity, and is due to various factors. Some of these have been detailed in past reports, and are again mentioned

later in this report. Each child attending for treatment received on an average 4.8 treatments. Each surgeon was responsible for some 3,645 patients, and gave comprehensive treatment to an average of 840 individual children. The number of patients attending the Committee's dental clinics during the year totalled 49,514. In the absence of internal specialisation facilities, approximately 200 cases, mainly those in need of orthodontic measures, were, by the courtesy of the Hospitals' Authority, referred to the local teaching Dental Hospital for treatment.

General Remarks

Previously, in this report I have referred to the fact that the dental defect percentage for children in the City is gradually being reduced. The fact remains however, that this hard won reduction is mainly due to intensification of a repair service, which in itself is a perpetual yearly process of considerable cost to the community. Contributory causes of dental caries are known, but fundamentals have yet to be found and pin-pointed, and, until this has been accomplished, the nation must continue to be burdened with a colossus of dental conservation. Medical research has, to its credit, accomplished much in its own field, and many diseases which have taken a large toll of the population in the past are today under control. Admittedly the possibility of reduction of dental caries by the compulsory fluoridation of water supplies is being currently assessed and, no doubt, when public opinion has been converted and convinced of its value, it will become a contributing prophylactic factor. Meantime can it be illogical to suggest, in face of what the nation is compelled to spend yearly on dental repair, that a whole hearted financing of dental research is very much overdue?

It is invidious to reiterate what has been written in previous reports regarding the inadequacy and unsuitability of clinic premises. I do so again only because I am of the opinion that these factors are largely the cause of a very marked falling off in the use of the Committee's clinics. Complaints expressed by parents in regard to the distance and inconvenient direction in which they are required to travel with their children are admittedly justified, and such parents tend to select an alternative venue for treatment. Living standards too are on a higher scale today, and it is natural that patients now expect clinic comfort and amenities in keeping with the times. It is imperative therefore, if the service is to retain a status, laboriously built up since its inception, and now very much in danger of downfall, that no further delay be brooked in the establishment of the Service's proposed new clinics. As it stands, the probability is of providing a stable for a horse that has selectively strayed.

The department has been fortunate in that, pending the provision of a special dental treatment centre, it has been possible to refer a large number of orthodontic patients to the local Dental Hospital, and I would beg to express appreciation to the hospital staff concerned for their courtesy in this direction. The Hospitals' Authority cannot however be expected to accept the less specialised prosthetic cases, and as our waiting lists for this branch of treatment have grown, it becomes necessary to make alternative interim arrangements for such cases, pending the availability of the Committee's dental specialisation centre.

In conclusion, I would wish to thank school Principals and the teaching staff for their co-operation throughout the year, and also the staff of the department for their valued contribution towards the effective organisation of the service. Statistical tables of the year's activity are appended.

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	58	50	38	146
Intermediate	1	8	3	12
Technical, Preparatory, and Grammar	13	6	5	24
Nursery and Nursery Centre	2	5	2	9
Special	1	3	1	5
TOTAL Visits	202	194	142	538
Inspection Sessions	189	196	146	531
Inspected per Session (Average)	132	123	117	124
TOTAL SCHOOLS VISITED	75	72	49	196
" " " (per cent)	(100.0)	(100.0)	(100.0)	(100.0)
RESPONSE TO NOTIFICATION:				
Refusing Inspection	—	—	—	—
Absent from Inspection	3,330	3,448	2,835	9,613
" " " (per cent)	(13.7)	(12.5)	(14.2)	(12.7)
TOTAL "CHILDREN" NOTIFIED	28,242	27,533	19,926	75,701
" " " (per cent of Rolls)	(99.07)	(99.47)	(97.99)	(98.93)
CHILDREN INSPECTED:				
Primary	17,891	17,045	13,381	48,317
Intermediate	593	4,671	1,665	6,929
Technical, Preparatory, and Grammar	6,319	1,910	1,830	10,059
Nursery School and Centre	69	189	75	283
Special School	40	320	140	500
TOTAL Boys Inspected	13,203	12,885	9,033	35,121
Girls Inspected	11,709	11,200	8,058	30,967
TOTAL CHILDREN INSPECTED	24,912	24,085	17,091	66,088
" " " (per cent of Rolls)	(87.39)	(87.01)	(84.05)	(86.37)
CHILDREN DEFECTIVE:				
Primary	14,078	13,299	9,531	36,908
" " " (per cent Inspected)	(78.69)	(78.02)	(71.23)	(76.39)
Intermediate	449	3,309	903	4,661
" " " (per cent Inspected)	(75.72)	(70.84)	(54.23)	(67.27)
Technical, Preparatory, and Grammar	3,197	919	931	5,047
" " " (per cent Inspected)	(50.59)	(48.12)	(50.87)	(50.17)
Nursery School and Centre	36	67	28	131
" " " (per cent Inspected)	(52.17)	(48.20)	(37.33)	(46.29)
Special School	34	231	70	335
" " " (per cent Inspected)	(85.00)	(72.19)	(50.00)	(67.00)
TOTAL Boys Defective	9,252	9,519	6,216	24,987
" " " (per cent Inspected)	(70.07)	(73.87)	(68.81)	(71.14)
TOTAL Girls Defective	8,542	8,306	5,247	22,095
" " " (per cent Inspected)	(72.95)	(74.16)	(65.12)	(71.35)
TOTAL "CHILDREN" DEFECTIVE	17,794	17,825	11,463	47,082
" " " (per cent Inspected)	(71.43)	(74.00)	(67.07)	(71.24)

Classification of Dental Defects

TABLE F 2

CLASSIFICATION	Area 1	Area 2	Area 3	Totals	
INDIVIDUALS:					
Children with	Saveable Teeth	12,705	13,246	8,099	34,050
	Unsaveable Teeth	828	803	711	2,342
	Saveable and Unsaveable Teeth	3,977	3,658	2,533	10,168
	Irregularity of Dentition	698	498	580	1,776
	Other Dental and Oral Defects	754	598	659	2,011
TEETH:					
Temporary Dentition	Sound	124,140	119,926	100,782	344,848
	Saveable	19,824	22,619	11,429	53,872
	Unsaveable	6,306	5,645	4,295	16,246
Permanent Dentition	Sound	373,935	352,755	239,150	965,840
	Saveable	23,515	24,018	13,707	61,240
	Unsaveable	3,092	2,952	1,617	7,661
TOTAL Teeth Saveable	43,339	46,637	25,136	115,112	
" " Unsaveable	9,398	8,597	5,912	23,907	
" " Examined	550,812	527,915	370,980	1,449,707	

Classification of Defectives

TABLE F 3

AGE GROUPS	BOYS			GIRLS		
	Inspected	Defective	Per cent Defective	Inspected	Defective	Per cent Defective
3	79	29	36.71	64	22	34.38
4	115	64	55.65	134	68	50.75
5	1,210	910	75.21	1,084	780	71.96
6	3,026	2,355	77.83	2,655	2,081	78.38
7	3,258	2,543	78.05	3,022	2,405	79.58
8	3,424	2,714	79.26	3,207	2,621	81.73
9	3,530	2,752	77.96	3,270	2,564	78.41
10	3,703	2,771	74.83	3,461	2,603	75.21
11	3,892	2,701	69.40	3,450	2,361	68.43
12	3,903	2,536	64.98	3,215	2,059	64.04
13	3,581	2,359	65.88	3,244	2,087	64.33
14	3,201	2,076	64.85	2,748	1,799	65.47
15	1,132	616	54.42	750	360	48.00
16	631	346	54.83	439	200	45.56
17	352	175	49.72	204	80	39.22
18	80	37	46.25	17	3	17.65
19	4	3	75.00	3	2	66.67
TOTALS ..	35,121	24,987	71.15	30,967	22,095	71.35

Post-Inspection Notification and Parents' Response

TABLE F 4

ITEMS	Area 1	Area 2	Area 3	Total
NOTIFIED AS DEFECTIVE:				
Total Notified	16,263	15,893	9,946	42,102
PARENTS' RESPONSE:				
Refusing Treatment	2,123	2,505	1,146	5,774
(per cent)	(13.1)	(15.8)	(11.5)	(13.7)
No response	1,019	1,863	489	3,371
(per cent)	(6.3)	(11.7)	(4.9)	(8.0)
Consenting to Treatment (Total) ..	13,121	11,525	8,311	32,957
(per cent notified)	(80.7)	(72.5)	(83.6)	(78.3)
By own Dentist	7,389	5,724	4,168	17,281
(per cent)	(56.3)	(49.7)	(50.2)	(52.4)
at City Clinics	5,732	5,801	4,143	15,676
(per cent)	(43.7)	(50.3)	(49.8)	(47.6)
TREATMENT ARRANGED:				
Appointments—				
Issued	5,732	5,801	4,143	15,676
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	1,606	859	1,459	3,924
" " Treatment	2,758	2,025	2,516	7,299
" " Inspection and Treatment ..	324	2,030	647	3,001
TOTAL INDIVIDUALS	4,688	4,914	4,622	14,224
PATIENTS:				
New Patients	1,299	1,477	701	3,477
Previous Patients	12,400	13,373	15,411	41,184
TOTAL PATIENTS	13,699	14,850	16,112	44,661

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	166	77	237	274
Argyle Senior	638	128	276	343
Ashmore Street Junior	251	73	143	203
Ballymurphy	246	32	71	111
Blythe Street Junior	242	38	96	105
Botanic Senior	462	92	319	331
Broadway Junior	244	51	118	129
Brown Street	419	77	167	240
Charter's Memorial	233	69	152	223
Donegall Road Junior	413	113	416	437
Earl Street Girls	143	32	68	94
Earl Street Infants'	143	56	111	160
Fane Street Senior	715	131	462	463
Linfield Junior	263	46	101	121
Mabel Street Junior	313	69	201	220
Magdalene*	—	26	76	88
Malone	310	56	200	208
Mariners'	185	32	66	94
Mayo Street	375	86	259	291
McQuiston	300	55	171	197
Ormeau Road Junior	193	26	98	100
Percy Street*	—	40	131	125
Porter's Senior	297	42	152	149
Queen Victoria	280	65	214	260
St. Anthony's Boys'	154	54	121	161
St. Anthony's Girls'	242	67	140	189
St. Brendan's	376	58	108	144
St. Bride's	281	71	250	248
St. Catherine's Convent	467	110	267	339
St. Colmcille's	44	18	39	51
St. Comgall's Boys'	498	95	199	235
St. Comgall's Girls'	504	84	196	223
St. Finian's	515	104	273	276
St. Gall's	505	105	275	337
St. John's Boys'	323	71	175	219
St. John's Girls'	350	63	169	189
St. Joseph's Boys'	454	44	117	148
St. Joseph's Girls'	398	31	78	102
St. Kevin's Boys'	1,043	152	450	473
St. Kevin's Girls'	978	172	475	508
St. Mary's Christian Brothers'	435	81	250	293
St. Mary's Boys'	105	16	47	44
St. Mary's Girls'	161	17	34	47
St. Mary's	394	84	247	246
St. Patrick's	149	4	8	8
St. Paul's Boys'	495	64	232	193
St. Paul's Girls'	141	4	11	11
St. Peter's Boys'	302	39	81	104
St. Peter's Girls'	379	28	59	77
St. Saviour's*	—	71	160	183
St. Simon's Junior	414	150	456	505
St. Vincent's	832	165	502	511
Sandy Row Junior	124	33	83	93
Springfield	520	126	419	427
Stranmillis	204	38	123	128
Taughmonagh	764	98	350	372
Ulsterville Junior	453	152	572	617
Workman	232	51	142	214
No School	—	19	51	67
TOTALS	20,067	4,051	11,464	12,948

* School closed.

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				
Antrim Road*	—	85	308	302
Ballygolan	458	107	407	436
Blenheim Junior	188	56	120	179
Carr's Glen	1,121	202	636	689
Cliftonville Infants'	246	—	—	—
Cliftonville Junior	455	—	—	—
Convent	784	153	495	519
Crumlin Road Junior	316	57	151	178
Currie Junior	336	111	300	389
Duncairn Junior	160	65	154	178
Finiston	549	83	246	313
Forth River	636	114	398	399
Fortwilliam*	—	43	148	168
Getty Junior	265	99	197	250
Grove Junior	673	209	607	659
Hemsworth Square Senior	608	63	228	249
Hillman	335	97	271	331
Holy Cross Boys'	693	101	230	325
Holy Cross Girls'	830	53	131	158
Holy Family Boys'	367	106	343	343
Holy Family Girls'	361	137	493	506
Jaffe*	—	56	162	191
John White Junior	483	103	282	315
Lancaster Street	213	70	165	233
Lowwood Infants'	339	98	268	323
Lowwood Junior	446	97	318	378
Lynn Junior*	—	27	59	81
Old Lodge Road	143	34	65	94
Perth Street	297	67	155	172
Riddel Memorial Junior	329	83	187	250
St. Colmban's Boys'	348	68	166	233
St. Colmban's Girls'	413	80	229	272
St. Joseph's Boys'	58	11	19	34
St. Malachy's Boys'	171	20	35	59
St. Mark's	203	44	137	144
St. Mary's Junior	483	93	260	291
St. Mary's Star of Sea Boys'	432	78	168	253
St. Mary's Star of Sea Girls'	430	85	213	298
St. Patrick's Christian Brothers'	492	161	463	557
St. Patrick's Boys' Junior	313	52	135	156
St. Patrick's Girls' Junior	354	51	152	190
St. Patrick's Girls' Senior	132	12	25	27
St. Vincent de Paul's Boys'	121	20	58	59
St. Vincent de Paul's Girls'	122	9	29	37
Seaview	742	148	554	505
Skegoniel	467	138	465	456
Star of Sea Boys'	168	31	92	80
Star of Sea Girls'	266	41	105	110
Wheatfield Infants'	326	87	310	318
Wheatfield Junior	541	—	—	—
Wolfhill	171	26	48	85
Woodvale Junior	408	102	377	361
No School	—	62	168	194
TOTALS	18,792	3,995	11,732	13,327

* School closed.

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	590	130	400	494
Beechfield Junior	591	116	380	469
Belmont Junior	350	56	189	212
Belvoir Hall Junior	304	61	187	237
Elmgrove	856	304	1,104	1,145
Euston Street	723	236	780	928
Greenwood	255	43	157	157
Harding Memorial	691	230	915	825
Lagan Village	121	38	94	110
Megain Memorial Junior	472	156	388	534
Memel Street Junior	120	17	52	63
Mersey Street	773	98	280	325
Mountpottinger Infants' *	—	53	184	164
Mountpottinger	312	54	221	208
Nazareth House	117	9	16	11
Nazareth Lodge	128	30	102	137
Nettlefield	758	296	1,061	1,156
Orangefield	726	234	859	847
Ormeau Park *	—	145	548	545
Ravenhill Road	209	54	166	188
Rosario Boys'	245	68	222	221
Rosario Girls'	223	76	253	269
Rosetta	619	203	745	714
Roslyn Street Junior *	—	36	107	109
St. Anthony's Boys'	175	43	181	219
St. Anthony's Girls'	224	59	234	272
St. Colman's	336	49	166	214
St. Congall's Boys'	95	10	40	40
St. Congall's Girls'	126	11	47	60
St. Joseph's Boys'	163	25	82	65
St. Joseph's Girls'	129	21	77	74
St. Jude's *	—	73	253	219
St. Malachy's Christian Brothers'	148	25	103	119
St. Malachy's Convent	499	69	214	195
St. Matthew's Boys'	450	73	236	329
St. Matthew's Convent	499	78	231	248
Strand	635	118	481	551
Strandtown	1,114	262	934	945
Sydenham	440	174	534	588
Templemore Avenue	726	79	281	336
Ulidia	546	—	—	—
No School	—	32	93	112
TOTALS	15,488	3,944	13,597	14,654

* School closed.

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				
Linfield	719	77	230	249
St. Thomas's Boys'	765	—	—	—
Total	1,484	77	230	249
Area 2				
Ballygomartin Boys'	732	—	—	—
Edenderry	532	58	169	200
Everton	662	117	432	508
Glenwood Girls'	477	96	297	318
Graymount Girls'	559	56	214	227
Model Boys'	776	109	395	394
Model Girls'	780	82	349	327
Mountcollyer	686	42	157	155
St. Gabriel's Boys'	497	19	31	41
St. Patrick's Boys'	443	29	76	78
Total	6,144	608	2,120	2,248
Area 3				
Ashfield Boys'	835	130	438	440
Ashfield Girls'	381	59	216	213
Orangefield Boys,	567	—	—	—
Park Parade	811	86	405	378
Total	2,594	275	1,059	1,031
TOTAL (All Areas)	10,222	960	3,409	3,528

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	428	2	14	10
.. .. . (Ardeen)	56	1	4	5
Christian Brothers' Grammar	633	95	327	425
Grosvenor High	644	139	568	601
Methodist College	1,782	153	543	575
Princess Gardens	284	20	75	86
Richmond Lodge	371	6	17	18
Royal Academical Institution	1,031	45	170	158
.. .. . (Inchmarlo)	245	7	22	18
Technical Intermediate	347	70	237	270
Victoria College	490	16	66	71
.. .. . (Drumglass House)	30	1	3	2
Strathearn	485	—	—	—
Total	6,826	555	2,046	2,239
Area 2				
Christian Brothers' Technical	295	76	159	228
Royal Academy	848	74	298	395
.. .. . (Ben Madigan)	51	1	5	6
.. .. . (Wingfield)	101	7	28	24
.. .. . (Sinclair Memorial)	76	7	19	13
St. Malachy's College	747	66	292	404
Total	2,118	231	810	1,070
Area 3				
Annadale Boys'	717	177	569	601
Ashfield Girls'	365	84	329	310
Bloomfield Collegiate	356	34	136	122
Cabin Hill	268	2	18	24
Methodist College (Downey House)	248	41	138	142
Total	1,954	338	1,190	1,199
TOTAL (All Areas)	10,898	1,124	4,037	4,508

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	—	—	—
Forth River *	—	1	1	—
Taughmonagh	39	1	2	—
Area 2				
Ballygolan	24	—	—	—
Brefne	18	—	—	—
Edenderry	46	4	10	10
Frederick Street	27	4	8	16
Glenbank	24	6	11	13
Tudor Lodge	47	6	23	32
Area 3				
McArthur	49	5	11	15
Nazareth Lodge	40	1	3	3
TOTAL (All Areas)	360	28	69	89

* School closed.

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	47	3	7	12
Fleming Fulton	26	1	6	7
Malcolm Sinclair House	18	—	—	—
Area 2				
Blind, Deaf and Dumb	—	1	1	2
Graymount	152	27	66	85
Mount Vernon	147	24	55	68
St. Aloysius's Boys'	95	8	22	29
Area 3				
Blind, Deaf and Dumb	—	—	—	—
Oakleigh	184	56	183	242
Victoria Homes	25	2	13	15
TOTAL (All Areas)	694	122	353	460

Dental Clinic Attendances:—School Group Totals

TABLE F 13

School	Total on Rolls	Children Attending Clinic	Total Clinic Attendances	Total Treatments
Primary	54,347	11,990	36,793	40,929
Intermediate	10,222	960	3,409	3,528
Technical, Preparatory, and Grammar ..	10,898	1,124	4,037	4,508
Nursery and Nursery Centre	360	28	69	89
Special	694	122	353	460
TOTAL (All Areas and Schools) ..	76,521	14,224	44,661	49,514

Dental Treatment in Clinics

TABLE F 14

TREATMENTS	Area 1	Area 2	Area 3	Totals
Extractions:				
Temporary Dentition	2,890	3,672	3,007	9,569
Permanent Dentition	907	1,198	747	2,852
Total	3,797	4,870	3,754	12,421
.. (per cent of Treatments)	(24.67)	(28.80)	(21.81)	(25.08)
ANAESTHETICS:				
Local	32	251	125	408
General	2,043	2,392	2,112	6,547
Total	2,075	2,643	2,237	6,955
.. (per cent of Treatments)	(13.49)	(15.63)	(12.99)	(14.05)
FILLINGS:				
Temporary Dentition	1,400	1,461	2,461	5,322
Permanent Dentition	7,311	7,010	7,970	22,291
Total	8,711	8,471	10,431	27,613
.. (per cent of Treatments)	(56.60)	(50.10)	(60.59)	(55.77)
SPECIAL TREATMENTS:				
Orthodontic	—	—	—	—
X-Ray	76	35	99	210
Prosthetic	—	—	—	—
Total	76	35	99	210
.. (per cent of Treatments)	(0.49)	(0.21)	(0.58)	(0.42)
SUBSIDIARY TREATMENTS:				
Dressings (Tooth)	240	485	314	1,039
Scalings	32	41	36	109
Polishings	74	149	106	329
Other Operations	385	215	238	838
Total	731	890	694	2,315
.. (per cent of Treatments)	(4.75)	(5.26)	(4.03)	(4.68)
CLINICAL INSPECTIONS	5,460	5,859	6,414	17,733
TOTAL TREATMENTS	15,390	16,909	17,215	49,514

Analysis of Treatment Sessions

TABLE F 15

ITEMS										TOTALS
TREATMENT SESSIONS (Half-day):										
Extractions	}	..	..	..	..	..	..	..	..	495
Anaesthetics		..	..	..	..	..	..	..	..
Fillings	}	..	..	..	..	..	..	..	..	4,470
Subsidiary Treatments		..	..	..	..	..	..	..	..
Clinical Inspections		..	..	..	..	..	..	..	..
Special Treatments		..	..	..	..	..	..	..	..	88
TOTAL TREATMENT SESSIONS										5,053

Dental Treatment Averages

TABLE F 16

ITEMS										AVERAGE
TREATMENT AVERAGE (Children):										
Extractions	..	(Per Child Treated)	..	..	..	..	..	..	..	1.2
Anaesthetics	..	( " " " )	..	..	..	..	..	..	..	0.7
Fillings	..	( " " " )	..	..	..	..	..	..	..	2.7
Subsidiary Treatments	..	( " " " )	..	..	..	..	..	..	..	0.2
Special Treatments	..	( " " " )	..	..	..	..	..	..	..	0.02
TOTAL TREATMENTS (Per Child Treated)										4.8
CLINICAL INSPECTION:										
Check Inspections		(Per Child Inspected)	..	..	..	..	..	..	..	2.6
TREATMENT AVERAGE (Staff):										
Extractions	..	(Per Extraction Session)	..	..	..	..	..	..	..	25.1
"	..	(Per Anaesthetic)	..	..	..	..	..	..	..	1.8
Anaesthetics	..	(Per Extraction Session)	..	..	..	..	..	..	..	14.1
Fillings	..	(Per Filling Session)	..	..	..	..	..	..	..	6.2
Subsidiary Treatments	..	( " " " )	..	..	..	..	..	..	..	0.5
Special Treatments	..	(Per Special Treatment Session)	..	..	..	..	..	..	..	2.4
Clinical Inspection	..	(Per Treatment Session)	..	..	..	..	..	..	..	3.5
PATIENTS	..	(Per Surgeon)	..	..	..	..	..	..	..	3645.7
INDIVIDUALS TREATED (per Surgeon)										840.8

Staff Complement:—Clinic Accommodation

TABLE F 17

ITEMS										TOTALS
STAFF COMPLEMENT:										
Chief Dental Officer	..	..	..	..	..	..	..	..	..	1
Dental Officers	..	(Full-time)	}	Equivalent Full-time Total	..	..	..	..	..	12.25
"	..	(Sessional)		
Anaesthetists	..	(Sessional)	..	..	..	..	..	..	..	4
Dental Clinic Nurses	..	(Full-time)	..	..	..	..	..	..	..	1
Dental Attendants	..	(Full-time)	..	..	..	..	..	..	..	3
"	..	(Full-time)	..	..	..	..	..	..	..	3.7
"	..	(Full-time)	..	..	..	..	..	..	..	4
"	..	(Full-time)	..	..	..	..	..	..	..	14
TOTAL DENTAL STAFF: Full-time Equivalent										38.95
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:—1955—1956—1957

TABLE F 18

ITEMS	1955	1956	1957	1957 compared 1956
SCHOOL DENTAL INSPECTION:				
				(per cent)
Schools visited	197	194	196	(+) 1.0
Visits	578	574	538	(-) 6.3
Inspection Sessions	574	570	531	(-) 6.8
Notified for Inspection	76,311	75,891	75,701	(-) 0.3
Refusing Inspection	—	—	—	—
Absent from inspection (per cent)	(12.8)	(10.9)	(12.7)	(+) 1.8
Inspected	66,554	67,627	66,088	(-) 2.3
Defective	48,494	48,308	47,082	(-) 2.5
Defective (per cent)	(72.9)	(71.4)	(71.2)	(-) 0.2
POST-INSPECTION NOTIFICATION:				
Notified as Defective	43,230	43,900	42,102	(-) 4.1
.. .. . (per cent)	(89.1)	(90.9)	(89.4)	(-) 1.5
RESPONSE TO NOTIFICATION:				
No Response (per cent)	(8.9)	(7.3)	(8.0)	(+) 0.7
Refusing Treatment (per cent)	(12.2)	(14.7)	(13.7)	(-) 1.0
Consenting to Treatment:—				
Total (per cent)	(78.9)	(78.0)	(78.3)	(+) 0.3
By own Dentist (per cent)	(39.9)	(45.9)	(52.4)	(+) 6.5
At Clinics (per cent)	(60.1)	(54.0)	(47.6)	(-) 6.4
TREATMENT ARRANGED:				
Appointments—				
Issued (Total)	20,499	18,503	15,676	(-) 15.3
Per cent Clinic Applications	(100.0)	(100.0)	(100.0)	—
Per cent Defectives Inspected	(42.3)	(38.3)	(33.3)	(-) 5.0
ATTENDANCES AT CLINICS:				
New Patients (per cent)	(10.8)	(9.15)	(7.79)	(-) 1.4
Previous Patients (per cent)	(89.2)	(90.9)	(92.21)	(+) 1.3
Total Patients	59,863	51,752	44,661	(-) 13.7
Individuals	19,787	15,122	14,224	(-) 5.9
.. .. . (per cent of Roll Defectives)	(35.6)	(28.1)	(26.1)	(-) 2.0
TREATMENTS:				
Extractions—				
Temporary Dentition	13,885	11,560	9,569	(-) 17.2
Permanent Dentition	3,708	3,102	2,852	(-) 8.1
Total	17,593	14,662	12,421	(-) 15.3
Anaesthetics—				
Local	353	309	408	(+) 32.0
General	9,628	8,113	6,547	(-) 19.3
Total	9,981	8,422	6,955	(-) 17.4
Fillings—				
Temporary Dentition	7,401	6,892	5,322	(-) 22.8
Permanent Dentition	25,962	23,632	22,291	(-) 5.7
Total	33,363	30,524	27,613	(-) 9.5
Special Treatments—				
Orthodontic	—	—	—	—
X-Ray	204	202	210	(+) 4.0
Prosthetic	—	—	—	—
Dressings (Tooth)	1,419	1,052	1,039	(-) 1.2
Scalings	136	145	109	(-) 24.8
Polishings	345	379	329	(-) 13.2
Other Operations	1,869	1,284	838	(-) 34.7
Clinical Inspections	24,254	21,286	17,733	(-) 16.7
TOTAL TREATMENTS	64,910	56,670	49,514	(-) 12.6
.. .. . Individuals Treated	14,671	11,013	10,300	(-) 6.5
.. .. . (per cent Roll Defectives)	(26.4)	(20.4)	(18.9)	(-) 1.5

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	490	9	—	481	344	71.52
.. .. . (Somerton House) ..	190	15	—	175	125	71.43
Dominican College	493	47	—	446	324	72.65
St. Dominic's School	594	29	—	565	329	58.23
.. .. . (Aquinas Hall) ..	88	6	—	82	54	65.85
TOTALS	1,855	106	—	1,749	1,176	67.24

Summarised Dental Report*

TABLE F 20

(A) Number of Children on School Rolls in Area	78,402
(1) Participating in Authority's Scheme	76,521
(2) Others	1,881
(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	531
(2) Treatment	5,053
(D) Total number of Children dentally inspected	66,088
(1) School entrants (Ages 4—6 inclusive)	8,224
(2) School leavers (Ages 13—14 inclusive)	12,774
(3) Others	45,090
(E) Number found to require treatment	47,082
(F) Number of those at (E) for whom:	
(1) Treatment was accepted at Authority's Clinics	15,676
(2) Parent chose to consult a private dentist	17,281
(3) Treatment was declined	5,774
(G) Number actually treated at Authority's Clinics (Individuals)	14,224
(H) Total Attendances at Clinics	44,661
(I) Number of General Anaesthetics administered	6,547

*As prescribed by Ministry of Health and Local Government.

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