**[Report 1968] / Medical Officer of Health, Belfast County Borough.**




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# REPORT

ON THE

## Health of the County Borough of Belfast for the Year 1968

Dr. JAMES McA. TAGGART
*Medical Officer of Health*

# REPORT

ON THE

# Health of the County Borough of Belfast

## FOR THE YEAR 1968

**Dr. JAMES McA. TAGGART**
*Medical Officer of Health*

COUNTY BOROUGH OF BELFAST

# Health Committee
# 1968

**Chairman:**

Councillor JOHN SAMUEL ROLSTON HARCOURT

**Deputy Chairman:**

Councillor CAPTAIN WALTER SHANNON, J.P.

**Aldermen:**

WILLIAM BOUCHER, J.P.
WILLIAM ROBINSON BOYD

**Councillors:**

JOHN SAMUEL ROLSTON HARCOURT
Miss IRENE MARGARET ELIZABETH McALERY
HUGH ROBERT BROWN, M.Com.Sc.
JOHN WESLEY CAMPBELL
JOHN WILLIAM KENNEDY, O.B.E., J.P., M.P.
JOHN GERARD O'HARE
JOHN GIBSON ARMSTRONG
WILLIAM CHRISTIE, J.P.
THOMAS FITZPATRICK
NATHAN JOSEPH, J.P. (died 7th Jan., 1969)
JOHN LAVELLE
FRANCIS WILLS WATSON, O.B.E., M.C., J.P.

## HEALTH DEPARTMENT
## STAFF AS AT 1st JULY, 1968

---

Medical Officer of Health and Port Medical Officer:—
J. McA. Taggart, M.B., B.Ch., D.P.H., D.P.A., F.R.S.H.

Deputy Medical Officer of Health and Deputy Port Medical Officer:—
W. J. McLeod, M.D., D.P.H., D.P.A., Ph.C.

**HEADQUARTERS:—**

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

**Administrative Branch:—**
3 Receptionist/Operators.

**Accounts Branch:—**
1 Executive Officer; 1 Senior Clerical Officer, 2 Clerical Officers, 1 Clerical Assistant.

**Stores Branch:—**
1 Executive Assistant; 3 Clerical Assistants; 1 Storekeeper; 2 Storemen.

**Registration Branch:—**
Superintendent Registrar of Births, Deaths and Marriages — T. S. McMonagle.
1 Deputy Supt. Registrar; 8 Registrars; 3 Deputy Registrars; 2 Typists.

**Typing Branch:—**
1 Supervisor of Typists; 6 Shorthand Typists; 1 Copy Typist.

**ENVIRONMENTAL HEALTH DIVISION:—**

Senior Medical Officer—vacant.
Administrative Assistant—G. H. Davis, E.R.D.

**Infectious Diseases Branch:—**
Medical Officer—J. A. Gilmore, M.B., D.P.H.
1 Executive Assistant; 1 Clerical Officer; 6 Clerical Assistants.

**Sanitary Branch:—**

| | |
|---|---|
| Chief Public Health Inspector | —W. Jenkins. |
| Senior Food Inspector | —R. J. Coulter |
| Senior Pests and Disinfecting Officer | —T. Taylor |
| Senior Inspector of Factories and Shops | —P. J. McMahon |
| Senior Smoke Officer | —C. Ellison. |
| Senior Port Public Health Inspector | —W. A. McBride |
| Senior Housing Inspector | —A. Bunting |
| Divisional Public Health Inspector, South | —R. J. Maguire |
| Divisional Public Health Inspector, West | —J. G. Butler |
| Divisional Public Health Inspector, East | —T. F. Mills |
| Divisional Public Health Inspector, North | —J. Thompson |

6 Food and Drugs Inspectors; 2 Port Public Health Inspectors; 4 Factory and Shops Inspectors; 2 Smoke Inspectors; 2 Housing Inspectors; 20 Public Health Inspectors; 5 Pests Officers; 14 Pupil Public Health Inspectors.

1 Executive Officer; 2 Executive Assistants; 1 Senior Clerical Officer; 5 Clerical Officers; 8 Clerical Assistants; 1 Notice Server; 4 Drivers; 1 Attendant (Disinfecting Station); 1 Labourer.

**Meat Inspection Branch:—**
City Veterinarian—J. F. Gracey, Ph.D., B.Agr., M.R.C.V.S., D.V.S.M.
Asst. City Veterinarian—W. T. Morrow, B.V.M.S., M.R.C.V.S.
Senior Meat Inspector—S. J. C. Boyd.
5 Meat Inspectors; 1 Clerical Assistant; 1 Copy Typist.

**COMMUNITY HEALTH DIVISION:—**

Senior Medical Officer — K. M. Corbett, M.D., B.Sc., D.P.H., D.C.H.

Clinic Medical Officer — M. S. Lyons, M.B., D.R.C.O.G.

18 Part-time Medical Officers

Chief Nursing Officer — Vacant

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

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

Supervisor of Midwives — Mrs. M. A. Whinnery, S.R.N., R.S.C.N., S.C.M.

Area Superintendent Health Visitors — Miss K Smyth, S R.N., S.C.M., H.V.Cert., T.A.Cert
— Miss D. E. McFarland, S.R.N., S.C.M., H.V.Cert.

First Assistant Superintendent of District Nurses:—
Miss M. L. Lester, S.R.N., S.C.M., H.V. Cert., Q.N.

55 Health Visitors; 14 Trainee Health Visitors; 58 District Nurses; 4 Student District Nurses; 3 Staff Nurses; 5 Enrolled Nurses; 5 Part-time Nurses; 2 Senior Midwives; 20 Midwives; 7 Part-time Midwives.

Chiropodists : 6 full-time, 5 part-time.

Administrative Assistant — A. Watson, A.C.I.S.

2 Executive Assistants; 2 Clerical Officers; 1 Shorthand Typist; 3 Copy Typists; 14 Clerical Assistants; 14 Clinic Clerks (part-time); 1 Cook-Housekeeper; 4 Clinic Caretakers.

**SCHOOL HEALTH DIVISION:—**

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

Clinic Medical Officers:— A. D. Campbell, M.B., D.P.H.
E. A. M. McMordie, M.B., D.P.H.
P. S. Kerr, M.B., D.P.H.
K. McKee, M.D., D.P.H., D.C.H.

Medical Officers: — E. E. Mercer, M.B., D.P.H.
D. B. Keith, M.B., D.P.H.
S. G. Gordon, M.B., B.S., M.R.C.S., L.R.C.P., D.P.H., D.C.H., D.T.M.H.
F. L. O'Rourke, M.B., D.P.H. (seconded)
D. C. Oswald, M.B., D.P.H.
R. M. Meyers, M.B., D.P.H.
4 Part-time Medical Officers

Chief Dental Officer: — S. R. Sheane, L.D.S.

Clinic Dental Officers: — T. S. Brannigan, L.D.S.
H. C. Thornberry, L.D.S.
P. J. R. Griffith, M.B., L.D.S.
J. R. Faulkner, L.D.S.

Dental Officers: — W. J. Hutchinson, L.D.S.
W. J. C. Davidson, L.D.S.
Mrs. D. Bolton, L.D.S.
J. A. Gow, L.D.S.
C. A. Fetherston, L.D.S.
W. M. Thomas, B.D.S.

3 Part-time Medical Officers (Anaesthetists); 7 Part-time Dental Officers.

4 Senior School Nurses; 23 Health Visitors; 1 Trainee Health Visitor; 5 Clinic Nurses; 1 Speech Therapist; 4 Speech Therapists (part-time); 2 Physiotherapists; 1 Chief Dental Clerk; 3 Senior Dental Surgery Assistants; 24 Dental Surgery Assistants.

Executive Officer — W. W. Magowan, J.P.

1 Executive Assistant; 1 Clerical Officer; 4 Shorthand Typists; 3 Typists; 4 Senior Clerical Assistants; 8 Clerical Assistants; 2 Clinic Caretakers; 1 Clinic Attendant.

## SUMMARY OF STATISTICS, 1968

LATITUDE 54° 35″ N.: LONGITUDE 5° 55″ W.

AREA (Census 1966: excluding 2,237 acres tidal and inland water): 15,815 acres (24.7 sq. miles)

POPULATION (Estimate of Registrar-General, 30th June, 1967: 390,700 (Males 183,900) (Females 206,800)
(Census, October 1966 — 398,405)

POPULATION per acre: 25; per square mile: 15,859.

INHABITED BUILDINGS (Census 1966): 115,435.

RATEABLE VALUATION (1968/69) £5,408,447.

PRODUCT OF A PENNY RATE (1968/69): £21,620.

MARRIAGES: 3,545; MARRIAGE RATE: 9.1

| | 1968 | 1967 | Average 1958/67 |
|---|---|---|---|
| Live Births (M. 3,998; F. 3,632) .. | 7,630 | 7,997 | 8,512 |
| Rate .. .. .. .. | 19.5 | 20.1 | 20.5 |
| Still Births (M. 76; F. 84) .. .. | 160 | 156 | 196 |
| Rate (per 1,000 total births) .. | 21 | 19 | 22.5 |
| Illegitimate live births (M. 217; F. 169) .. | 386 | 352 | 252 |
| Per cent of live births .. .. | 5.1 | 4.4 | 3.0 |
| Deaths (M. 2,340; F. 2,471) .. .. | 4,811 | 4,345 | 4,791 |
| Rate .. .. .. .. | 12.3 | 10.9 | 11.5 |
| Infant Deaths (M. 142; F. 92) .. .. | 234 | 226 | 255 |
| Rate (per 1,000 live births) .. .. | 31 | 28 | 30 |
| Neo-natal Deaths (M. 93; F. 48) .. | 141 | 138 | 167 |
| Rate (per 1,000 live births) .. .. | 18 | 17 | 19.6 |
| Peri-natal Deaths (M. 158; F. 120) .. | 268 | 275 | 342 |
| Rate (per 1,000 total births) .. | 36 | 34 | 39.4 |
| Maternal Deaths .. .. .. | 1 | 1 | 3 |
| Rate (per 1,000 total births) .. | 0.1 | 0.1 | 0.3 |

| | Deaths | Death Rate |
|---|---|---|
| Measles | 1 | 0.0 |
| Diphtheria | Nil | — |
| Whooping Cough | 2 | 0.0 |
| Poliomyelitis | Nil | — |
| Influenza | 18 | 0.05 |
| Tuberculosis (respiratory) | 24 | 0.06 |
| Tuberculosis (other forms) | 4 | 0.01 |

**To:**

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

My Lord Mayor, Ladies and Gentlemen,

I have pleasure in presenting my report on the work of the Health Department and the health of the City for the year 1968.

*Population:*

The Registrar-General estimates the population in June, 1968 as 390,700 (males 183,900; females 206,800) a reduction of 7,800 compared with 1967. The population figure at the October 1966 census was 398,405.

*Births and Deaths:*

There was a reduction in the number of live births registered – 7,630 (males 3,998; females 3,632) giving a birth rate of 19.5 as compared with 7,997 (birth rate 20.1) in 1967. Infant mortality showed an increase, the rate being 31 per 1,000 live births. Deaths occurring during the first month of life numbered 141 giving a neo-natal rate of 18. The peri-natal rate (stillbirths and deaths during the first week) was 36.

The total number of notified births occurring in Belfast institutions was 10,042 as against 10,119 in 1967. The number of domiciliary confinements attended by midwives during the year dropped to 526 (808 in 1967) but the changing pattern of midwifery is evidenced by the facts that 6,190 mothers were attended by midwives following discharge from hospital (5,146 in 1967). The high proportion of confinements now taking place in hospitals and in general practitioner maternity units is to some extent made possible by the earlier discharge of mothers and babies to their own homes. In these cases there is close liaison between hospital and local health authority staff to ensure that the patient's home conditions are suitable for early discharge and that continuity of care for mother and baby is immediately available.

*Maternal Mortality:*

During the year there was one death attributable to pregnancy and childbirth.

*Tuberculosis:*

Deaths from all forms of tuberculosis, 28 (24 respiratory), showed a slight increase of 2 from the figure for 1967. Although there has been an encouraging drop in the incidence of this disease in recent years (137 new cases were notified in 1968) active tuberculosis is still abroad in the community and active steps must still continue to be taken to eradicate it completely. Close liaision between our four health visitors who are engaged exclusively on this work and chest physicians ensures prompt surveillance of active cases and their family contacts.

*Cancer:*

Deaths from all forms of cancer, which is the second most important cause of death, numbered 920 as against 796 in 1967. Cancer of the lung and respiratory system caused 227 deaths (15 more than in 1967), mostly among men in their middle years. The impact of mortality of the breadwinner does not end at death. It creates lasting social upheaval through the bereavement of his dependants. The most important causes of death in middle aged men are coronary heart disease and lung cancer. There is tremendous scope for improvement through research into the cause of these diseases, but of all the major underlying causes of morbidity and mortality in middle age the one that predominates is cigarette smoking. It has been estimated that in 1966 in Great Britain over 50,000 deaths at all ages from lung cancer, bronchitis and heart disease could be fairly attributed to cigarette smoking. Considering also the vast amount of disability associated with these diseases, a reduction in cigarette smoking would bring about a considerable improvement in the health of the nation. However, the changing of a habit formed over a lifetime and the development of new attitudes will necessarily be a long and uphill task for those engaged in the field of health education. Perhaps the most fruitful field will lie in the promotion of healthy patterns of behaviour of the young and this battle must be engaged by parents, teachers and health workers in all realms of health education. The benefits of this exercise will only become apparent in the long term but, if realized, the children of today will enjoy a much healthier middle age than that of their parents.

*Infectious Disease:*

With the exception of gastro-enteritis and infective hepatitis both of which showed an increased incidence there was no undue prevalence of serious infectious disease throughout the year. Six cases

of poliomyelitis were notified; three were of the paralytic type, Type 1 virus being isolated from these and from a number of non-paralytic infections. None of the paralytic cases had been fully immunised.

*Co-operation with Hospital and General Practitioner Services:*

The close links between the health committee and hospital services in the fields of child health, mental health, venereal diseases, tuberculosis and geriatrics were strengthened further throughout the year. This is especially important in view of the possible reorganisation of the health services in the future. In hospital clinics and out-patient departments our health visitors now work in close association with consultants and other medical workers. The value of this arrangement is seen to good advantage in the after-care service when continuity of care of the patient is ensured when he is discharged from hospital. One health visitor specially trained in venereal diseases health education and social work attends at the Venereal Diseases Department of the Royal Victoria and Ulster Hospitals to assist consultants on the social aspects and "follow-up" of patients in the community.

Attachment of health visitors to family doctor practices has been again extended throughout the year and further co-operation on these lines is under way with an increase in the number of whole-time attachments. Attachment of district nurses to group practices has also commenced and this arrangement will be further developed as more staff become available. There is no doubt that many family doctors now appreciate the value of having fully trained health visitors, midwives and district nursing staff to assist them in the day to day care of their patients. Working closely with the family doctor, health visitors can also exercise great influence in the field of preventive and social medicine in which they are highly trained.

*Health Education:*

A large part of the time of health department staff is spent on health education work. This is especially so in the case of health visitors in the Community and School Health Services. This work has expanded considerably in recent years, e.g., group teaching at clinics covering such subjects as mothercraft, nutrition, food hygiene, prevention of accidents, care of the aged, foot care, personal hygiene, dental care, etc. There has also been a considerable increase in the number of health education programmes undertaken, including evening classes for mothers based on our four main clinic centres. Lectures, discussions and demonstrations have been conducted by our health visitors, making much use of visual aids, films, filmstrips, tape recordings, etc. School health visitors are now engaging in scheduled programmes of health education in seventeen city schools, working in close association with domestic science and biology teachers.

Health department staff are also much involved in the training programmes of public health inspectors, health visitors, pupil midwives, home nurses, medical students, welfare students and doctors studying for the Diploma in Public Health. In addition, faculties of Queen's University often use the resources of the department in research programmes and in individual investigations by students into problems of health, housing, environment, statistical analysis, etc.

*Cervical Cytology and Cancer Education:*

Four cervical cytology sessions continued at three centres throughout the year. At these centres women have an opportunity to discuss all aspects of cancer prevention with women doctors and health visitors. In addition to taking the cervical smear for the early detection of cancer of the cervix a full gynaecological examination is carried out with breast examination and urine testing. Women are instructed in the early detection of cancer symptoms and any abnormalities detected on examination are referred to the family doctor. During the year 2,027 women were examined, 3 positive smears and 3 early breast cancers were detected and 1,822 women with other abnormalities were referred for appropriate treatment to family doctors. Cancer of the breast is the most common form of cancer in women being responsible for 85 deaths in Belfast in 1968.

*Family Planning:*

During the year in response to a request from the Ministry of Health and Social Services the committee agreed to assume responsibility for the provision of Family Planning Services. In the first instance it was agreed that the Northern Ireland Family Planning Association should conduct clinics and provide for appropriate advice and treatment in local health authority premises acting as agents for the health committee. Two clinic sessions were held weekly by the Family Planning Association and a further two sessions weekly conducted by health committee staff will be commenced at an early date. In addition, the committee contributes to the cost of a Family Planning clinic at the Royal Maternity Hospital where more specialised treatment is provided and a similar arrangement will apply at the Ulster Hospital during the coming year. At all clinics advice is given on the use of the "rhythm method" of family planning to those who prefer to use this method.

There can be no doubt that a generally available and efficient family planning service promotes stable family life and helps to relieve financial burdens falling on other services through the physical and mental ill-health arising from lack of advice and knowledge of this subject.

*General Sanitary Services:*

The sanitary staff under the Chief Public Health Inspector continued their wide range of duties described in detail in the body of the report. In common with other health departments in the United Kingdom the shortage of public health inspectors continues to hamper the work of the various sections. This is especially so in the case of the Food and Drugs Section where frequent inspection of premises where food is manufactured, stored, prepared or sold is essential if high standards of hygiene are to be maintained. It is intended to increase the numbers of officers engaged on this work as soon as more trained staff become available and to include a greater content of positive health education and instruction in the day to day work of these officers.

*Port Health:*

On the recommendation of the Association of Sea and Airport Health Authorities, I was awarded a travelling fellowship by the Wolfson Foundation to enable me to visit India in January–February, 1968, to study infectious diseases, especially smallpox. Arrangements for the programme of visits were made with the Medical Adviser to the High Commissioner of India in London. When in India I saw many cases of smallpox of different types and in different stages of development. In addition I was able to study cases of other infectious diseases such as Diphtheria, Typhoid, Rabies, Tetanus, Cholera, Leprosy, etc., which although rare in the United Kingdom are nevertheless potentially dangerous in immigrants arriving in this country. The itinerary included visits to hospitals and institutions in Bombay, Madras, Calcutta and Delhi, and in addition I visited port medical officers in the major seaports. My visit to the Port of Bombay was of particular interest and I was much impressed there by the work being done in connection with the health and welfare of seamen and their families and also the strict health checks imposed on outward bound passengers, in particular on Moslem pilgrims bound for Mecca. In Delhi I was privileged to take part in a conference of medical officers from all over India discussing the Smallpox Eradication Programme. I also had a most useful meeting there with the Assistant Director General (International Health) who is in charge of Sea and Airport Health Services throughout India. With such a wealth of clinical cases of smallpox and other infectious diseases in all the areas visited the experience gained was of the greatest possible value and I would like to thank the members of the Health Committee for kindly granting me leave of absence to take full advantage of this Fellowship.

This report contains statistical information as required by the Ministry of Health and Social Services and the officers in charge of each section give a detailed account of the various duties carried out by each division.

I would like to thank the Chairman and Members of the Health Committee for their consideration and support in furthering the cause of health in the City, the Town Clerk, the heads and other officers of Corporation Departments with whom my work is closely associated and finally the members of staff of the Health Department for their conscientious service and for their loyalty, co-operation and support throughout the year.

I have the honour to be

My Lord Mayor, Ladies and Gentlemen,

Your obedient servant,

J. McA. TAGGART,

*Medical Officer of Health and Port Medical Officer.*

## CAUSES OF DEATH AT DIFFERENT AGE PERIODS, 1968

**TABLE 1**

| Abbreviated List Nos .* | Causes of Death | Total Deaths | MALES | | | | | | | | | | | | FEMALES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | All Ages | AGED | | | | | | | | | | | All Ages | AGED | | | | | | | | | | |
| | | | | Under 1 mth. | 1—5 mths | 6—11 mths. | Total Under 1 year | 1-4 | 5-14 | 15-24 | 25-44 | 45-64 | 65-74 | 75 & over | | Under 1 mth. | 1—5 mths. | 6—11 mths. | Total Under 1 year | 1-4 | 5-14 | 15-24 | 25-44 | 45-64 | 65-74 | 75 & over |
| | All Causes | 4,811 | 2,340 | 93 | 36 | 13 | 142 | 17 | 10 | 17 | 90 | 671 | 706 | 687 | 2,471 | 48 | 33 | 11 | 92 | 14 | 10 | 6 | 72 | 451 | 649 | 1,177 |
| B1 | Cholera | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| B2 | Typhoid Fever | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| B3 | Bacillary dysentery and Amoebiasis | 2 | 1 | 1 | — | — | 1 | — | — | — | — | — | — | — | 1 | — | — | — | — | — | — | — | — | — | — | 1 |
| B4 | Enteritis and Other Diarrhoeal Diseases | 13 | 8 | — | 5 | 2 | 7 | 1 | — | — | — | — | — | — | 5 | 1 | 2 | — | 3 | 1 | — | — | — | 1 | — | — |
| B5 | Tuberculosis of Respiratory System | 24 | 16 | — | — | — | — | — | — | — | 1 | 8 | 7 | — | 8 | — | — | — | — | — | — | — | 1 | 1 | 4 | 2 |
| B6 | Other Tuberculosis | 4 | 2 | — | — | — | — | — | — | — | — | 1 | 1 | — | 2 | — | — | — | — | — | — | — | — | 1 | — | 1 |
| B7 | Plague | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| B8 | Diphtheria | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| B9 | Whooping Cough | 2 | — | — | — | — | — | — | — | — | — | — | — | — | 2 | — | 2 | — | 2 | — | — | — | — | — | — | — |
| B10 | Streptococcal Sore Throat and Scarlet Fever | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| B11 | Meningococcal Infection | 3 | 2 | — | — | — | — | 1 | — | — | — | — | 1 | — | 1 | — | — | — | — | — | — | — | — | 1 | — | — |
| B12 | Acute Poliomyelitis | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| B13 | Smallpox | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| B14 | Measles | 1 | 1 | — | — | — | — | 1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| B15 | Typhus and Other Rickettsioses | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| B16 | Malaria | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| B17 | Syphilis and its sequelae | 7 | 3 | — | — | — | — | — | — | — | — | 1 | 1 | 1 | 4 | — | — | — | — | — | — | — | — | — | 3 | 1 |
| B18 | Other Infective and Parasitic Diseases | 21 | 10 | 1 | — | — | 1 | 1 | — | 1 | 1 | 3 | 2 | 1 | 11 | — | — | — | — | 1 | — | — | 3 | 2 | 3 | 2 |
| B19 a-f | Cancer | 920 | 505 | — | 1 | — | 1 | 1 | — | 2 | 15 | 206 | 172 | 108 | 415 | — | — | — | — | 1 | 1 | 1 | 25 | 128 | 129 | 130 |
| B19g | Hodgkin's Disease and Leukaemia | 26 | 9 | — | — | — | — | — | 1 | — | — | 4 | 4 | — | 17 | — | — | 1 | 1 | — | — | — | 2 | 5 | 5 | 4 |
| B20 | Benign and Unspecified Neoplasms | 11 | 7 | — | — | — | — | — | — | 1 | — | 4 | 2 | — | 4 | — | — | — | — | — | 1 | — | — | 1 | 1 | 1 |
| B21 | Diabetes Mellitus | 36 | 11 | — | — | — | — | — | — | — | 2 | 4 | 1 | 4 | 25 | — | — | — | — | — | — | — | 1 | 5 | 8 | 11 |
| B22 | Avitaminoses and Other Nutritional Deficiency | 5 | 2 | — | — | — | — | — | — | — | — | — | — | 2 | 3 | — | — | — | — | — | — | — | — | — | — | 3 |
| B23 | Anaemias | 22 | 6 | — | — | — | — | — | — | — | — | 2 | 1 | 3 | 16 | — | — | — | — | — | 1 | — | — | 3 | 5 | 7 |
| B24 | Meningitis | 5 | 2 | — | — | — | — | — | — | — | — | 2 | — | — | 3 | — | 1 | — | 1 | — | — | — | — | 1 | 1 | — |
| B25 | Active Rheumatic Heart Disease | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B26 | Chronic Rheumatic Heart Disease | 90 | 24 | — | — | — | — | — | — | — | 8 | 7 | 5 | 4 | 66 | — | — | — | — | — | — | — | 5 | 31 | 20 | 10 |
| B27a | Hypertensive Heart Disease | 43 | 15 | — | — | — | — | — | — | — | — | 4 | 4 | 7 | 28 | — | — | — | — | — | — | — | — | 4 | 7 | 17 |
| B27b | Other Hypertensive Disease | 28 | 15 | — | — | — | — | — | — | — | 1 | 7 | 4 | 3 | 13 | — | — | — | — | — | — | — | — | 7 | 5 | 1 |
| B28a | Ischaemic Heart Disease with Hypertension | 112 | 57 | — | — | — | — | — | — | — | 3 | 21 | 24 | 9 | 55 | — | — | — | — | — | — | — | — | 18 | 27 | 10 |
| B28b | Ischaemic Heart Disease without Hypertension | 1060 | 596 | — | — | — | — | — | — | — | 19 | 198 | 216 | 163 | 464 | — | — | — | — | — | — | — | 3 | 76 | 155 | 230 |
| B29 | Other Forms of Heart Disease | 235 | 78 | — | — | — | — | — | — | — | 3 | 13 | 16 | 46 | 157 | — | — | — | — | — | — | — | 2 | 9 | 29 | 117 |
| B30a | Cerebrovascular Disease with Hypertension (Benign) | 122 | 37 | — | — | — | — | — | — | — | 2 | 15 | 10 | 10 | 85 | — | — | — | — | — | — | — | 1 | 20 | 27 | 37 |
| B30b | Cerebrovascular Disease without Hypertension | 600 | 214 | — | 1 | — | 1 | — | — | — | 5 | 37 | 59 | 112 | 386 | — | — | — | — | — | 1 | — | 4 | 41 | 86 | 254 |
| B46a | Other Diseases of Circulatory System | 144 | 59 | — | — | — | — | — | — | — | 1 | 10 | 18 | 30 | 85 | 1 | — | — | 1 | — | — | — | — | 8 | 19 | 57 |
| B31 | Influenza | 18 | 3 | — | — | 1 | 1 | — | — | — | 1 | 1 | — | — | 15 | — | — | — | — | 1 | — | — | — | — | 1 | 13 |
| B32 | Pneumonia | 237 | 97 | 3 | 20 | 5 | 28 | 2 | — | — | — | 5 | 20 | 42 | 140 | 1 | 17 | 3 | 21 | — | — | — | 1 | 4 | 20 | 94 |
| B33 | Bronchitis, Emphysema and Asthma | 331 | 222 | — | — | 1 | 1 | — | — | — | 5 | 59 | 86 | 71 | 109 | — | — | — | — | — | — | — | 4 | 27 | 40 | 38 |
| B46b | Other Diseases of Respiratory System | 45 | 21 | — | 1 | — | 1 | — | — | 1 | — | 8 | 4 | 7 | 24 | — | 1 | — | 1 | — | — | — | 1 | 3 | 7 | 12 |
| B34 | Peptic Ulcer | 42 | 22 | — | — | — | — | — | — | — | — | 9 | 9 | 4 | 20 | — | — | — | — | — | — | — | — | 5 | 3 | 12 |
| B35 | Appendicitis | 3 | — | — | — | — | — | — | — | — | — | — | — | — | 3 | — | — | — | — | — | — | — | — | — | — | 3 |
| B36 | Intestinal Obstruction and Hernia | 16 | 4 | — | — | 1 | 1 | — | — | — | — | — | — | 3 | 12 | — | — | — | — | — | — | 1 | — | 3 | 1 | 7 |
| B37 | Cirrhosis of Liver | 11 | 5 | — | — | — | — | — | — | — | — | 1 | 3 | 1 | 6 | — | — | — | — | — | — | — | — | 3 | 1 | 2 |
| B46c | Other Diseases of Digestive System | 41 | 15 | — | — | — | — | — | — | — | — | 5 | 3 | 7 | 26 | — | — | — | — | — | — | — | 1 | 3 | 8 | 14 |
| B38 | Nephritis and Nephrosis | 13 | 8 | — | — | — | — | — | — | — | 1 | 1 | 2 | 4 | 5 | — | — | — | — | — | — | — | 1 | 1 | — | 3 |
| B39 | Hyperplasia of Prostate | 8 | 8 | — | — | — | — | — | — | — | — | — | 2 | 6 | — | — | — | — | — | — | — | — | — | — | — | — |
| B40 | Abortion | 1 | — | — | — | — | — | — | — | — | — | — | — | — | 1 | — | — | — | — | — | — | — | 1 | — | — | — |
| B41 | Other Complications of Pregnancy, Childbirth and Puerperium | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| B42 | Congenital Anomalies | 65 | 28 | 17 | 5 | 2 | 24 | 2 | 1 | — | 1 | — | — | — | 37 | 18 | 6 | 6 | 30 | 2 | — | — | — | 4 | — | 1 |
| B43 | Birth Injury, Difficult Labour and Other Anoxic and Hypoxic Conditions | 55 | 41 | 41 | — | — | 41 | — | — | — | — | — | — | — | 14 | 14 | — | — | 14 | — | — | — | — | — | — | — |
| B44 | Other Causes of Perinatal Mortality | 41 | 29 | 29 | — | — | 29 | — | — | — | — | — | — | — | 12 | 12 | — | — | 12 | — | — | — | — | — | — | — |
| B45 | Symptoms and Ill-Defined Conditions | 8 | 1 | — | 1 | — | 1 | — | — | — | — | — | — | — | 7 | 1 | 1 | 1 | 3 | — | — | — | 1 | — | 2 | 1 |
| B46d | All Other Diseases | 174 | 69 | — | 2 | — | 2 | 1 | — | 1 | 3 | 20 | 15 | 27 | 105 | — | 1 | — | 1 | 3 | 2 | 1 | 8 | 15 | 24 | 51 |
| B47 | Motor Vehicle Accidents | 48 | 33 | — | — | — | — | 4 | 7 | 4 | 5 | 6 | 5 | 2 | 15 | — | — | — | — | 4 | 3 | 1 | 1 | 3 | 2 | 1 |
| B48 | All Other Accidents | 75 | 32 | 1 | — | 1 | 2 | 3 | 1 | 3 | 4 | 3 | 6 | 10 | 43 | — | 2 | — | 2 | 1 | 1 | — | 3 | 4 | 5 | 27 |
| B49 | Suicide and Self-Inflicted Injuries | 37 | 18 | — | — | — | — | — | — | 3 | 8 | 5 | 2 | — | 19 | — | — | — | — | — | — | 2 | 3 | 12 | 1 | 1 |
| B50 | All Other External Causes | 6 | 4 | — | — | — | — | — | — | 1 | 1 | 1 | 1 | — | 2 | — | — | — | — | — | — | — | — | 1 | — | 1 |

* 8th Edition

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

**TABLE 2**

| Age Group (Years) | Deaths | | | Rate per 1,000 of population of age group (based on 1966 Census figures) | Percentage of total deaths |
|---|---|---|---|---|---|
| | Male | Female | Total | | 1968 |
| Under 1 year | 142 | 92 | 234 | 29.4 | 4.9 |
| 1–4 | 17 | 14 | 31 | 1.0 | 0.6 |
| 5–14 | 10 | 10 | 20 | 0.3 | 0.4 |
| 15–24 | 17 | 6 | 23 | 0.3 | 0.5 |
| 25–44 | 90 | 72 | 162 | 1.9 | 3.4 |
| 45–64 | 671 | 451 | 1,122 | 12.1 | 23.3 |
| 65–74 | 706 | 649 | 1,355 | 43.9 | 28.2 |
| 75 and over | 687 | 1,177 | 1,864 | 126.1 | 38.7 |

Principal causes of death in order of importance

**TABLE 3**

| | | |
|---|---|---|
| 1. | Heart disease | 1,205 |
| 2. | Cancer | 920 |
| 3. | Vascular lesions affecting the central nervous system | 722 |
| 4. | Bronchitis | 331 |
| 5. | Pneumonia | 237 |
| 6. | Violent and accidental deaths | 166 |
| 7. | Chronic rheumatic heart disease | 90 |
| 8. | Hypertension | 71 |
| 9. | Congenital anomalies | 65 |

Comparative Statistics for Counties and County Boroughs

**TABLE 4**

| Area | Rate per 1,000 population | | | | Rate per 1,000 births | | Still-birth rate per 1,000 total births | Accidental deaths |
|---|---|---|---|---|---|---|---|---|
| | Marriage | Birth | Death | Death rate from tuber-culosis | Infant mortality (1,000 live) | Maternal mortality (1,000 total) | | |
| Northern Ireland | 7.5 | 22.1 | 10.6 | 0.04 | 24 | 0.27 | 16 | 520 |
| Belfast C.B. | 9.1 | 19.5 | 12.3 | 0.07 | 31 | 0.13 | 21 | 123 |
| Londonderry C.B. | 8.5 | 27.1 | 9.9 | 0.02 | 30 | 0.07 | 15 | 20 |
| Co. Antrim | 7.0 | 23.5 | 8.9 | 0.02 | 21 | 0.13 | 14 | 99 |
| Co. Armagh | 6.7 | 23.5 | 10.2 | 0.02 | 18 | 0 | 13 | 47 |
| Co. Down | 6.8 | 20.2 | 10.6 | 0.04 | 22 | 0.66 | 17 | 114 |
| Co. Fermanagh | 6.4 | 20.2 | 12.9 | 0.06 | 25 | 1.0 | 12 | 22 |
| Co. Londonderry | 6.5 | 25.5 | 9.3 | 0.02 | 22 | 0.32 | 13 | 40 |
| Co. Tyrone | 7.1 | 24.2 | 10.8 | 0.01 | 25 | 0 | 16 | 55 |

**TABLE 5** Trend of mortality from certain principal causes of death from 1910

| Year | Heart disease (B26, 27A, 28, 29) | | Cancer | | Respiratory 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 | 346 | 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 |
| 1945 | 1,130 | 2.59 | 664 | 1.52 | 326 | 0.75 | 533 | 1.22 |
| 1950 | 1,500 | 3.33 | 717 | 1.59 | 225 | 0.5 | 565 | 1.26 |
| 1955 | 1,365 | 3.0 | 741 | 1.6 | 76 | 0.17 | 597 | 1.3 |
| 1956 | 1,297 | 2.9 | 840 | 1.89 | 74 | 0.16 | 471 | 1.06 |
| 1957 | 1,383 | 3.14 | 844 | 1.9 | 60 | 0.13 | 592 | 1.34 |
| 1958 | 1,493 | 3.42 | 822 | 1.88 | 56 | 0.13 | 549 | 1.25 |
| 1959 | 1,443 | 3.33 | 802 | 1.85 | 62 | 0.16 | 657 | 1.51 |
| 1960 | 1,476 | 3.4 | 793 | 1.84 | 28 | 0.07 | 546 | 1.25 |
| 1961 | 1,425 | 3.4 | 763 | 1.83 | 35 | 0.08 | 876 | 2.1 |
| 1962 | 1,428 | 3.45 | 777 | 1.87 | 39 | 0.09 | 520 | 1.25 |
| 1963 | 1,616 | 3.92 | 788 | 1.91 | 52 | 0.13 | 672 | 1.63 |
| 1964 | 1,433 | 3.5 | 794 | 1.94 | 34 | 0.08 | 580 | 1.41 |
| 1965 | 1,495 | 3.67 | 810 | 1.99 | 27 | 0.07 | 633 | 1.55 |
| 1966 | 1,442 | 3.58 | 844 | 2.09 | 22 | 0.05 | 900 | 2.24 |
| 1967 | 1,431 | 3.84 | 796 | 1.99 | 22 | 0.06 | 512 | 1.28 |
| 1968 | 1,540 | 3.94 | 920 | 2.35 | 24 | 0.06 | 586 | 1.5 |

— Signifies information not available

**TABLE 6** **Comparative Statistics: Belfast, Northern Ireland, England and Wales, Scotland and Irish Republic, 1968**

| | Belfast | Northern Ireland | England and Wales | Scotland | Irish Republic |
|---|---|---|---|---|---|
| 1. Rates per 1,000 population: | | | | | |
| Marriage | 9.1 | 7.5 | 8.4 | 8.4 | 6.4 |
| Birth | 19.5 | 22.1 | 16.8 | 18.2 | 20.9 |
| Death | 12.3 | 10.6 | 11.8 | 12.1 | 11.3 |
| 2. Death rate per 1,000 births: | | | | | |
| Maternal | 0.1 | 0.3 | 0.24 | 0.1 | 0.3 |
| Infant | 31 | 24 | 18.3 | 21 | 21 |
| 3. Death rates per 100,000 population: | | | | | |
| Tuberculosis | 7.1 | 3.9 | 4.1 | 5.3 | 9.9 |
| Cancer | 235 | 165 | 221 | 240 | 181 |
| Heart diseases (B26, 27A, 28, 29) | 394 | 380 | 384 | 413 | 356 |
| Coronary disease (B28) | 300 | 282 | 285 | 330 | 246 |
| Diphtheria | Nil | Nil | 0.0 | 0.04 | Nil |
| 4. Still-birth rate per 1,000 total births | 21 | 16 | 14 | 15 | — |

Population, births, birth rate per 1,000, deaths, death rate per 1,000 and natural increase from 1890

**TABLE 7**

| Year | Population | Births | | Deaths | | Natural 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 |
| 1945 | 435,900 | 9,853 | 22.6 | 5,069 | 11.6 | 4,784 |
| 1950 | 450,000 | 8,834 | 19.6 | 5,082 | 11.3 | 3,752 |
| 1955 | 453,900 | 8,100 | 17.8 | 4,752 | 10.5 | 3,348 |
| 1956 | 444,800 | 8,212 | 18.5 | 4,632 | 10.4 | 3,580 |
| 1957 | 440,100 | 8,459 | 19.2 | 4,899 | 11.1 | 3,560 |
| 1958 | 436,200 | 8,263 | 18.9 | 4,818 | 11.0 | 3,445 |
| 1959 | 433,800 | 8,365 | 19.3 | 4,821 | 11.1 | 3,544 |
| 1960 | 433,900 | 8,736 | 20.1 | 4,737 | 10.9 | 3,999 |
| 1961 | 416,500 | 8,806 | 21.1 | 4,989 | 12.0 | 3,817 |
| 1962 | 413,900 | 8,636 | 20.9 | 4,594 | 11.1 | 4,042 |
| 1963 | 412,000 | 8,839 | 21.5 | 5,046 | 12.2 | 3,793 |
| 1964 | 410,300 | 8,719 | 21.3 | 4,717 | 11.5 | 4,002 |
| 1965 | 406,800 | 8,447 | 20.8 | 4,745 | 11.7 | 3,702 |
| 1966 | 402,900 | 8,316 | 20.6 | 5,083 | 12.6 | 3,233 |
| 1967 | 398,500 | 7,997 | 20.1 | 4,345 | 10.9 | 3,652 |
| 1968 | 390,700 | 7,630 | 19.5 | 4,811 | 12.3 | 2,819 |

**TABLE 8** Deaths from cancer by sex and site in 1968

| Detailed List Nos. | Sites | Males | Females |
|---|---|---|---|
| | **Buccal Cavity and Pharynx** | | |
| 140 | Lip | — | 1 |
| 141 | Tongue | 1 | 2 |
| 142 | Salivary gland | 1 | 1 |
| 143 | Gum | — | — |
| 144–145 | Mouth | 1 | 2 |
| 146–149 | Pharynx | 3 | 7 |
| | **Digestive Organs and Peritoneum** | | |
| 150 | Oesophagus | 17 | 9 |
| 151 | Stomach | 62 | 49 |
| 152–153 | Intestines | 46 | 59 |
| 154 | Rectum | 20 | 19 |
| 155–156 | Biliary Passages and liver | 5 | 9 |
| 157 | Pancreas | 26 | 19 |
| 158 | Peritoneum | — | 3 |
| 159 | Other digestive organs | 2 | — |
| | **Respiratory System** | | |
| 160 | Nose, nasal cavities, etc. | — | — |
| 161 | Larynx | 2 | 1 |
| 162 | Trachea, bronchus and lungs | 196 | 27 |
| 163 | Other respiratory organs | 1 | — |
| | **Bone, Connective Tissue, Skin and Breast** | | |
| 170 | Bone | 1 | 3 |
| 171 | Connective and other soft tissue | 4 | — |
| 172–173 | Skin | 5 | 12 |
| 174 | Breast | 1 | 85 |
| | **Genito-Urinary Organs** | | |
| 180–182 | Uterus | — | 30 |
| 183 | Ovary, Fallopian tube and broad ligament | — | 21 |
| 184 | Other female genital organs | — | 6 |
| 185 | Prostate | 31 | — |
| 186 | Testis | — | — |
| 187 | Other male genital organs | — | — |
| 188 | Bladder | 16 | 10 |
| 189 | Other urinary organs | 10 | 5 |
| | **Other and Unspecified Sites** | | |
| 190 | Eye | 1 | — |
| 191 | Brain | 9 | 4 |
| 192 | Other parts of nervous system | 3 | 1 |
| 193 | Thyroid gland | 2 | 3 |
| 194 | Other endocrine glands | 1 | — |
| 195–199 | Other Sites | 23 | 18 |
| 200, 202, 203, 208, 209 | Neoplasms of lymphatic and haematopoietic tissues (exclusive of Hodgkin's Disease, and leukaemia, etc.) (201, 204–207) | 15 | 9 |
| | Total | 505 | 415 |

## Deaths from certain communicable diseases from 1890

**TABLE 9**

| Year | Meningo-coccal infections | Diph-theria | Dysentery | *Gastro-Enteritis | Measles | Polio-myelitis | Scarlet fever | Typhoid fever | Whooping cough | Influenza |
|---|---|---|---|---|---|---|---|---|---|---|
| 1890 | — | 37 | — | 247 | 378 | — | 41 | 177 | 292 | — |
| 1895 | — | 34 | — | 325 | 197 | — | 88 | 184 | 109 | — |
| 1900 | — | 54 | — | 241 | 42 | — | 14 | 261 | 115 | — |
| 1905 | — | 32 | — | 295 | 227 | — | 35 | 128 | 24 | — |
| 1910 | 3 | 27 | — | 241 | 504 | — | 18 | 18 | 259 | — |
| 1915 | 39 | 27 | — | 240 | 177 | 0 | 107 | 10 | 134 | — |
| 1920 | 4 | 45 | 1 | 223 | 132 | 0 | 94 | 34 | 84 | 243 |
| 1925 | 0 | 38 | 0 | 203 | 167 | 0 | 49 | 18 | 99 | 84 |
| 1930 | — | 22 | 0 | 116 | 6 | — | 7 | 2 | 65 | 38 |
| 1935 | 0 | 55 | 0 | 249 | 251 | 2 | 37 | 11 | 22 | 65 |
| 1940 | 22 | 85 | 0 | 316 | 150 | 1 | 10 | 1 | 54 | 161 |
| 1945 | 2 | 7 | 1 | 188 | 10 | 4 | 2 | 1 | 26 | 16 |
| 1950 | 5 | 3 | 0 | 37* | 5 | 11 | 2 | 1 | 16 | 32 |
| 1955 | 5 | 0 | 3 | 31 | 2 | 0 | 0 | 0 | 10 | 34 |
| 1956 | 10 | 0 | 1 | 8 | 0 | 1 | 0 | 0 | 6 | 27 |
| 1957 | 0 | 0 | 0 | 12 | 2 | 2 | 0 | 0 | 1 | 63 |
| 1958 | 1 | 0 | 1 | 13 | 0 | 0 | 0 | 0 | 5 | 13 |
| 1959 | 3 | 0 | 3 | 12 | 1 | 0 | 0 | 0 | 7 | 40 |
| 1960 | 0 | 0 | 2 | 10 | 0 | 1 | 0 | 0 | 0 | 8 |
| 1961 | 0 | 0 | 0 | 13 | 2 | 3 | 0 | 0 | 0 | 124 |
| 1962 | 2 | 0 | 1 | 16 | 0 | 0 | 0 | 0 | 3 | 16 |
| 1963 | 1 | 0 | 0 | 5 | 0 | 1 | 0 | 0 | 0 | 20 |
| 1964 | 1 | 0 | 0 | 12 | 0 | 1 | 0 | 0 | 1 | 5 |
| 1965 | 2 | 0 | 0 | 7 | 2 | 0 | 0 | 0 | 0 | 4 |
| 1966 | 2 | 0 | 0 | 19 | 1 | 0 | 0 | 0 | 1 | 106 |
| 1967 | 2 | 0 | 2 | 3 | 2 | 0 | 0 | 0 | 4 | 8 |
| 1968 | 3 | 0 | 2 | 13 | 1 | 0 | 0 | 0 | 2 | 18 |
| Average Annual Deaths 1958–67 | 1.4 | 0 | 0.9 | 11.0 | 0.8 | 0.6 | 0 | 0 | 2.1 | 34.4 |

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

## Notifications of certain communicable diseases from 1900

**TABLE 10**

| Year | Diphtheria | Dysentery | Food poisoning | Gastro-enteritis | Infective hepatitis | Measles | Polio-myelitis | Puerperal pyrexia* | Scarlet fever | Typhoid fever | Whooping cough |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900 | 407 | — | — | — | — | — | — | 44 | 658 | 1,777 | — |
| 1905 | 234 | — | — | — | — | — | — | 19 | 650 | 631 | — |
| 1910 | 238 | — | — | — | — | — | — | 16 | 734 | 95 | — |
| 1915 | 179 | — | — | — | — | — | 1 | 6 | 1,994 | 49 | — |
| 1920 | 300 | — | — | — | — | — | 1 | 48 | 1,939 | 210 | — |
| 1925 | 423 | — | — | — | — | — | 0 | 5 | 1,657 | 143 | — |
| 1930 | 118 | — | — | — | — | — | 9 | 20 | 1,132 | 32 | — |
| 1935 | 1,201 | — | — | — | — | 6,203 | 22 | 31 | 3,394 | 117 | 337 |
| 1940 | 1,165 | — | — | — | — | 5,062 | 2 | 9 | 1,266 | 17 | 701 |
| 1945 | 213 | — | — | — | — | 1,702 | 20 | 1 | 768 | 14 | 603 |
| 1950 | 45 | 35 | 55 | 377 | 28 | 4,209 | 109 | 4 | 1,668 | 5 | 1,078 |
| 1955 | 0 | 401 | 29 | 689 | 65 | 4,328 | 1 | 46 | 791 | 23 | 1,460 |
| 1956 | 0 | 198 | 31 | 412 | 166 | 1,797 | 9 | 37 | 540 | 8 | 790 |
| 1957 | 0 | 269 | 18 | 410 | 112 | 4,109 | 141 | 50 | 492 | 4 | 119 |
| 1958 | 0 | 310 | 24 | 430 | 83 | 280 | 11 | 29 | 384 | 2 | 1,132 |
| 1959 | 0 | 278 | 27 | 450 | 179 | 4,731 | 11 | 18 | 506 | 10 | 721 |
| 1960 | 0 | 276 | 58 | 455 | 296 | 487 | 3 | 36 | 519 | 0 | 88 |
| 1961 | 0 | 232 | 40 | 420 | 132 | 3,976 | 13 | 23 | 306 | 0 | 74 |
| 1962 | 0 | 326 | 35 | 401 | 71 | 1,535 | 5 | 17 | 194 | 0 | 635 |
| 1963 | 0 | 199 | 42 | 324 | 155 | 2,989 | 0 | 29 | 193 | 0 | 95 |
| 1964 | 0 | 183 | 10 | 411 | 265 | 1,904 | 0 | 16 | 402 | 0 | 223 |
| 1965 | 0 | 378 | 10 | 343 | 224 | 1,678 | 3 | 11 | 374 | 2 | 321 |
| 1966 | 0 | 300 | 10 | 475 | 71 | 1,422 | 1 | 3 | 186 | 0 | 221 |
| 1967 | 0 | 134 | 6 | 602 | 142 | 2,096 | 0 | 6 | 276 | 0 | 135 |
| 1968 | 0 | 279 | 17 | 634 | 426 | 1,243 | 6 | 4 | 424 | 1 | 301 |
| Average Annual Notification 1958–67 | 0 | 261 | 26 | 431 | 151 | 2,109 | 4 | 18 | 334 | 1 | 364 |

NOTES:— Puerperal Pyrexia – figures up to 1951 for puerperal fever only.

Measles – up to 30th June, 1968, notifiable only as the first case occurring in a household within a period of two months.

Whooping Cough – up to 30th June, 1968, notifiable only as the first case occurring in a household within a period of three months.

— means not available or not then notifiable.

## RAINFALL IN MILLIMETRES

**TABLE 11**

| Month | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 |
|---|---|---|---|---|---|---|---|---|---|---|
| January | 64.0 | 95.2 | 111.8 | 93.2 | 46.0 | 51.1 | 137.9 | 84.6 | 113.0 | 149.8 |
| February | 35.6 | 64.3 | 102.4 | 52.3 | 73.9 | 17.0 | 19.0 | 178.1 | 82.3 | 58.1 |
| March | 73.4 | 64.8 | 35.6 | 51.3 | 91.7 | 98.6 | 116.8 | 121.2 | 72.4 | 98.7 |
| April | 69.1 | 74.4 | 113.3 | 56.6 | 64.5 | 46.5 | 94.0 | 114.3 | 79.8 | 49.4 |
| May | 49.3 | 55.6 | 99.1 | 56.9 | 85.6 | 57.2 | 82.6 | 87.6 | 107.2 | 79.2 |
| June | 67.1 | 64.8 | 51.8 | 40.4 | 110.2 | 70.9 | 107.4 | 114.0 | 46.2 | 57.4 |
| July | 110.7 | 134.9 | 47.7 | 57.2 | 76.5 | 42.9 | 88.6 | 48.5 | 91.4 | 61.5 |
| August | 22.1 | 184.9 | 79.2 | 135.1 | 95.3 | 92.7 | 107.4 | 88.4 | 119.4 | 72.0 |
| September | 38.9 | 71.5 | 110.2 | 154.8 | 62.5 | 105.7 | 81.3 | 94.5 | 142.0 | 126.1 |
| October | 83.3 | 136.7 | 108.7 | 56.9 | 120.9 | 142.5 | 95.0 | 139.4 | 157.0 | 139.3 |
| November | 87.1 | 128.0 | 70.1 | 105.7 | 187.5 | 88.9 | 148.6 | 129.8 | 119.1 | 108.5 |
| December | 154.2 | 59.9 | 89.7 | 101.6 | 21.8 | 143.5 | 169.2 | 192.3 | 113.5 | 76.3 |
| | 854.8 | 1135.0 | 1019.6 | 962.0 | 1036.4 | 957.5 | 1247.8 | 1392.7 | 1243.3 | 1076.3 |

## COMMUNICABLE DISEASES

The Public Health Act (N.I.) 1967 introduced a revised list of notifiable diseases which came into operation on 1st July, 1968. This was followed by an upwards revision of the fee paid to medical practitioners. The changes produced only a few alterations in the statistical pattern of notifications.

*Acute Meningitis*

This new term is so vague that statistics compiled under this heading are meaningless. Up to the end of June, 9 cases of cerebrospinal fever were notified; after that date 48 cases of acute meningitis notified. The great majority of these cases were benign infections of virus origin, mainly in school children and young adults.

*Gastro Enteritis*

The terminology here remains unchanged but notifications reached a high total of 634. Most of these were mild intestinal upsets with complete recovery but there is still a group which can only be described as classical green diarrhoea accompanied by a fundamental disturbance of metabolism difficult to correct: these resulted in 13 deaths.

*Measles*

It is now 5 years since the last epidemic of measles (1963) and there is no indication that its biennial periodicity will return. The 1,243 notifications were from all parts of the city and the cases were mainly children under 5 years of age. Immunisation has not yet become a factor in the change in the epidemiology of measles.

*Whooping Cough*

This disease remains endemic at a low prevalence. Most cases are mild; many are not diagnosed in the absence of a typical "whoop." Still, the unfortunate infant under 1 year of age is at some risk as it is left partially unprotected by the present schedules of immunisation. There were two deaths in this age group.

*Infective Hepatitis*

Notifications reached a high level of 426 cases, mainly in school children and in most cases only a mild illness. The cases were scattered over the city and throughout the year, with some excess during the winter months. The epidemiology is that of an air-borne infection: there is no evidence of water or food borne spread – although this is the academic teaching, based presumably on the finding of the virus in the gut and excreta.

*Food Poisoning*

A total of 17 notifications included a group of 4 cases due to infected pork luncheon meat. However, food poisoning organisms were not isolated from the infected persons. Bacterial isolations were made from 9 sporadic cases: 7 were S. typhimurim, 1 S. stanley and 1 S. dublin. There was no common factor beyond noting that the patients were young children or over 70 years of age.

*Typhoid Fever*

The one notification was that of a young boy who consistently played near and had fallen into a stream which receives many sewage overflows. A case of the same phage type occurred in the same vicinity some years ago. Moore swabs placed in the stream were negative.

*Poliomyelitis*

Poliomyelitis infection returned to Belfast in the form of a small outbreak of 3 paralytic and 3 non-paralytic cases occurred. The paralytic cases included a boy of 4 years with extensive trunk and leg paralysis, also two girls of 6 years, one with right arm paralysis and one with right leg paralysis. None of these children were immunised. Three boys, two aged 4 years and one aged 12 years had non-paralytic attacks. Only one of these patients had been immunised. Type I virus was isolated from the 5 non-immunised patients and Type 3 virus from the immunised patient. Action taken was the administration of live triple polio vaccine to all contacts, in the home, in the adjoining houses and in schools. No cases occurred among these freshly immunised contacts.

*Press Publicity*

It is important to express the Department's appreciation of the co-operation of the Press in the reporting of outbreaks of infectious diseases, particularly as stress is laid on the preventive measures which can be taken. Regrettably one local newspaper published a "scandal" headline over a report that certain people has been immunised early in the autumn against influenza so that those who belatedly in the winter sought immunisation found that vaccine was not available. It is difficult to understand why the precaution of early immunisation should be referred to as "a scandal."

## Immunisation

The usual facilities for immunisation against smallpox, diphtheria, whooping cough, tetanus, poliomyelitis, measles and tuberculosis were available at child health centres, at schools and by general practitioners. The revised fees for immunisation given by general practitioners, together with health visitor attachment to group practices, has resulted in a greater proportion of immunisations being performed by general practitioners.

The occurrence of cases of poliomyelitis in the city was followed by the usual great rush for immunisation. Parents had been warned by circulars and by word of mouth that outbreaks would occur if immunisation was neglected but many parents will not take action until cases of paralytic poliomyelitis occur in children.

Measles immunisation was offered but met with a poor reception. Efforts to encourage its use were not supported by some general practitioners and paediatricians: indeed, there was some active opposition.

## Medical Examinations, Parking Meter Scheme

101 disabled persons made application for parking meter exemption certificates. These applicants were examined to see if their disability affected their mobility. The great majority of these applicants had substantial handicaps: the main categories were:–

| | |
|---|---|
| Injury to legs | 24 |
| Arthritis to leg joints | 24 |
| Poliomyelitis | 15 |
| Congenital defects | 6 |
| Circulatory defects of legs | 6 |

From the safety aspect, one notes with concern the ages of some applicants: for example one over 80 years and five over 70 years of age: they could, however, prove to be very safe drivers.

W. J. McLEOD, M.D., D.P.H., D.P.A., Ph.C.,
*Deputy Medical Officer of Health.*

## Smallpox Vaccination

**TABLE 12**

| | Under 2 years | 2 and under 5 years | 5 and under 15 years |
|---|---|---|---|
| Primary | 1,068 | 263 | 46 |
| Revaccination | — | — | 266 |

## Immunisation against other diseases

*(completed primary courses – under 19 years of age)*

**TABLE 13**(a)

| Disease | Year of Birth | | | | | Others under age 19 | Total |
|---|---|---|---|---|---|---|---|
| | 1968 | 1967 | 1966 | 1965 | 1961/64 | | |
| Diphtheria | 263 | 2,691 | 675 | 190 | 685 | 173 | 4,677 |
| Whooping cough | 257 | 2,660 | 650 | 180 | 189 | 10 | 3,946 |
| Tetanus | 263 | 2,691 | 677 | 191 | 693 | 245 | 4,760 |
| Polio | 292 | 2,523 | 643 | 201 | 797 | 152 | 4,608 |

*(Reinforcing doses)*

**TABLE 13**(b)

| Disease | Year of birth | | | | | Others under age 19 | Total |
|---|---|---|---|---|---|---|---|
| | 1968 | 1967 | 1966 | 1965 | 1961/64 | | |
| Diphtheria | 2 | 231 | 260 | 103 | 3,243 | 816 | 4,655 |
| Whooping cough | 2 | 224 | 228 | 78 | 590 | 145 | 1,267 |
| Tetanus | 2 | 233 | 266 | 116 | 3,316 | 998 | 4,931 |
| Polio | 29 | 290 | 648 | 311 | 5,123 | 3,955 | 10,356 |

*Staff Matters and Pupil Training*

Four of our long-serving officers retired on superannuation during the year after many years of faithful service to the Corporation and City generally. Two were Divisional Public Health Inspectors and one of them, Mr. Fred Hill, acted as my Deputy for several years and was of great assistance and help during that time (although never officially appointed to the post). With the retirement of these four officers and the resignation of two junior officers on appointment elsewhere, we did not gain anything in numerical strength from the successes of our six final year students in passing their examinations. However, we were able to appoint two newly qualified inspectors from an adjoining County Health Authority and one previously qualified inspector. Although these three inspectors and our own successful students meant nine new appointments the Inspectorate was still twelve below establishment at the end of the year. The understrength of the Inspectorate is a great handicap with the Clean Air programme gaining momentus, the acceleration of slum clearance and redevelopment and the implementation of the new and important Office and Shop Premises Act. Again, with much pleasure, reference can be made to the high pass rate of our Northern Ireland students. A pass figure of over 90%, as against a little over 60% for the United Kingdom as a whole, with our six students maintaining the Belfast record of 100% over the past two years, is a remarkable achievement. Six new pupils were appointed to maintain a pupil strength of 14, at which rate we shall have to continue for some years before all vacancies are filled.

**General**

The following paragraphs serve to highlight certain matters contained in the detailed reports submitted by the various sections of the Sanitary Branch.

*Slum Clearance and Redevelopment*

Surveys of Areas F2, F3 and F4 were completed and the Areas officially represented and declared Redevelopment Areas during the year. These areas comprise 2,625 houses bounded by Falls Road, Grosvenor Road and Cullingtree Road. The inspectors in the Housing Section were also engaged in a survey of houses in multiple occupation in the City, which will be the subject of a special report to the appropriate committee.

*Food Inspection and Food Hygiene*

Although much valuable work is carried out by this Section, there is a need for constant thorough surveillance of all food premises and it is hoped to increase the number of inspectors engaged in this work as soon as more become available. Officers of the Department have been giving lectures and demonstrations to students in food hygiene courses which were organised by the Catering Industry Training Board and the City's Education Department.

*Meat and Poultry Inspection*

Regular inspection of poultry killed for retail sale appears to be producing results and the tables given elsewhere in the report show a reduction in the number of birds condemned as unfit for human consumption. It is believed that breeders are much more selective in the birds they send to the killing stations, because they are now subject to rigorous inspection. Close liaison is maintained with the meat inspection staff in the Abattoir and careful watch is kept for the presence of unstamped meat in the butchers' shops in order to prevent meat which has not been properly inspected being sold in the City.

*Air Pollution*

The No. 2 Smoke Control Order was made during the year but because of impending legal changes the date of coming into operation of the No. 1 Order was delayed until 1969. We are still keeping to our five-year programme of a new Order each year and, in addition, intend to make Orders to cover new housing developments. Increased use of approved smokeless fuels for domestic heating and in the new commercial developments, with the modernisation of industrial plant, will contribute to a cleaner atmosphere in the City.

*Office and Shop Premises Act*

The report required by the Ministry of Health and Social Services on the implementation of the provisions of the Act, covering the period since it came into operation on the 1st July, 1967, until

the 31st December, 1968, is included in this section of the Annual Health Report. This report is self-explanatory and sets out in detail the results of a survey of several thousand premises in the City, to ascertain the extent of compliance with the provisions of the Act. The report makes interesting reading in regard to the application of an Act which has been described as legislation of major social importance, covering provisions for the health, safety and welfare of persons employed in offices and shops. Many of the contraventions reported deal with matters for which no legislation previously existed. Our officers responsible for the enforcement of the Act have reported ready willingness on the part of employers to comply with its provisions.

*Port Health*

An apt description of the changing conditions in transportation of goods is that the docks area now resembles a railway goods yard. Containers are everywhere and with the new Public Health (Imported Food) Regulations permitting deferment of inspections until destination centres, all inland local authorities can become, in practice, if not in name, Port Health Authorities.

*Acknowledgments*

Our officers maintain excellent liaison with officers of other departments closely related to our work and we are most grateful for all the help and co-operation received, particularly from the staff of the City Surveyor, the City Architect, the City Planning Officer, the Estates Superintendent, the Town Solicitor and Belfast Water Commissioners. Advice and guidance from officers of the Ministry of Health and Social Services and much practical help from the Public Health Laboratory staff is gratefully acknowledged. Appreciation is also recorded for the help given in the compilation of this section of the Report by the senior officers of the Atmospheric Pollution, Housing, Port Health, Factories and Shops, Food and Drugs and Pests Control Sections and the clerical staff of the Sanitary Branch.

## Sewerage, Sewage Disposal, Land Drainage and River Works

This information is supplied by the City Engineer and Surveyor and the extract quoted below is taken from his Annual Report for 1968 on the work of his Department. The extract refers to works in which the Health Department has an interest.

The construction of the concrete lining of the 1½ mile long 7 ft. 6 in. internal diameter high level intercepting sewer between Mervue Street and the intersection of Argyle Street and Ashmore Street has been completed. This sewer, which was constructed entirely in tunnel, will be in operation early in the New Year. Plans are in preparation for the continuation of this sewer to Falls Road near Broadway, also for the provision of sewage pumping at Glenmachan Street pumping station and a pumping main connecting the station with the extended high level intercepting sewer at Falls Road. The relaying of the Springfield Road sewer between West Circular Road and Springfield Park will be completed in the New Year.

Schemes for the culverting of the Farset River at Bombay Street, the Brianville Stream and the Ballymurphy Stream between Whiterock Road and Springfield Park have been submitted to the Ministry of Agriculture for approval as urban drainage schemes.

Work has commenced on three site investigation contracts in connection with the third section of the high level intercepting sewer, Kinnegar sewage disposal works, a new bridge over the River Lagan at Stranmillis, the development of the Balmoral industrial estate and also the Bog Meadows. Contract documents are being prepared for the second stage of the development of the Bog Meadows which includes the provision of sewers, construction of an access road to Stockman's Lane and the piping and diversion of streams. Plans have been prepared for the provision of roads and sewers, including necessary earthworks, in connection with the development of Balmoral Industrial estate on the lands of the former Malone Training School. It is expected that tenders will be invited for this scheme at an early date.

## Refuse Collection and Disposal

Because of the nearness of the opening date of the new City Meat Plant concern has been expressed as to the possibility of rodent and fly infestation. Officers of the Cleansing Department are co-operating with our staff to arrange that tipping will take place at the point as far as possible from the Meat Plant during the fly breeding season. It is expected also that increased supplies of "blinding" material will reduce breeding places. Rodent control measures are carried out by our staff and the area is sprayed during the fly breeding season.

## Water Supplies

Samples are collected weekly by our officers for bacteriological examination by the Public Health Laboratory Service. The aim is to cover all supplies to all areas of the City. The results of the examination are sent to the Water Commissioners who in turn send us the results of their sampling for chemical analysis and bacteriological examination. Our officers co-operate with the Commissioners in reporting burst pipes and wastes of water.

*Water Samples collected by Health Department staff from consumers' taps*

During the year the total number of samples taken was 303. Of this number 248 were reported as highly satisfactory and the remaining 55 samples were unsatisfactory. The results of the unsatisfactory samples were as follows:—

**TABLE B 1**

| Coliform organisms (per 100 ml.) | Samples | Coliform organisms of faecal origin (per 100 ml.) | Samples |
|---|---|---|---|
| 1 – 3 | 40 | 1 – 3 | 9 |
| 4 – 10 | 8 | 4 – 10 | 1 |
| Greater than 10 | 7 | Greater than 10 | — |

10 samples contained both faecal and non-faecal coli.

4 samples were taken for chemical analysis to determine the lead content.

*Water Samples collected by the Health Department staff from consumers' taps in tenements*

In all 227 samples were taken for bacteriological examination and of these 189 were reported as highly satisfactory: 38 were unsatisfactory because of the presence of coliform organisms.

*Samples of water from mineral water manufacturers*

111 samples of mains water were taken for bacteriological examination and of these 88 were returned as highly satisfactory. 23 were classified as unsatisfactory due to the presence of coliform organisms. 31 samples of private supplies in use for manufacturing purposes were taken and the Bacteriologist reported 26 of them as highly satisfactory. The remaining 5 were classified as unsatisfactory due to the presence of coliform organisms of faecal and non-faecal origin.

*Domestic supplies from wells and springs*

Of 20 samples taken only 4 were reported as satisfactory. The remaining 16 samples were shown to have coliform organisms of faecal and non-faecal origin. 11 of these samples had more than 10 organisms per 100 ml. of water.

## Swimming Baths

*Enclosed swimming baths*

During the year the one approved school in the City was closed (the new premises are outside Belfast). There are now three enclosed pools at Royal Belfast Academical Institution, Methodist College and Fleming Fulton Special School, in addition to the four owned by the Corporation.

630 inspections were carried out and 1,012 tests made for pH and chlorine residual. In 73 instances the water was above or below the agreed standards and remedial measures were instituted. Out of a total of 262 samples taken for bacteriological examination 3 were unsatisfactory and those having control of the relevant ponds were advised of these adverse reports.

*Open-air swimming ponds*

The Corporation own two of these pools in the City and there are two at public schools. One of the school ponds is not in use at the moment and may not be put back into operation, as a new indoor pool has been built outside the City boundary. There were 51 inspections carried out at these pools and 68 tests for pH and chlorine residual. In 3 instances the results showed the water to be above or

below agreed standards. Of the 34 samples taken for bacteriological examinations 2 were unsatisfactory, and those responsible for the pools were informed of the unsatisfactory results.

## Housing Acts (N.I.) 1890-1967

*Slum Clearance and Redevelopment*

During the year the Housing Section completed the survey of Area 24 which is bounded by Newtownards Road, Church Street East, Island Street and Lackagh Street. In April a sample survey was carried out of houses in multiple occupation in the City as to compliance with the provisions of the Housing Act (N.I.) 1963. The survey revealed that in a number of these houses a Management Order could be usefully applied to ensure proper conduct and maintenance. From our officers' observations it would appear that certain owners of this type of property are interested only in the amount of income derived from rents rather than in the provision of amenities and proper maintenance. Many of the tenants are problem families and our officers found it difficult to get information as to who owned the houses and what rents were being paid. It was often found that no rent book was provided and many of the tenants seemed to be in fear of their landlord because of lack of security of tenancy. The function of the Department under this Act will be to have proper facilities provided such as lighting, ventilation, water supply, washing facilities, drainage, facilities for the cooking, storage and preparation of food and proper standards of heating.

In May areas F2, F3 and F4 were represented to the Housing (Clearance and Redevelopment) Committee to be declared Redevelopment Areas. In June, following an application by the Belfast Corporation for a Vesting Order for Area C (Malvern Street area), the Ministry of Development caused a public inquiry to be held and in October, following the making of a Declaration of Unfitness Order, a public inquiry was held to deal with objections received to the making of that Order. The Public Health Inspectors were engaged in giving evidence as to the unfitness or otherwise of the houses. A survey was also carried out of Area 6 which is bounded by North Queen Street, Spamount Street, Trainfield Street and New Lodge Road and also of Area 8 which is bounded by Sussex Street, Dale Street, Earl Street and Cross Street.

Following surveys carried out by our officers, twenty-nine houses were recommended to the Housing Committee for Closing Orders to be made. These houses are usually ones which are situated outside the designated Areas and because of special social or medical circumstances Closing Orders are the only suitable means for dealing with them. During 1968 the first new dwellings inside Redevelopment Area F1 (Cullingtree Road Area) were completed and in the foreground of the twenty storey block (which was completed first) we saw the first introduction of the landscaped open space with the planting of silver birch trees. At the end of the year two blocks of medium-rise deck-access types of buildings were completed.

*New Houses Completed*

| | | |
|---|---|---|
| (i) | Private ... ... ... ... ... ... | 368 |
| (ii) | Corporation: | |
| | Houses ... ... ... ... ... ... | 231 |
| | Flats or maisonettes ... ... ... ... | 621 |
| | Old peoples' dwellings ... ... ... ... | 170 |
| | Total ... ... | 1,390 |

*Conversion/Improvement Schemes*

| | |
|---|---|
| Reports re standard grants ... ... ... ... ... | 330 |
| Reports re improvement grants ... ... ... ... | 344 |
| Total ... ... | 674 |

*Discretionary points system for allocation of houses on medical grounds*

| | |
|---|---|
| Applications received... ... ... ... ... ... | 19 |

All were assessed by the Medical Officer of Health.

*Individual unfit houses*

| | |
|---|---|
| Closing Orders ... ... ... ... ... ... | 29 |
| Demolition Orders ... ... ... ... ... ... | Nil |

*Rent and Mortgage Interest (Restrictions) Acts (N.I.)* 1920–1961

The tables below show the use made by tenants and owners of the provisions of these Acts. Where statutory nuisances are discovered at the time of inspections, notices under the Public Health Acts are served requiring their abatement.

(a) During 1968:—

| | |
|---|---|
| Certificates and reports outstanding at 1.1.68 ... ... ... | 1 |
| Applications for certificates and reports... ... ... ... | 124 |
| Certificates issued to tenants ... ... ... ... ... | 69 |
| Reports issued to landlords ... ... ... ... ... | 23 |
| Certificates refused ... ... ... ... ... ... | 4 |
| Reports refused ... ... ... ... ... ... | 23 |
| Applications for certificates and reports cancelled ... ... | 3 |
| Certificates and reports outstanding at 31.12.68 ... ... ... | 3 |

(b) Totals from 1st September, 1951 until 31st December, 1968:—

| | |
|---|---|
| Applications for certificates and reports... ... ... ... | 43,820 |
| Certificates issued to tenants ... ... ... ... ... | 30,249 |
| Reports issued to landlords ... ... ... ... ... | 7,515 |
| Certificates refused ... ... ... ... ... ... | 528 |
| Reports refused ... ... ... ... ... ... | 5,173 |
| Applications for certificates and reports cancelled ... ... | 352 |

## Public Health Nuisances

There was an 8% increase in the number of nuisances complained of and discovered compared with the previous year. Although the Re-development programme and the demolition of the pre-fabricated bungalows has removed many potential sources of complaints, there are many houses in the 'twilight' and unfit categories still occupied and any inclement weather produces a harvest of complaints from these. The tables below show the types of nuisances complained of and discovered and the action taken by our officers to have them abated.

*Nuisances complained of and discovered*

**TABLE B 2**

| Nuisance | Totals |
|---|---|
| Drains, traps, etc., foul or defective | 3,102 |
| Tiling, paving or flooring defective | 1,692 |
| Sinks defective or want of; wastepipes foul or defective | 275 |
| Water closets foul or defective; no water closet accommodation; soil or ventilation pipes defective or want of | 2,681 |
| Dustbins defective or want of | 219 |
| Roofs defective | 7,225 |
| Spouting defective or want of | 5,717 |
| Damp state | 12,176 |
| Plaster on walls or ceiling defective | 2,157 |
| Domestic water supply, want of or unsuitable | 37 |
| Lighting or ventilation insufficient or want of | 415 |
| Schools overcrowded | — |
| Dwelling houses overcrowded | 47 |
| Accumulation of manure and offensive matter; offensive smells; premises or passages dirty | 1,536 |
| Fowl or animal kept so as to be a nuisance | 30 |
| Schools dirty or defective | — |
| Miscellaneous | 6,374 |
| Total | 43,683 |

*Public health nuisances abated in dwelling houses, etc.*

**TABLE B 3**

| Nuisances abated | Nuisances | | | | Totals |
|---|---|---|---|---|---|
| | North | South | East | West | |
| House drains cleansed | 559 | 474 | 348 | 713 | 2,094 |
| House drains repaired and relaid | 92 | 69 | 107 | 151 | 419 |
| Houses had tiling, paving or flooring repaired | 245 | 346 | 502 | 356 | 1,449 |
| Waterclosets cleansed or repaired | 494 | 472 | 589 | 708 | 2,263 |
| Dustbins provided | 23 | 38 | 39 | 62 | 162 |
| Houses provided with new sinks | — | — | — | — | — |
| Houses had roofs repaired | 1,333 | 1,425 | 1,732 | 2,039 | 6,529 |
| Houses had spouting repaired | 1,008 | 1,101 | 1,426 | 1,955 | 5,490 |
| Passages cleansed | 23 | 30 | 49 | 23 | 125 |
| Houses cleansed | 20 | 41 | 29 | 45 | 135 |
| Houses had minor repairs carried out | 994 | 1,329 | 1,571 | 1,924 | 5,818 |
| Houses had miscellaneous nuisances abated | 71 | 84 | 126 | 136 | 417 |
| | 4,862 | 5,409 | 6,518 | 8,112 | 24,901 |

*Summary for* 1968 *in connection with defects in dwelling houses*

| | |
|---|---|
| Nuisances complained of and discovered ... ... ... | 43,683 |
| Inspections ... ... ... ... ... ... | 80,435 |
| Statutory notices issued ... ... ... ... ... | 16,368 |
| Sanitary improvements carried out ... ... ... ... | 24,901 |
| Summonses for non-compliance with notices ... ... ... | 1,211 |
| Magistrates' Abatement Orders obtained ... ... ... | 230 |
| Summonses for disobedience of Magistrates' Orders ... ... | 42 |
| Fines imposed ... ... ... ... ... ... | £662. 8.0 |
| Costs awarded ... ... ... ... ... ... | £109.11.0 |

*Memoranda to other Departments, etc., in connection with complaints*

| | |
|---|---|
| Estates Department ... ... ... ... ... | 583 |
| City Surveyor's Department... ... ... ... ... | 1,002 |
| Water Commissioners ... ... ... ... ... | 535 |

*Bye-Laws relating to keeping water closets supplied with sufficient water for flushing*

| | |
|---|---|
| Inspections during the year ... ... ... ... ... | 1,292 |
| Notices issued ... ... ... ... ... ... | 600 |
| Summonses ... ... ... ... ... ... | 46 |
| Fines imposed ... ... ... ... ... ... | £159.0.0 |
| Costs awarded ... ... ... ... ... ... | £16.2.0 |
| Continuing offences ... ... ... ... ... | Nil |
| Fines in respect of continuing offences ... ... ... | Nil |
| Costs in respect of continuing offences ... ... ... | Nil |

*Belfast Corporation Act* 1930, *Section* 44 (*provision of dust-bins*)

| | |
|---|---|
| Notices requiring provision of dust-bins ... ... ... | 42 |
| Summonses for non-compliance with notices ... ... ... | Nil |
| Dust-bins provided following complaint to the Department ... | 162 |

*Buildings used for public entertainment*

The inspection of buildings used for public entertainment continued during the year, and, in addition to the tests carried out in cinemas, theatres and dance halls to check on the ventilating and heating systems, the premises were also inspected under the Food Hygiene Regulations, the Office and Shop Premises Act and the Public Health Acts for general hygiene, the welfare of the persons employed and general sanitation throughout.

| | |
|---|---|
| Cinemas and Theatres:— | |
| Number in the City ... ... ... ... ... | 23 |
| Inspections ... ... ... ... ... ... | 27 |
| Tests carried out ... ... ... ... ... | 24 |
| Kata thermometer readings ... ... ... ... | 120 |
| Dance Halls:— | |
| Premises licensed for public dancing ... ... ... | 35 |
| Inspections ... ... ... ... ... ... | 17 |
| Tests carried out ... ... ... ... ... | 7 |
| Kata thermometer readings ... ... ... ... | 35 |

*Drain testing*

Testing of drains by various methods is carried out when investigating complaints of rat infestations, offensive smells, seepages of liquid matter, etc., and details are given below of the number of complaints received and the types of tests carried out:—

| | |
|---|---|
| Tests on complaints of rats ... ... ... ... ... | 580 |
| Tests on other complaints ... ... ... ... ... | 270 |
| Defects found by colour tests ... ... ... ... | 35 |
| Defects found by smoke tests ... ... ... ... | 283 |
| Defects found by water tests ... ... ... ... | — |
| Length in feet of drain pipes laid in relaying drains ... ... | 289 |
| Other sanitary fittings provided (gully traps, etc.) ... ... | 11 |

*School buildings*

Schools and school meals kitchens are inspected as to sanitary and hygienic conditions and complaints of unsatisfactory conditions received from the School Health Service are investigated by the Public Health Inspectors. Food supplied on contract to the kitchens is subjected to periodic examination by the Food Inspectors and samples are taken for bacteriological examination and chemical analysis.

| | |
|---|---|
| Inspections of schools, etc. ... ... ... ... ... | 176 |
| Complaints received from School Health Division ... ... | 3 |
| Intimation notices concerning defects sent to:— | |
| (a) Director of Education ... ... ... ... | 9 |
| (b) Managers of voluntary schools ... ... ... | 4 |
| Sanitary improvements carried out ... ... ... ... | 12 |
| Samples of contract milk taken ... ... ... ... | 78 |

*Other premises and locations*

Routine inspections are carried out at the undernoted premises for the detection of public health nuisances and appropriate action is taken where necessary.

| | |
|---|---|
| Stabling yards (28 on register at 31.12.68) | |
| Inspections | 121 |
| Anti-fly treatments | 141 |
| Burial grounds | |
| Inspections | 11 |
| Public sanitary conveniences | |
| Number in City | 78 |
| Inspections | 829 |
| Offensive trades (hide merchants, etc.) | |
| Number in City | 7 |
| Inspections | 9 |
| Hairdressers | |
| Registered at 1st January, 1968 | 527 |
| Registered during the year | 29 |
| Deleted during the year | 23 |
| Registered at 31st December, 1968 | 533 |
| Inspections | 950 |
| Common lodging houses | |
| Inspections | 1 |
| Tipping grounds | |
| Inspections | 20 |
| Rivers and streams | |
| Inspections | 418 |
| Samples of water collected | 126 |
| Infectious diseases | |
| Visits following | 1,559 |

## ATMOSPHERIC POLLUTION

In last year's Report it was mentioned that the programme of Smoke Control Areas had been started on the West side of the City. The No. 1 Smoke Control Area – bounded by the City boundary, Ballygomartin Road, West Circular Road and Springfield – was surveyed and the Order submitted for the approval of the Ministry of Health and Social Services. As objections were received, a public inquiry was held, at which individuals and tenant associations, as well as Corporation officers, gave evidence. The Ministry ultimately approved the Order and, in March, 1968, notice was given that No. 1 Smoke Control Area would come into operation on 1st October, 1968.

The tenants of 1,483 Corporation-owned dwellings were given freedom of choice on the type of heating required. Contracts were placed through the City Architect's Department for solid fuel room heaters and the Gas and Electricity Departments carried out installations using their respective fuels. Most of the installation was carried out in the summer months so as to reduce inconvenience to householders. Most tenants and occupiers responded well to the need to change from the traditional coal fire.

As a result of the public inquiry the Ministry considered, at the request of the Belfast Health Committee, the difficult position raised by 265 new dwellings (i.e. dwellings started after 9th June,

1964) in No. 1 Smoke Control Area which would not have qualified for grant under the legislation as it stood. The date on which the No. 1 Smoke Control Order would come into operation was eventually deferred until 1st April, 1969.

It would appear, from three months' experience with their smokeless appliances, that most tenants are satisfied, but a number of complaints of lack of room heat have been made by tenants who had one particular type of solid fuel room heater installed. Tests made in conjunction with the Coal Advisory Service have shown that a defect causes the convected air to leak into the combustion chamber, thus being drawn up the chimney. This problem has been referred to the manufacturers of the appliance and it is hoped to find a remedy before the tenants lose faith in the merits of room heaters.

No. 2 Smoke Control Area, bounded by West Circular Road, Ballygomartin Road, Woodvale Road, Ainsworth Avenue and Springfield Road, comprising 1,341 acres adjoining No. 1 Smoke Control Area, has been surveyed. This area contains 1,347 dwellings (1,200 privately-owned: 147 Corporation-owned) 40 shops, 10 factories and 10 schools, churches, halls, etc. No objections were received subsequent to the making of the order and it has since been confirmed by the Ministry. It is hoped that the proposed operative date (1st October, 1969) can still be kept.

It is proposed to make Smoke Control Orders in respect of (a) the recently developed Glencairn Estate, which has a small number of solid fuel improved grates and the masionette blocks are heated by gas. This area, which is being developed by the Belfast Corporation, is phased in three stages, the first of which is now completed and work is about to start on stage two; (b) Redevelopment Area "A" (Upper Library Street) which is already occupied by dwellings with smokeless appliances. This area could be extended as far as Royal Avenue in the City Centre at very little expense.

Work on the Smoke Control Areas has reduced the time available for inspection of industrial premises, but inspections have been maintained particularly in relation to those boiler plants which are known to emit smoke and, where necessary, statutory notices have been issued. The number of industrial plants habitually emitting dark smoke has greatly declined in recent years, mainly due to the need for efficient burning of fuel, the modernisation of plant and greater awareness of the importance of clean air.

During the year 43 plans were submitted for approval in respect of boiler plant and these were considered in relation to type of boiler, type of fuel and the height and location of chimneys in relation to surrounding areas. In recent years, a high percentage of new boiler plant is oil fired and generally, after initial adjustments, these emit little smoke. The problem of emission of sulphur dioxide still remains and it is therefore necessary to ensure that chimney heights are sufficient to reduce the ground level concentration of sulphur dioxide to a minimum. Local architects and consulting engineers are aware of the provisions of the Memorandum on chimney heights and have co-operated very fully in ensuring that they are designed to the satisfaction of all concerned.

Smoke, sulphur dioxide and solid deposited matter are still recorded by the Department on a daily and monthly basis. Daily volumetric recording sites have been increased from 10 to 11 by the addition of a new station at St. Aidan's School, Springfield Road. The instrument previously located at Falls Road Transport Depot has been transferred to the clinic at Ballymurphy. These two new sites are within No. 1 Smoke Control Area and it was hoped that, by obtaining records from these points for a few months before the area became smokeless, a comparison could be made to show the value of Smoke Control Areas.

Current reports from the Atmospheric Pollution Research Laboratory appear to indicate that monthly instruments for recording sulphur trioxide and solid matter are of doubtful accuracy: unless recordings are required for some specific source of pollution, the daily volumetric instrument is believed to give more accurate results for the area in which it is located and it is also easier and cheaper to operate and maintain.

*Work done in connection with air pollution in* 1968

| | |
|---|---|
| Timed observations ... ... ... ... ... | 325 |
| Minutes of dark and black smoke emitted ... ... ... | 303 |
| Average minutes of dark and black smoke emitted per observation | 0.9 |
| Verbal notices given ... ... ... ... ... | 36 |
| Statutory notices served ... ... ... ... ... | 7 |
| Plant inspections and advisory visits ... ... ... ... | 832 |
| Complaints investigated ... ... ... ... ... | 86 |
| Number of inspections re smoke control areas ... ... ... | 3,676 |
| Number of factory chimneys ... ... ... ... | 400 |

## Location of atmospheric pollution recording sites

(a) *Health Department*

1. Ormeau Avenue
2. York Road
3. Station Street
4. Forfar Street No. 1
5. Forfar Street No. 2
6. Northern Road
7. Grove
8. College Street
9. Templemore Avenue
10. North Road
11. Balmoral Avenue
12. Ballymurphy
13. Mountcollyer Street
14. Lowwood Park
15. Queen's Bridge
16. Dufferin Road
17. Forfar Street
18. St. Aidan's, Springfield Road

(b) *Queen's University, Belfast*

19. Royal Victoria Hospital

(c) *Belfast Corporation Electricity Department*

20. Sydenham Airport
21. Duncrue Street
22. Great Patrick Street
23. Skegoneill Street
24. Park Avenue
25. Madrid Street
26. East Bridge Street
27. Victoria Works, Queen's Road
28. Thompson Dock, Queen's Road

## Solid matter deposited (tons per square mile) at collecting stations in 1968

**TABLE B 4**

| Month | Station | | | | | Totals | Monthly Averages |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | | |
| January | 29.42 | 35.42 | 21.21 | 25.97 | 63.36 | 175.38 | 35.08 |
| February | 17.23 | 15.27 | 12.92 | 20.78 | 23.06 | 89.26 | 17.85 |
| March | 35.84 | 40.22 | 30.24 | 24.87 | 48.83 | 180.00 | 36.00 |
| April | 26.45 | 20.44 | 19.16 | 24.93 | 15.14 | 106.12 | 21.22 |
| May | 26.28 | 21.31 | 22.22 | 23.32 | 18.35 | 111.48 | 22.30 |
| June | 16.76 | 24.91 | 21.68 | 15.91 | 17.75 | 97.01 | 19.40 |
| July | 19.35 | 13.97 | 12.85 | 14.03 | 18.12 | 78.32 | 15.66 |
| August | 32.46 | 21.97 | 26.68 | 40.41 | 29.19 | 150.71 | 30.14 |
| September | 22.02 | 17.84 | 16.08 | 18.63 | 9.26 | 83.83 | 16.77 |
| October | 19.66 | 19.21 | 15.37 | 22.22 | 63.76 | 140.22 | 28.04 |
| November | 28.30 | 27.48 | 25.07 | 22.42 | 58.29 | 161.56 | 32.31 |
| December | 23.55 | 18.08 | 19.13 | 22.08 | 22.99 | 105.83 | 21.17 |
| Totals | 297.32 | 276.12 | 242.61 | 275.57 | 388.10 | | |
| Averages | 24.78 | 23.01 | 20.22 | 22.96 | 32.34 | | |

## Sulphur determination by lead-peroxide method ($SO_3$ per 100 sq. cm.)

(a) *Stations maintained by Health Department*

**TABLE B 5**

| Month | Station | | | | Totals | Monthly Averages |
|---|---|---|---|---|---|---|
| | 4 | 5 | 6 | 7 | | |
| January | 2.10 | 1.10 | 2.30 | 1.60 | 7.10 | 1.77 |
| February | 3.40 | 1.35 | 2.90 | 1.40 | 9.05 | 2.26 |
| March | 1.90 | 1.18 | 1.50 | 1.41 | 5.99 | 1.50 |
| April | 1.07 | 1.84 | 3.40 | 1.36 | 7.67 | 1.92 |
| May | 1.75 | 1.04 | 2.84 | 1.00 | 6.63 | 1.66 |
| June | 0.94 | 0.56 | 2.10 | 0.47 | 4.07 | 1.02 |
| July | 0.95 | 0.42 | 1.91 | 0.37 | 3.65 | 0.91 |
| August | 1.12 | 0.42 | 3.33 | 0.65 | 5.52 | 1.38 |
| September | 1.36 | 0.80 | 4.20 | 1.45 | 7.81 | 1.95 |
| October | 1.95 | 1.20 | 7.10 | 1.60 | 11.85 | 2.96 |
| November | 2.53 | 2.15 | 4.10 | 2.25 | 11.03 | 2.76 |
| December | 2.40 | 1.75 | 5.40 | 2.40 | 11.95 | 2.99 |
| Totals | 21.47 | 13.81 | 41.08 | 15.96 | | |
| Averages | 1.79 | 1.15 | 3.42 | 1.33 | | |

(b) *Stations maintained by Belfast Corporation Electricity Department*

**TABLE B 6**

| Month | Station | | | | | | | | | Totals | Monthly averages |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | |
| January | 6.40 | 2.21 | 1.92 | 1.75 | 1.54 | 2.64 | —* | 3.84 | 3.43 | 23.73 | 2.97 |
| February | 3.67 | 2.25 | 2.40 | 1.81 | 1.51 | 2.01 | —* | 2.19 | 2.83 | 18.67 | 2.33 |
| March | 5.35 | 1.46 | 1.83 | 1.25 | 1.38 | 2.20 | 1.45 | 3.94 | 2.33 | 21.19 | 2.35 |
| April | 2.76 | 1.90 | 1.61 | 1.58 | 1.22 | 1.78 | 0.88 | 1.51 | 1.89 | 15.13 | 1.68 |
| May | 4.08 | 2.24 | 1.27 | 1.39 | 1.17 | 1.55 | 0.76 | 1.40 | 1.63 | 15.49 | 1.72 |
| June | 2.06 | 0.92 | 0.52 | 0.80 | 0.50 | 0.82 | 0.74 | 0.75 | 0.86 | 7.97 | 0.89 |
| July | 1.49 | 0.75 | 0.83 | 0.54 | 0.63 | 0.90 | 0.50 | 0.71 | 1.10 | 7.45 | 0.83 |
| August | 1.44 | 1.19 | 0.97 | 0.64 | 0.56 | 0.92 | 1.89 | 0.78 | 1.17 | 9.56 | 1.06 |
| September | 2.56 | 1.53 | 1.08 | 1.00 | 0.73 | 1.10 | 0.69 | 1.03 | 1.55 | 11.27 | 1.25 |
| October | 2.39 | 1.60 | 1.30 | 1.23 | 0.77 | 1.35 | 0.85 | 1.94 | 1.99 | 13.42 | 1.49 |
| November | 3.62 | 4.17 | 1.92 | 2.71 | 1.23 | 1.89 | 1.13 | 1.65 | 2.80 | 21.12 | 2.34 |
| December | 3.46 | 2,84 | 2.03 | 1.93 | 1.48 | 2.49 | 1.33 | 2.14 | 3.66 | 21.36 | 2.37 |
| Totals | 39.28 | 23.06 | 17.68 | 16.63 | 12.72 | 19.65 | 10.22 | 21.88 | 25.24 | | |
| Averages | 3.27 | 1.92 | 1.47 | 1.39 | 1.06 | 1.64 | 1.02 | 1.82 | 2.10 | | |

* Instrument damaged: no recordings

## Rainfall in mm. at 5 deposit gauge stations, 1968

**TABLE B 7**

| Month | Station | | | | | Monthly Averages |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | |
| January | 119.1 | 119.1 | 118.1 | 129.0 | 122.2 | 121.5 |
| February | 42.2 | 37.3 | 41.1 | 47.0 | 47.0 | 42.9 |
| March | 90.2 | 78.0 | 87.1 | 83.1 | 66.0 | 80.9 |
| April | 41.9 | 35.1 | 36.1 | 39.1 | 37.1 | 37.9 |
| May | 77.0 | 64.0 | 74.2 | 79.0 | 75.9 | 74.0 |
| June | 41.1 | 25.1 | 39.1 | 41.1 | 41.9 | 37.7 |
| July | 59.9 | 54.1 | 49.0 | 40.1 | 58.2 | 52.5 |
| August | 73.2 | 68.1 | 72.1 | 33.0 | 70.1 | 63.3 |
| September | 89.2 | 86.1 | 89.2 | 90.2 | 34.0 | 77.7 |
| October | 111.0 | 119.1 | 108.2 | 109.0 | 132.1 | 115.9 |
| November | 77.0 | 98.0 | 91.9 | 95.0 | 96.0 | 91.6 |
| December | 66.0 | 65.0 | 61.0 | 57.2 | 61.0 | 62.0 |

## Daily volumetric instrument (station 19) maintained by Queen's University, Belfast

*(Concentration in ug. per cu.m.)*

**TABLE B 8**

| Month | Smoke | | $SO_2$ | |
|---|---|---|---|---|
| | M.A. | H.D.A. | M.A. | H.D.A. |
| January | 150 | 480 | 150 | 403 |
| February | 250 | 725 | 264 | 466 |
| March | 110 | 368 | 145 | 318 |
| April | 101 | 301 | 173 | 369 |
| May | 107 | 224 | 164 | 308 |
| June | 37 | 82 | 102 | 209 |
| July | 45 | 104 | 76 | 130 |
| August | 43 | 127 | 79 | 136 |
| September | 65 | 231 | 124 | 215 |
| October | 77 | 204 | 107 | 222 |
| November | 146 | 528 | 173 | 385 |
| December | 200 | 692 | 199 | 452 |

## Daily volumetric instruments maintained by Health Department

*(Concentration of Smoke and Sulphur Dioxide in ug. per cu.m.)*

**TABLE B 9**

| Month | STATIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8 | | | | 9 | | | | 10 | | | | 11 | | | | 12 | | | | 13 | | | | 14 | | | | 15 | | | | 16 | | | | 17 | | | | 18 | | | |
| | Smoke | | $SO_2$ | | Smoke | | $SO_2$ | | Smoke | | $SO_2$ | | Smoke | | $SO_2$ | | Smoke | | $SO_2$ | | Smoke | | $SO_2$ | | Smoke | | $SO_2$ | | Smoke | | $SO_2$ | | Smoke | | $SO_2$ | | Smoke | | $SO_2$ | |
| | ma | hrd | ma | hdr | ma | hdr | ma | hdr | ma | hdr | ma | hdr | ma | hdr | ma | hdr | ma | hdr | ma | hdr | ma | hdr | ma | hdr | ma | hdr | ma | hdr | ma | hdr | ma | hdr | ma | hdr | ma | hdr | ma | hdr | ma | hd |
| January | 127 | 698 | 175 | 400 | 250 | 602 | 170 | 380 | 125 | 358 | 100 | 220 | 89 | 356 | 71 | 164 | 125 | 282 | 58 | 158 | 237 | 440 | 186 | 358 | 128 | 310 | 115 | 223 | 144 | 360 | 143 | 258 | 148 | 300 | 144 | 271 | 252 | 698 | 176 | 400 | – | – | – | – |
| February | 180 | 672 | 267 | 540 | 329 | 726 | 207 | 515 | 177 | 641 | 139 | 445 | 191 | 461 | 125 | 251 | 193 | 457 | 139 | 354 | 267 | 903 | 237 | 696 | 139 | 548 | 133 | 459 | 210 | 583 | 180 | 436 | 195 | 655 | 176 | 400 | 261 | 640 | 211 | 374 | 134 | 473 | 157 | 318 |
| March | 60 | 129 | 121 | 238 | 77 | 389 | 89 | 279 | 51 | 228 | 52 | 88 | 38 | 102 | 44 | 201 | 93 | 148 | 90 | 206 | 91 | 171 | 151 | 238 | 40 | 81 | 42 | 101 | 74 | 324 | 80 | 308 | 85 | 88 | 58 | 138 | 88 | 163 | 104 | 231 | 64 | 176 | 93 | 209 |
| April | 60 | 121 | 190 | 389 | 101 | 168 | 163 | 298 | 40 | 75 | 87 | 155 | 40 | 105 | 73 | 168 | 91 | 282 | 69 | 180 | 149 | 168 | 89 | 118 | 91 | 160 | 158 | 375 | 74 | 126 | 132 | 241 | 57 | 150 | 118 | 207 | 94 | 189 | 149 | 268 | 62 | 151 | 91 | 250 |
| May | 63 | 118 | 116 | 240 | 78 | 148 | 101 | 220 | 36 | 58 | 58 | 117 | 33 | 67 | 50 | 112 | 89 | 261 | 66 | 168 | 78 | 285 | 121 | 314 | 48 | 106 | 79 | 221 | 79 | 168 | 80 | 209 | 61 | 98 | 90 | 198 | 86 | 161 | 109 | 198 | 58 | 148 | 88 | 198 |
| June | 51 | 82 | 105 | 237 | 63 | 108 | 92 | 189 | 31 | 52 | 52 | 84 | 141 | 92 | 51 | 103 | 88 | 96 | 64 | 231 | 85 | 105 | 83 | 161 | 35 | 52 | 62 | 120 | 56 | 140 | 72 | 261 | 57 | 72 | 82 | 146 | 78 | 104 | 106 | 228 | 58 | 82 | 82 | 250 |
| July | 31 | 81 | 75 | 119 | 40 | 65 | 49 | 81 | 20 | 34 | 29 | 40 | 21 | 44 | 33 | 57 | 76 | 82 | 58 | 138 | 55 | 76 | 56 | 97 | 23 | 50 | 34 | 56 | 36 | 64 | 63 | 106 | 36 | 60 | 47 | 78 | 50 | 63 | 65 | 120 | 55 | 76 | 71 | 186 |
| August | 43 | 86 | 83 | 141 | 52 | 106 | 67 | 120 | 27 | 52 | 33 | 56 | 28 | 61 | 36 | 91 | 45 | 116 | 50 | 91 | 61 | 171 | 72 | 176 | 30 | 100 | 45 | 92 | 59 | 130 | 78 | 147 | 45 | 124 | 61 | 107 | 65 | 124 | 82 | 131 | 60 | 78 | 68 | 172 |
| September | 85 | 261 | 115 | 218 | 104 | 178 | 90 | 169 | 58 | 121 | 59 | 121 | 26 | 59 | 32 | 74 | 81 | 157 | 61 | 138 | 100 | 198 | 103 | 164 | 61 | 117 | 67 | 121 | 95 | 179 | 100 | 161 | 76 | 181 | 83 | 176 | 100 | 151 | 119 | 158 | 89 | 187 | 67 | 159 |
| October | 120 | 231 | 200 | 318 | 171 | 342 | 167 | 310 | 82 | 159 | 86 | 174 | 74 | 240 | 72 | 182 | 148 | 527 | 82 | 171 | 91 | 161 | 148 | 459 | 74 | 176 | 74 | 178 | 131 | 210 | 131 | 210 | 102 | 184 | 120 | 231 | 151 | 281 | 171 | 250 | 97 | 192 | 75 | 174 |
| November | 162 | 601 | 161 | 398 | 268 | 761 | 164 | 401 | 138 | 488 | 116 | 310 | 118 | 241 | 75 | 172 | 142 | 512 | 73 | 165 | 299 | 888 | 198 | 361 | 178 | 843 | 110 | 461 | 175 | 459 | 132 | 251 | 183 | 542 | 134 | 310 | 232 | 664 | 158 | 333 | 98 | 591 | 172 | 439 |
| December | 151 | 645 | 172 | 529 | 217 | 988 | 168 | 588 | 126 | 486 | 104 | 334 | 113 | 490 | 91 | 327 | 136 | 589 | 164 | 305 | 240 | 620 | 172 | 520 | 132 | 1018 | 101 | 586 | 143 | 589 | 130 | 339 | 167 | 442 | 129 | 353 | 181 | 704 | 140 | 481 | 127 | 276 | 193 | 465 |

ma—Monthly Average. hdr—Highest Daily Reading.

**Heaviest Pollution**—
Smoke—Lowwood Park, 12th December: 1,018 ug. per cu. m.
$SO_2$—Templemore Avenue, 17th December: 588 ug. per cu. m.

**Lightest Pollution**—
Smoke—Balmoral Avenue, 1st August: 5 ug. per cu. m.
$SO_2$—Queen's Bridge, 28th June: 11 ug. per cu. m.

## PORT HEALTH

The Belfast Port Sanitary Authority was created by the Local Government Board (Ireland) Provisional Orders Confirmation (No. 4) Act, 1900. Under Section 26 (4) of the Public Health Act (N.I.) 1967, the former Act ceased to have effect as from 1st April, 1968 and the other parts of Section 26 of the latter Act had the effect of making the Port of Belfast part of the area of the County Borough of Belfast. Any functions under any enactment exerciseable by a health authority as respects any waters forming part of a port may be undertaken by the Health Authority of the County or County Borough. In exercising such functions, the Health Authority for the County Borough of Belfast may be known as the Belfast Port Health Authority. The Port of Belfast is defined by Schedule 5 of the Public Health and Local Government (Administrative Provisions) Act (N.I.) 1946 (as amended) as "the part of the port of Belfast established for the purposes of the enactments relating to the customs of the United Kingdom which lies on the landward side of a straight line drawn from Blackhead in the Larne Rural District to Orlock Point in the North Down Rural District including (a) the waters of that port within such limits and (b) all harbours, docks, basins, wharves, bays, creeks, channels, rivers, weirs and streams which abut on or flow into those waters." This includes the harbours of Bangor and Carrickfergus and the jetty at Kilroot, at which some foreign-going and coastal ships arrive.

A further change in the legislation affecting Port Health was the Imported Food (Northern Ireland) Regulations, 1968 which replaced the Public Health (Imported Food) Regulations 1937–1948. Much of the substance of the 1937–1948 Regulations pertaining to the entry into Northern Ireland of unsound food or that of doubtful quality, composition or preparation has been retained in the new regulations, but additional provisions have become necessary because of the revolutionary changes in land/sea carriage of goods generally and foodstuffs in particular, especially methods of packaging necessary for containers and pallets to ensure protection against damage, pilferage or deterioration of goods in transit.

Conveyance of foodstuffs to Northern Ireland by container is as yet limited to cross-channel passage between Preston, Garston or Liverpool and Belfast, augmented by the carriage of loaded and secured vehicles and trailers, (including insulated or refrigerated vehicles and containers) in special coastal vessels and the express passenger car ferries and steamers engaged in the normal cross-channel services.

The bulk of imported foodstuffs from foreign sources arrives as loose cargo, mainly consigned direct from European ports, cartoned (preserved or canned goods) or in bags or nets (fruit, vegetables, pulses, etc.). Canned meat products and butter arrive from Scandinavian, Dutch and German ports in cartons secured to pallets for easy handling. Considerable quantities of canned goods arrive from Canadian, Australian and African ports, together with preserved and dried fruits. The packaging of these consignments is sufficiently strong to withstand the rigour of long sea voyages. On these occasions the entire content of the consignment is available for inspection whilst on board, during discharge or setting down in shed, whereas in the case of containers, vehicles or trailers (many of which are secured to final destination) inspection has to be deferred until unpacking takes place at depots, consignees' premises or stores inland at some distance from the port. Thus close liaison is necessary between importers, H.M. Customs, local authorities and the Port Health service, so that the inspection of imported food, previously carried out by the Port Health staff at landing of cargoes, may be done elsewhere by inspectors of the health authority in the area of final destination. This is particularly necessary where Customs clearance has been deferred until arrival at final destination.

The prohibition of entry of imported unsound food has been extended to include food not satisfying the requirements of regulations made under the Food and Drugs Act (Northern Ireland) 1958. The definition of meat has been amended to include the flesh, etc., of all mammals other than rabbits and hares and the permitted period of detention of foodstuffs has been increased from 48 hours to 6 days (including Saturdays and Sundays) in order to enable additional measures such as bacteriological examination and analysis to be completed where necessary. The requirement of the attachment of official certificates to all imported meat or meat products has been extended to include similar imports which have been landed at ports in the Republic of Ireland and the Channel Islands and (whether or not they have been subjected to any process or treatment) have been re-exported to Northern Ireland. Where, due to a bona fide mistake or mishap, an official certificate is absent or not of required conformity, acceptance of the consignment for distribution is subject to enquiry and consultation between the British Ministry of Agriculture, Fisheries and Food and the Northern Ireland Ministry of Health and Social Services. All specified notices, certificates and undertakings have been produced in uniform manner acceptable to all Port Health Authorities and others concerned.

Examination and sampling for physico/chemical analysis was done on all consignments of groundnuts in shell imported from abroad. In no case was aflatoxin found to be present. Similar

action was taken in respect of desiccated coconut imported from Ceylon: in no case were intestinal pathogens isolated on bacteriological examination.

The M/V *Dorset* arrived at the port direct from Australia with three large containers of canned fruit. This is the first direct importation of such goods by container direct from manufacturer to importer. Handling of the 86,400 cans was confined to the manufacturer's and importer's premises, this obviating pilferage and damage. 10 pallets of cans were packed into each container and the cans were enshrouded by shrink-wrapping in clear plastic, instead of in cartons. This experiment has been so successful that at least half of next year's Australian canned fruit will be imported in this manner.

The refrigerated cargo vessel *Tekoa* arrived on 20th January from South Island, New Zealand, with a consignment of approximately 20,000 frozen lamb carcases, cartons of offals and tierces of sausage casings. The utmost care was taken to ensure hygienic handling of the cargo both at discharge and in loading into containers for delivery to local cold stores. The dockers and loaders were provided with white protective clothing and head covering also clean burlap wrapping for legs and those dockers working in the holds, with a "clean" area created on the weather deck for the donning and removal of protective foot and leg covering. Clean wooden walk-boards were laid upon carcases in the holds, where unloading involved walking over them. Special metal trays were used in the landing of cargo on to elevated platforms erected on the quayside, from which loading into meat containers took place. The interiors of the containers were inspected before loading was permitted and any which were considered unsuitable were rejected. The inspection of the cargo, with particular attention to official certificates, was continuous during discharge. A further 20,000 mutton and lamb carcases arrived from the same source by the M/V *Westmoreland* on 27th March. Similar conditions of cargo discharge were applied and supervision and inspection of the consignment was maintained until discharge was completed.

Exported foodstuffs included frequent consignments of large quantities of whelks to London, Le Havre and Rotterdam. In addition to the continuous export of fresh pork to North American, Canadian and cross-channel ports, a 200 ton consignment of boneless beef was shipped by the M/V *Arctic* to North America for canning and manufacturing purposes. The arrival of the new drive-through car ferry M/V *Lion* on 3rd January commenced the daily Belfast/Ardrossan daylight service which, since the termination of nightly sailings to Glasgow, has become the sole passenger service direct from Belfast to Scotland. A considerable quantity of foodstuffs in vehicles, trailers and containers is conveyed on this vessel, as both outward and inward traffic.

The 100-year old direct freight service with Cardiff has been discontinued and replaced by a unit load container service through English North-Western ports. Most of the cross-channel cargo, which in the past was discharged into dockside sheds throughout the harbour estate and there sorted for distribution, is now in containers and is despatched intact to local depots or consignee's premises by a daily (instead of, as previously, a weekly) service.

Enlargement of existing container berths, installation of cargo handling equipment and improvement of container bays and parking areas continues. On the east side of the river the new drydock, 1,100 feet long and 165 feet wide, although not yet fully operational, received the new 100,000 d.w. tons bulk carrier *Skaufast* for completion of hull painting. The new building dock at present under construction at the Musgrave Channel will occupy a large section of the Channel, at which in the past vessels undergoing refit or completion were moored. A 75-acre area of foreshore adjoining Airport Road West and Musgrave Channel, extending seaward to the Oil Refinery Wharf, is in the process of reclamation.

At the Richardson Wharf plant has been installed to expedite the discharge of bulk cargoes of potash, phosphate, sulphur, etc., for use in the manufacture of chemical fertilizers at the nearby factory. A further crane, equipped with special tight-closing grabs to minimise spillage and resultant dust dissemination, together with a hopper, have also been provided on the jetty. To prevent leakage at the point of hopper discharge onto the belt conveyor, screens have been fitted and the entire conveyor from jetty to factory is enclosed in an elevated structure.

The previous method of cargo discharge was by crane and hopper into open trucks which conveyed the chemicals to the factory by road, creating hazard and annoyance from chemical dust, not only to people in the vicinity, but to canteens and foodstuffs in dockside sheds.

In at least 10 instances early detection followed by removal or turning over of harbourage, prior to Warfarin baiting, prevented rodent infestation becoming established in a number of dockside sheds and provender stores.

Instances of dark smoke emission from ships funnels have continued to decrease and any such emissions were reduced or stopped on complaint to Masters or Chief Engineers.

Regular contact was maintained with the officers of the Landing, Shipping and Waterguard branches of H.M. Customs and Excise, the Home Office Immigration Branch, the Marine Survey Branch of the Board of Trade, the Portal Inspection Branch of the Ministry of Agriculture, the Belfast Harbour Commissioners, the Belfast and District Water Commissioners and the Harbour Masters of Bangor and Carrickfergus, all of whom have been most helpful and co-operative.

*Vessels launched by Harland and Wolff Ltd. in* 1968

| | | Gross Tons |
|---|---|---|
| *Thara* | Bulk Carrier | 41,089 |
| *Skaufast* | Bulk Carrier | 57,204 |
| Naval Craft | | 2,650 |
| Small Craft | | 241 |

*Vessels inspected during refit*

| | |
|---|---|
| Cargo vessels:– | Aulica, Brookmount, Container Enterprise, Container Venturer, Empire Star, Essequibo, Fylrax, Gunvar Stormer, Hayclon Wave, Hamilton Sleigh, Hemisinus, Italia Martelle Fassio, King Jaja, Knud Sif, Magdalena, Mayfair Sapphire, Onitsha, Opportunity, Pacific Coast, Persic, Platidia, Pointer, Roelaf Buisman, Santona, Sheraton, Slieve Bearnagh, Sugar Crystal, Surrey Trader, Talisker, Thessaly, Trangermania, Venana, Vinland. |
| Tankers:– | British Sovereign, British Talent, Esso Mercia, George Peacock, Methane Progress. |
| Cross-channel cargo/passenger vessels:– | Duke of Argyll, Duke of Lancaster, Duke of Rothesay, Hibernia, Leinster, Scottish Coast, Ulster Prince, Ulster Queen. |
| Naval:– | 4 vessels. |
| Tugs:– | Meadow, Piper. |

## Amount of shipping entering the port in 1968

**TABLE B** 10

| From | Number | Tonnage | Number inspected | | Number recorded as defective | Ships on which defects have been remedied | Ships reported as having had infectious disease on board during the voyage |
|---|---|---|---|---|---|---|---|
| | | | By Medical Officer | By Port Public Health Inspector | | | |
| FOREIGN: Steam / Motor | 1,325 | 2,027,688 | 6 | 1,265 | 68 | 60 | 7 |
| COASTWISE: Steam / Motor | 5,930 | 4,908,351 | 26 | 1,275 | 70 | 65 | 1 |
| TOTALS | 7,255 | 6,936,039 | 32 | 2,540 | 138 | 125 | 8 |

Included in the above table are arrivals at Bangor, Carrickfergus and Kilroot.

## Character of trade of port

(a) *Passenger traffic (other than coastwise) during the year:–*

**TABLE B** 11

| Passengers | Aliens | | British and Commonwealth | | Total | | Refused leave to land/embark |
|---|---|---|---|---|---|---|---|
| | Forces | Civilian | Forces | Civilian | Forces | Civilian | |
| Inwards by ship | 20 | 562 | — | 867 | 20 | 1,429 | 12 |
| Inwards by aircraft | 50 | 1,062 | 918 | 7,797 | 968 | 8,859 | — |
| TOTAL | 70 | 1,624 | 918 | 8,864 | 988 | 10,288 | 12 |
| Outwards by ship | 16 | 226 | — | 694 | 16 | 920 | — |
| Outwards by aircraft | 2 | 1,703 | 895 | 8,137 | 897 | 9,840 | — |
| TOTAL | 18 | 1,929 | 895 | 8,831 | 913 | 10,760 | — |

(b) *Cargo traffic:–*

Principal Imports:—Maize; wheat; barley; oats; flour; butter; fresh, dried and canned fruits; meat and meat products; tea; sugar; fish; vegetables; eggs (frozen and powder); confectionery; chocolate; desiccated coconut; wines; ales; cordials; carobs; grain offals; cattle, pig and poultry fodder; hides (cured); timber; wood-pulp; paper; flax; hemp; coir; sisal; rayon fibre; soap; chemicals; drugs; fertilisers and ancillary materials; crude and industrial oils; coal; coke; duralium; tin plate; iron; steel; brass; copper and alloys; machinery; hardware; cement; building materials; vehicles; tar; asphalt; rubber; tobacco (leaf and manufactured); cigarettes; potash; phosphate rock; sulphur.

Principal Exports:—Confectionery; chocolate; milk (preserved and condensed); eggs; bacon; pork; beef; poultry; rabbits; hares; fresh fish; shellfish; potatoes; apples; pears; grass-seed; live cattle; sheep and pigs; hides (wet); feeding stuffs; machinery; rope; twine; felt; linen; scrap metal; oil; motor spirit; tobacco; cigarettes; whiskey.

(c) *Foreign ports from which ships arrived:–*

**TABLE B** 12

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Aarhus | 10 | Eidjhavn | 1 | Leningrad | 2 | Puerto La Cruz | 2 |
| Abidjan | 1 | Eskifjordur | 1 | Les Sables D'olonne | 2 | Quayaquil | 1 |
| Abo | 3 | Famagusta | 15 | Le Treport | 20 | Quebec | 8 |
| Adelaide | 1 | Fecamp | 7 | Libourne | 2 | Raufarhofn | 2 |
| Ahus | 4 | Fort Lauderdale | 1 | Lidkoping | 1 | Rauma | 3 |
| Ala | 2 | Forteliberte | 1 | Limasol | 11 | Reykjavik | 2 |
| Algiers | 1 | Fortwilliam | 1 | Lisbon | 4 | Riga | 10 |
| Allepy | 1 | Frederica | 1 | L'Orient | 2 | Rio de Janeiro | 1 |
| Almeria | 3 | Frederikshund | 1 | Lourenco Marques | 3 | Ronneby | 1 |
| Amsterdam | 52 | Freetown | 3 | Luderitz | 1 | Ronnebyhamn | 2 |
| Annaba | 1 | Fremantle | 1 | Lysetsil | 1 | Rotterdam | 194 |
| Antwerp | 45 | Fuglefjord | 2 | Madras | 1 | Rouen | 52 |
| Archangel | 10 | Gdansk | 2 | Malmo | 2 | St. John, N.B. | 8 |
| Arendal | 2 | Genoa | 4 | Maloy | 1 | St. Malo | 4 |
| Ashdod | 15 | Ghent | 48 | Malta | 1 | Salvador | 1 |
| Bainbeuf | 1 | Gibraltar | 1 | Mantyluoto | 2 | San Antonio | 1 |
| Baltimore | 2 | Gluckstadt | 1 | Marans | 1 | Sandarne | 1 |
| Baranquilla | 1 | Gold River | 1 | Marin | 3 | San Francisco de Paol | 1 |
| Bayonne | 18 | Gothenburg | 30 | Marmagoa | 1 | San Lorenzo | 1 |
| Bedi Bunder | 2 | Groningen | 3 | Marseilles | 1 | Santos | 1 |
| Beira | 9 | Gruvon | 2 | Martinniem | 1 | Sapele | 1 |
| Beaumont | 1 | Haifa | 4 | Matarani | 1 | Sarpsborg | 4 |
| Bergen | 2 | Haiti | 1 | Melbourne | 1 | Sas Van Ghent | 1 |
| Bilbao | 1 | Halden | 1 | Mena-al-Ahmadi | 9 | Savannah | 1 |
| Boca Grandee | 1 | Halifax | 4 | Middelharnis | 1 | Shanghai | 1 |
| Bombay | 4 | Halmstad | 11 | Millazzo | 1 | Siglufjord | 1 |
| Bordeaux | 8 | Halsa | 1 | Mombasa | 8 | Singapore | 1 |
| Brake | 1 | Hamburg | 25 | Montevideo | 1 | Skagen | 3 |
| Bremen | 10 | Hamilton, Ontario | 2 | Montreal | 23 | Steinhamn | 1 |
| Breskens | 3 | Hamina | 13 | Moss | 1 | Stockvik | 1 |
| Bridgewater, N.S. | 1 | Hango | 1 | Mostaganem | 1 | Svartvik | 2 |
| Brighton (Trindad) | 1 | Haugesund | 2 | Namsos | 1 | Swijndrecht | 1 |
| Brisbane | 1 | Harbour Breton | 2 | Nantes | 1 | Swinoujscie | 3 |
| Brussels | 10 | Harbour Grace | 1 | Napier | 1 | Szczecin | 6 |
| Beunaventura | 1 | Helsingborg | 1 | Naples | 5 | Takoradi | 2 |
| Buenos Aires | 3 | Hirtshals | 6 | Neuss | 2 | Tanga | 1 |
| Caen | 4 | Honfleur | 32 | Neuvitas | 1 | Tema | 1 |
| Calcutta | 3 | Hong Kong | 2 | New Orleans | 4 | Terneuzen | 12 |
| Callao | 2 | Hsinkiang | 1 | Newport News | 8 | Three Rivers | 4 |
| Capelle-des-Bois | 1 | Husnes | 2 | New Westminister | 2 | Timaru | 1 |
| Capetown | 10 | Igarka | 1 | New York | 1 | Toledo | 2 |
| Cartagena | 6 | Ijmuiden | 6 | Norfolk, Va. | 7 | Topilla | 1 |
| Chalna | 1 | Kalamata | 1 | Norrkoping | 4 | Toronto | 1 |
| Chicago | 2 | Kalingrad | 2 | Odda | 1 | Trelleborg | 1 |
| Chimbote | 1 | Kalmar | 2 | Odense | 1 | Trinidad | 1 |
| Chittagong | 2 | Kandla | 1 | On | 1 | Treraa | 1 |
| Cleveland | 1 | Karachi | 3 | Oran | 4 | Tromso | 3 |
| Coatzocoalco | 4 | Karlshamn | 2 | Oslo | 20 | Trondhiem | 1 |
| Cochin | 4 | Karlskrona | 4 | Ostend | 2 | Tyboron | 1 |
| Constanza | 2 | Karlstad | 6 | Paimpol | 2 | Uddevalla | 2 |
| Copenhagen | 22 | Katwijk-an-zee | 1 | Parrsboro | 1 | Vadhiem | 1 |
| Cristobel | 3 | Kharg Island | 13 | Pasajes | 5 | Vadso | 1 |
| Dakar | 14 | Kitimat | 1 | Pastelillo | 1 | Valencia | 5 |
| Dalhousie | 2 | Klaipeda | 2 | Penang | 2 | Valetta | 1 |
| Dar-es-Salaam | 2 | Koping | 7 | Pensacola | 1 | Vancouver | 2 |
| Detroit | 1 | Kotka | 16 | Philadelphia | 6 | Ventspils | 8 |
| Dieppe | 1 | Kristiansund | 1 | Pornic | 1 | Viarreggio | 2 |
| Donsto | 1 | La Ciotati | 1 | Port Alfred | 2 | Vizakapatnam | 1 |
| Dordrecht | 1 | Lagos | 8 | Port Arthur | 6 | Walvis Bay | 6 |
| Douarnenez | 1 | Landskrona | 1 | Port Elizabeth | 1 | Wemeldinge | 1 |
| Drammen | 3 | La Pallice | 2 | Porto Alegre | 2 | Weymouth, N.S. | 2 |
| Dunkirk | 7 | Larvik | 3 | Port St. Joe | 1 | Wilhelmshavn | 3 |
| Durban | 10 | Le Havre | 2 | Port Sulphur | 1 | Wilmington | 1 |
| Dusseldorf | 1 | Le Leque | 1 | Port Sweetenham | 1 | Yokohama | 2 |
| East London | 2 | Le Lulea | 4 | Possoli | 1 | Zanzibar | 1 |

*The nationalities of vessels which were inspected on arrival at the port were as follows:–*

**TABLE B** 13

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| American | 1 | Finnish | 13 | Italian | 6 | Republic of Ireland | 36 |
| Belgian | 4 | French | 36 | Lebanese | 1 | Rumanian | 2 |
| British | 1,180 | German (E) | 4 | Liberian | 25 | Russian | 32 |
| Canadian | 1 | German (W) | 349 | Maltese | 1 | South African | 6 |
| Colombian | 1 | Ghanaian | 1 | Monegasque | 1 | Spanish | 10 |
| Cypriot | 8 | Greek | 17 | Nigerian | 3 | Swedish | 17 |
| Danish | 90 | Hungarian | 1 | Norwegian | 62 | Swiss | 3 |
| Dutch | 585 | Icelandic | 4 | Panamanian | 7 | Uruguayan | 1 |
| Faroese | 3 | Indian | 11 | Polish | 15 | Yugoslavian | 3 |

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

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

| | |
|---|---|
| Ships carrying aliens (including those granted temporary shore leave) | 172 inwards; 75 outwards |
| Aircraft carrying aliens | 105 inwards; 114 outwards |
| Granted temporary shore leave | 90 |

**Water supply**

(a) *and* (b) *for the port and shipping:—*

The port fresh water supply is obtained from the Belfast City and District Water Commissioners' mains which feed the Belfast Harbour Commissioners' quayside mains and hydrants. Vessels are supplied from quayside hydrants by the use of meter/standpipes and hoses under the control of the Water Commissioners.

(c) *Water boats:—*

There are no water boats at the port. Local tugs supply fresh water on the rare occasions when ships are anchored off-shore.

*Water Sampling*

53 samples of drinking water were taken on board vessels and submitted to the Central Laboratory for bacteriological examination. 52 of these samples were found to be highly satisfactory: one was unsatisfactory due to the presence of coliform organisms. Where examination revealed contamination the ship's water tanks, pumps and systems were thoroughly flushed and chlorinated with effective results.

**Public Health (Ships) Regulations (Northern Ireland) 1954-1964:—**

*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 to 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 Public Health Inspector 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. 629 completed Declaration of Health forms were received from vessels arriving at the port from foreign ports other than "excepted ports."

*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 Health Authority.

*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 Health 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 Health Authority and the Officers of H.M. Customs and notifications of ships requiring special attention are received from the latter

*Mooring stations designated under Regulations 22 to 30:—*

With the concurrence of H.M. Customs and the Belfast Harbour Commissioners, the ordinary places of mooring, discharge or loading have been designated mooring stations in relation to inward ships from foreign ports.

*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.

*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 or 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 ships is carried out by the Port Public Health Inspectors. 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 N.I. 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:—* No notifications regarding contacts of infectious diseases were received from other Sea and Airport Health Authorities during the year.

*Regulation 9: Arrangement for the diagnosis and treatment of venereal diseases among seamen under international agreement:—*

Upon the arrival of a ship in the port, the Master is informed of arrangements for the diagnosis and treatment of venereal disease amongst the seamen. Pamphlets are left which give the location and time of V.D. Clinics and warning of the danger of venereal disease. If continuation of treatment at another port is necessary, the seaman's V44 is completed by the Medical Officer of the V.D. Clinic with particulars of treatment given. The Belfast Harbour Commissioners have permitted the display in the port area of Health Department notices warning of the necessity for diagnosis and information on treatment centres.

*Arrangements for interment of the dead:—*

These are dealt with by the shipping companies or their agents.

*Cases of notifiable and other communicable diseases landed from ships (including coastwise ships)*

**TABLE B 14**

| Diseases | Cases | | Ships concerned | Average cases for previous five years |
|---|---|---|---|---|
| | Passengers | Crew | | |
| Dysentery | — | 2 | 2 | 1 |
| Gastro-enteritis | — | 1 | 1 | — |
| Influenza | — | 2 | 2 | 9 |
| Mumps | — | 1 | 1 | 1 |

*Cases of notifiable and other communicable diseases occurring in vessels during voyage but disposed of prior to arrival*

**TABLE B 15**

| Diseases | Cases | | Ships concerned | Average cases for previous five years |
|---|---|---|---|---|
| | Passengers | Crew | | |
| Chickenpox | — | 1 | 1 | 2 |
| Malaria | — | 1 | 1 | — |

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

*Other illnesses which occurred in vessels during voyage or present on arrival*

**TABLE B 16**

| Illness | Foreign-going | Coastwise |
|---|---|---|
| Appendicitis | 1 | — |
| Dental | 6 | 3 |
| Eye inflammation | 1 | — |
| Gastritis | 12 | 4 |
| Hepatitis | 1 | — |
| Injury | 15 | 7 |
| Kidney trouble | 1 | — |
| Laryngitis | 1 | — |
| Nephritis | 1 | — |
| Pleurisy | 1 | — |
| Rheumatism | 1 | — |
| Sinusitis | 1 | — |
| Synovitis | 1 | — |
| Venereal disease | 17 | 3 |

## Measures against rodents

*Steps taken for detection of rodent plague:—*

On ships in port:—All ships arriving from ports where plague is endemic are boarded by the Port Public Health Inspector 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.

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

If a vessel shows evidence of rat infestation or has come from a suspected port, rat guards have to be fixed and maintained fixed to all mooring lines during the time the vessel is in port. Other measures to prevent passage of rats over gangways, etc., may be required. Particular attention is paid to accumulations of materials likely to attract rats, such as galley swill deposited on decks or jetties and not contained in tightly-covered metal receptacles.

*Methods of deratting:—*

(a) On ships:—Eradication measures in a vessel are influenced by the extent and location of the infestation. Where it is slight and confined, trapping and warfarin baiting will suffice. In other cases fumigation with hydrogen cyanide is carried out by authorised contractors in accordance with the provisions of the Hydrogen Cyanide (Fumigation of Ships) Regulations (Northern Ireland) 1952 under the supervision of the Port Public Health Inspectors.

(b) Premises in the vicinity of docks, quays, etc:—Sheds, wharves, roads and open spaces in the Belfast Harbour Commissioners' Estate receive routine warfarin baiting. Occupiers of premises within the Estate readily accede to requests for provision of rodent repressive treatment at their premises. When necessary a written notice under the Rats and Mice (Destruction) Act, 1919 is served on the occupiers of the premises concerned.

*Measures taken for detection of rats:—*

(a) On ships:—Vessels arriving in the port are inspected by the Port Public Health Inspectors and Pests Officer to ascertain the presence and extent of rodent infestation or any condition which would encourage infestation.

(b) On shore:—Sheds, stores, other buildings and structures also timber stacks and open spaces receive continual inspection.

Inspections made by Pests Officer :—

| | |
|---|---|
| Vessels .. .. .. .. .. .. .. | 909 |
| Vessels – for issue of deratting exemption certificates .. .. | 146 |
| Dockside premises, sheds, stores, timber-stacks, building and fitting-out berths, yards and lands .. .. .. .. | 856 |

*Ratproofing:—*

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

The quaysides of docks and basins in the port are mainly of solid granite construction with ferro-concrete or granite sett surfacing. In the case of jetties, wharves and quay extensions, some rat harbourage does exist in the under-jetty piling and frame work also in the stone facing of the river bank but rat passage from one to the other is restricted by the sound construction of quayside surfacing. The use of concrete and/or granite setts laid on concrete in the construction of roads and shed floors ensures effective ratproofing in sheds and other dockside buildings.

(*b*) *Action to extend ratproofing:—*

(1) In ships:—Efforts are directed towards restricting free movement in vessels and preventing access to such attractive spaces as bilges for water, under ceilings, sheathing or casing for nesting and food stores. The use of tight fitting steel doors, sheet metal and expanded fine-mesh metal assures perfect protection.

(2) On Shore:—Dock-side premises are inspected to ensure that they are maintained in sound condition against the entry and harbourage of rodents and that material favourable to harbourage and feeding is not permitted to accumulate. Most owners and occupiers of premises in the port area are fully aware of the damage to merchandise caused by rodents and adopt all practicable measures to prevent their entry.

On 19 occasions accumulations of material offering rodent harbourage were turned over, restacked or removed and ratproofing was made good in 7 cases.

*Number of rats destroyed during year*

(1) On ships:—

**TABLE B** 17

| Species | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Black | — | 1 | 7 | 2 | 2 | 1 | — | — | — | 4 | 4 | — | 21 |
| Brown | — | — | — | — | — | — | — | — | — | — | — | — | — |

In addition to the above, 14 mice were destroyed.

**(2) In docks, quays, wharves, warehouses etc.:—**

**TABLE B** 18

| Species | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Black | 8 | 3 | 6 | 3 | 3 | 2 | 2 | 1 | 3 | — | — | — | 31 |
| Brown | — | 2 | — | 2 | — | — | 2 | 2 | 3 | — | 3 | — | 14 |

In addition to the above, 22 mice were destroyed.

The number of rats destroyed in the above table were those reported to the Port Public Health Inspectors and Pests Officer, following enquiry from sweepers, storemen, pests eradicating operators, etc.

*Measures of rat destruction on plague "infected" or "suspected" ships or ships from plague infected ports which arrived at the port during the year:*—No plague infected or suspected ships arrived at the port during the year.

*Deratting Certificates and Deratting Exemption Certificates issued during the year*

**TABLE B** 19

| Net tonnage | Ships | Deratting certificates issued | | | | | De-ratting exemption certificates issued | Total certificates issued |
|---|---|---|---|---|---|---|---|---|
| | | After fumigation with | | | After trapping, poisoning, etc. | Total | | |
| | | HCN | Sulphur | HCN and sulphur | | | | |
| Under 300 tons | 37 | — | — | — | — | — | 37 | 37 |
| From 301 tons to 1,000 tons | 35 | — | — | — | — | — | 35 | 35 |
| From 1,001 tons to 3,000 tons | 10 | — | — | — | — | — | 10 | 10 |
| From 3,001 tons to 10,000 tons | 34 | — | — | — | — | — | 34 | 34 |
| Over 10,000 tons | 11 | — | — | — | — | — | 11 | 11 |
| TOTALS | 127 | — | — | — | — | — | 127 | 127 |

Vessels where rodent infestation was slight were serviced by trapping and baiting and, where deemed necessary, notification of extent of infestation was given to the Port Health Authority of the port of final discharge.

## Hygiene of crews' spaces:

Classification of nuisances:—

**TABLE B** 20

| Nationality of ships | Inspected | Defects of original construction | Structural defects through wear and tear | Dirt, vermin, and other conditions prejudicial to health |
|---|---|---|---|---|
| British | 1,180 | 7 | 96 | 131 |
| Other nationalities | 1,360 | — | 6 | 32 |

The defects found consisted of:–

**TABLE B** 21

| **Defects due to wear and tear of the following:** | British | Other Nationalities |
|---|---|---|
| Bilge limbers and suctions | 2 | — |
| Bulkheads, shell and deck plating | 4 | — |
| Chopping blocks | 1 | — |
| Coffee, milk and tea boilers | 1 | — |
| Deckhead and bulkhead insulation | 5 | — |
| Decks | 8 | — |
| Doors | 2 | — |
| Drinking water filters | 2 | — |
| Flue pipes | 2 | — |
| Flushing valves | 3 | — |
| Fresh water systems | 2 | — |
| Fresh water tanks | 1 | — |
| Galley refuse shutes | 1 | — |
| Galley stoves | 11 | 1 |
| Heating systems | 2 | — |
| Port lights and windows | 7 | — |
| Refrigerators | 9 | 1 |
| Scupper pipes and fittings | 4 | — |
| Soil discharges | 1 | — |
| Tiling | 7 | 2 |
| Urinal discharges and stalls | 1 | — |
| Ventilation systems | 3 | — |
| Ventilators | 2 | — |
| Wash-basins | 4 | — |
| Waste discharges | 6 | 1 |
| W.C. basins | 2 | — |
| W.C. seats | 1 | 1 |
| **Other conditiond remedied:** | | |
| Bilges cleansed and painted | 6 | — |
| Crew and passenger accommodation cleansed | 18 | 4 |
| Crew and passenger accommodation painted | 15 | 3 |
| Dockside nuisances | 12 | 9 |
| Domestic refrigerators painted | 9 | — |
| Drinking water systems chlorinated | 4 | — |
| Drinking water tanks cleansed and cement washed | 19 | — |
| Lockers painted | 2 | — |
| Refuse on deck | 3 | 2 |
| Scuppers cleansed | 9 | 1 |
| Serviced for insects | 12 | 10 |
| Serviced for rodents | 4 | 3 |
| Sullage tanks cleansed | 3 | — |
| Swill bins provided | 2 | — |
| W.C. basins and compartments cleansed | 3 | — |
| Totals | 219 | 38 |

*Action taken following discovery of nuisances or other defects in vessels:–*

It was not necessary to issue formal written notices on any occasion as in every case of verbal notice to Masters, Duty Officers, Owners, or Shipping Agents (and, where vessels were undergoing refit, Marine Superintendents and Shipyard Managers) of nuisances and other defects, remedial action followed. Nuisances and other defects arising from defects in original construction of vessels and any contraventions of the Merchant Shipping (Crew Accommodation) Regulations, 1953, were notified to the Nautical Officers of the Board of Trade, Marine Survey Branch. Berths occupied by vessels (particularly the adjoining jetty surfaces) were kept under close observation to prevent soiling of dockside surfaces and contamination of water hydrants by overside discharge of soil and waste water. The berthing masters of the Harbour Commissioners give notice to masters of incoming vessels that discharges on to quayside surfaces are prohibited and that, where accidental discharges occur, immediate cleansing and hosing down of the dockside surface is required so as to avoid contamination being carried into adjoining sheds in which foodstuffs may be stored.

## Food Inspection

*Action taken under the Food and Drugs Act (N.I.) 1958 and Regulations made thereunder:–*

The following samples of food were taken and submitted to

(a) the Central Laboratory, for bacteriological examination:–

Luncheon Meat 1; Mussels (preserved) 1; Desiccated coconut 28; Egg noodle (Chinese) 1; Chopped ham 1.

(b) the Public Analyst for chemical analysis:–

Pears 24; Oranges 10.
and for physico/chemical analysis:– Groundnuts in shell, 5.

All cargoes of foodstuffs on board vessels, in containers or stored in dockside sheds and warehouses were kept under continuous observation and inspected regularly for the detection of unsound food or infringements of the Regulations made under the Food and Drugs Act (N.I.) 1958.

*Shellfish:—Information respecting any shellfish beds or layings within the area under the jurisdiction of the Port Health Authority, stating whether they are, in the opinion of the Port Medical Officer, liable to pollution:*—There are no layings of shellfish within the area.

*Report of any action under the Public Health Shellfish (N.I.) Regulations* 1936 *or the Food and Drugs Act (N.I.)* 1958:—None taken. Under the Belfast Corporation Act 1930, it is an offence to gather shellfish within the area of the Belfast Port Health Authority. Posters are exhibited in the vicinity of the Port area, warning the public against the gathering of shellfish.

*Unsound food seized or surrendered*

**TABLE B** 22

| | Tons | Cwts. | Lbs. |
|---|---|---|---|
| Biscuits | 1 | 1 | 22 |
| Butter | | 1 | 0 |
| Canned diced peaches and pears in syrup | | | 36 |
| Canned pear pieces in syrup | | | 39 |
| Canned fruit cocktail in syrup | | 4 | 68 |
| Cooking fat | | | 12 |
| Desiccated coconut | | 4 | 0 |
| Ginger cake mix | | | 56 |
| Glace cherries | | 2 | 30 |
| Onions | 3 | 5 | 0 |
| Pears | | 4 | 0 |
| Pine crush | | | 40 |
| Wine 5 gallons | | | |

*Dark Smoke (Permitted Periods) (Vessels) Regulations (N.I.) 1965: Smoke observations of ships' funnels–*

| | |
|---|---|
| Number of observations (each of 30 minutes' duration) made during the year ... ... ... ... ... ... | 5 |
| Number observed discharging black smoke over three minutes in a continuous period of 30 minutes ... ... ... ... | 2 |
| Number observed discharging dark smoke continuously for periods longer than those permitted in the Schedule to the Regulations, during a continuous period of 30 minutes ... ... ... | 3 |

Verbal notice was given by the Port Public Health Inspectors to Masters, Chief Engineers, and Ships' Managers on 5 occasions regarding the volume and duration of emission of dark and black smoke from ships' funnels. In every case immediate remedy was effected. Opportunity is taken, especially when visiting vessels which use steam in heating or propulsion, to contact Chief Engineers with a view to preventing emission of dark smoke from funnels while vessels are in the port.

*Routine and other inspections, additional to those tabulated elsewhere in the Report:–*

832 visits to cross-channel passenger vessels

1,299 re-inspections regarding defects, etc.

304 inspections regarding issue of deratting and deratting exemption certificates.

## FACTORIES AND SHOPS

Plans received from the City Surveyor's Department concerning alterations to existing buildings and erection of new buildings were examined and reported on as follows:–

| | |
|---|---|
| Bakeries ... ... ... ... ... ... ... | 3 |
| Bookmakers' offices ... ... ... ... ... | 6 |
| Car showrooms ... ... ... ... ... ... | 2 |
| Multi-storey car parks ... ... ... ... ... | 2 |
| Bread shops ... ... ... ... ... ... | 3 |
| Church buildings ... ... ... ... ... ... | 2 |
| Clubs ... ... ... ... ... ... ... | 3 |
| Dance halls ... ... ... ... ... ... | 1 |
| Dental surgeries ... ... ... ... ... ... | 1 |
| Factories ... ... ... ... ... ... ... | 12 |
| Hairdressers ... ... ... ... ... ... | 3 |
| Health studios ... ... ... ... ... ... | 2 |
| Hospitals ... ... ... ... ... ... ... | 2 |
| Hostels ... ... ... ... ... ... ... | 2 |
| Launderettes and dry cleaners ... ... ... ... | 11 |
| Mixed shops (non-food) ... ... ... ... ... | 19 |
| Office buildings ... ... ... ... ... ... | 38 |
| Schools ... ... ... ... ... ... ... | 17 |
| Sports pavilions ... ... ... ... ... ... | 3 |
| Warehouses and workplaces ... ... ... ... ... | 12 |

In addition to the above there were 21 reports made to the City Planning Officer on applications under the Planning Acts (N.I.) 1931 and 1944.

The following tables give details of the work carried out during the year in connection with the enforcement of the Factories Acts:–

| | |
|---|---|
| Number of factories (power) on register ... ... ... | 2,665 |
| Number of factories (non-power) ... ... ... ... | 238 |
| Other premises ... ... ... ... ... ... | 68 |

*Inspections for purposes of provisions as to health*

**TABLE B 23**

| Premises | Inspections | Notices issued | Occupiers prosecuted |
|---|---|---|---|
| Factories with mechanical power | 2,707 | 77 | — |
| Factories without mechanical power | 82 | 4 | — |
| *Other premises under the Act (including works of building and engineering construction, but not including outworkers' premises) | 221 | 6 | — |
| Totals | 3,011 | 87 | — |

* Electrical stations reckoned as factories

**TABLE B 24**

| Particulars | Instances | Remedied | Referred to Chief Factory Inspector | Prosecutions |
|---|---|---|---|---|
| Want of cleanliness (Sect. 1) | 97 | 91 | 6 | — |
| Overcrowding (Sect. 2) | — | — | — | — |
| Unreasonable temperature (Sect. 3) | 2 | — | 2 | — |
| Inadequate ventilation (Sect. 4) | 2 | 1 | 1 | — |
| Ineffective drainage of floors (Sect. 6) | 1 | — | 1 | — |
| Sanitary conveniences (Sect. 7) | — | — | — | — |
| Insufficient | 4 | 4 | — | — |
| Unsuitable or defective | 179 | 158 | — | — |
| Not separate for the sexes | 2 | 3 | — | — |
| Other offences (excluding offences relating to home-work, which are reported in Table B 25) | 13 | 4 | 9 | — |
| Totals | 305 | *241 | 19 | — |

* Defects remedied include defects outstanding from last year

*Factory Outworkers (Homework)*

**TABLE B 25**

| Nature of Work | Inspections | Outwork in unwholesome premises (Section 115) | | | Outwork in infected premises (Sections 116/117) | | |
|---|---|---|---|---|---|---|---|
| | | Instances | Statutory notices served | Prose-cutions | Instances | Orders made | Prosecutions |
| 1. Making, cleaning, washing, altering, ornamenting, finishing and repairing of wearing apparel | 5 | — | — | — | — | — | — |
| 2. Making-up, ornamenting, finishing and repairing of table linen (including in the term "linen" articles of cotton and linen mixture) | 164 | 2 | 2 | — | 3 | — | — |
| 3. Textile weaving and any process incidental thereto | Nil | — | — | — | — | — | — |
| Totals | 169 | 2 | 2 | — | 3 | — | — |

| | |
|---|---|
| Outworkers premises within the City, notified during the year ... | 225 |
| Notices sent to factories employing outworkers ... ... | 30 |
| Notices for failing to keep or send lists of outworkers ... ... | 9 |
| Outworkers notified from other districts ... ... ... | Nil |
| Outworkers notified to districts outside the City ... ... | 194 |

In addition to the provisions of the Factories Acts relating to Local Authority responsibilities, factories are also subject to the provisions of the Public Health Acts in so far as public health nuisances are concerned. Consequently, during visits to factories, such nuisances as damp conditions, structural defects, discharge of fumes, etc., are actioned under the Public Health Acts. Details are as follows:–

*Inspection of factories and workplaces under the Puplic Health Acts (N.I.) 1878 to 1926 and the Belfast Corporation Acts 1845 to 1961:–*

| | |
|---|---|
| Nuisances discovered ... ... ... ... ... | 128 |
| Statutory notices issued ... ... ... ... ... | 105 |
| Nuisances abated ... ... ... ... ... ... | 101 |
| Dangerous structures, risk of fire, etc., reported to the City Surveyor | 23 |

## Bakehouses

There were 193 bakehouses on the Department's register at the end of 1968, three fewer than in 1967. Eight of the smaller type bakeries ceased using the premises for baking purposes and five new bakeries were established. 1,200 visits were made on connection with the Food Hygiene (General) Regulations (N.I.) 1964, the investigation of foreign matter in foodstuffs and inspections during the course of alterations and improvements to existing and new bakeries.

**TABLE B 26**

| Defects | Instances | Notices | Remedied |
|---|---|---|---|
| Want of cleanliness in food rooms | 15 | 10 | 14 |
| Food rooms required decoration | 68 | 24 | 57 |
| Ceilings, walls, floors, doors, etc., in disrepair | 13 | 13 | 6 |
| Equipment worn or defective, required repair or renewal | 2 | 2 | 2 |
| Cleanliness of machinery, tables, benches, utensils not observed | 4 | 4 | 4 |
| Sanitary conveniences so placed that offensive odours could penetrate food room | 4 | 3 | 3 |
| Unsuitable refuse containers or disposal | 5 | 5 | 4 |
| Unsuitable washing facilities for personal hygiene | 9 | 9 | 7 |
| Hygiene notices not exhibited | 3 | 3 | 3 |
| Unsuitable washing facilities for equipment and machinery | 7 | 7 | 5 |
| Suitable and sufficient ventilation of food rooms not provided or maintained | 2 | 2 | 2 |
| Walls and ceilings of cooking and food preparation rooms not capable of being readily cleansed | 17 | 14 | 15 |
| Drain inlets in food rooms | — | — | — |
| Suitable precautions not taken to prevent contamination of food by insects, dirt, animals or otherwise | 23 | 21 | 20 |
| Unsuitable first aid equipment | 5 | 5 | 5 |
| Other defects | 16 | 12 | 13 |
| Totals | 193 | 134 | *160 |

* Defects remedied include defects outstanding from the previous year

The following foodstuffs examined in bakehouses were found to be unfit for human consumption and were surrendered and destroyed:–

2 x 70 lb. bags flour; 22 lbs. dates; 14 lbs. margarine; 4 doz. pastry; 7 lbs. currants.

## Bread Shops

| | |
|---|---|
| Breadshops on register at 1st January, 1968 ... ... ... | 360 |
| Deletions ... ... ... ... ... ... ... | 15 |
| Additions (new premises) ... ... ... ... ... | 20 |
| Bread shops on register at 31st December, 1968 ... ... | 365 |
| Inspections during the year ... ... ... ... ... | 1,879 |

**TABLE B 27**

| Defects | Instances | Notices | Remedied |
|---|---|---|---|
| Want of cleanliness in food rooms | 1 | 1 | 1 |
| Ventilation inadequate or not maintained | 1 | 1 | 1 |
| Ceilings, walls, windows, doors, in disrepair | 10 | 9 | 7 |
| Ceilings, walls, windows, doors, etc., required cleansing | 2 | 2 | 2 |
| Suitable and sufficient washing facilities not provided | 23 | 22 | 17 |
| Food rooms required redecoration | 4 | 1 | 4 |
| No first aid equipment | 3 | 2 | 3 |
| Adequate precautions not taken to prevent contamination of food | 16 | 16 | 9 |
| Unsuitable refuse containers and disposal | 2 | 2 | — |
| Other defects | 13 | 8 | 12 |
| Totals | 75 | 64 | *56 |

* Defects remedied include defects outstanding from the previous year

### Bread Vans

The inspection of bread vans with regard to hygiene and the provision of suitable and sufficient washing facilities under the Food Hygiene (General) Regulations (N.I.) 1964 continued throughout the year. 129 inspections of bread vans were made during the course of delivery of bread to houses and retail shops, with the following results:–

| | |
|---|---|
| Unsatisfactory personal cleanliness ... ... ... ... | 2 |
| Uncleanliness of vehicles ... ... ... ... ... | 7 |
| Unsatisfactory handwashing facilities ... ... ... | 8 |

In all cases verbal and written notices were issued and the conditions remedied. There were two cases of unsuitable bread vans and on representation the vehicles were immediately withdrawn from service.

Three inspections of flour mills were carried out during the year; apart from a few minor contraventions of the Food Hygiene Regulations a good standard of hygiene was maintained in these mills.

### Betting and Lotteries Act (N.I.) 1957

| | |
|---|---|
| Number of bookmakers' offices operating in the City ... ... | 111 |
| Applications made to the Courts for certificates of suitability ... | 121 |
| Number of certificates granted by the Courts ... ... ... | 114 |
| Objections made on health grounds ... ... ... ... | 7 |
| Applications refused by the Courts ... ... ... ... | 2 |

During the year five bookmakers' offices closed down and four new offices were established; this was partly due to housing re-development schemes in the City. One new application for a licence is still pending at the Courts. Of the seven objections by the Department to the granting of Certificates of Suitability on the grounds that the premises did not comply with the Office and Shop Premises Act and the Public Health Acts, four of the applicants were granted Certificates after they had given the Courts undertakings that the work required by the Department would be carried out before the premises were opened for business. One is still awaiting a decision by the Courts and the other two applications were not proceeded with. Six plans in connection with bookmakers' offices were received during the year involving structural alterations and improvements.

## OFFICE AND SHOP PREMISES ACT (N.I.) 1966

(Annual Report for the period 1st July, 1967 to 31st December, 1968)

This is the first report under Section 57 (1) of the Office and Shop Premises Act (N.I.) 1966 (which requires Health Authorities to submit annual reports to the Ministry of Health and Social Services on the enforcement of their duties under the Act) and covers the period from 1st July, 1967 to 31st December, 1968.

The Act repeals those sections of the Shops Act (N.I.) 1946 which dealt with the health and comfort of persons employed in shops, and makes more comprehensive provision for their health,

welfare and safety. The definition of shops covers a wider field of employment and, for the first time in Northern Ireland, lays down similar health provisions for the persons employed in office premises, which were not covered in previous enactments.

The Act came into force on 1st July, 1967 and for the first few months the Department was busy in making preparations to meet the problems of enforcement, compiling a register, training personnel who would be involved in enforcement, and setting up a small information centre within the department to deal with the expected flood of enquiries and to give advice to employers, employees and trade organisations throughout the City. At this stage, valuable assistance was received from the Ministry of Health and Social Services with their series of circulars containing information, advice and guidance on the provisions of the Act and from the Factory Inspectorate of the same Ministry, who arranged joint meetings to sort out problems, discuss uniformity of procedure and give advice on technical matters.

In accordance with Section 51 (1) of the Act the Health Committee approved the use of two Public Health Inspectors on a full-time basis and the part-time use of the Food and Drugs Staff during their normal visits to food premises, for enforcement of the Act. The full-time Inspectors were to be responsible for office premises and non-food shops, so as to avoid as far as possible unnecessary duplication of inspection.

*Registration: (Section* 48)

The obligation under Section 48 on employers of persons coming within the scope of the Act to register with their local Health Authority had a disappointing response as far as Belfast was concerned: there were periods in the early months when applications and completed O.S.P.1 forms came in large numbers but this soon tapered off to a trickle, in spite of continued widespread publicity by means of advertisements, the display of posters, etc. The Department found it necessary to carry out a house to house canvass of premises likely to come within the Act who had not yet made a return; this took the form of a crash effort by existing staff and Pupil Public Health Inspectors in conjunction with their normal duties and resulted in a steady flow of registrations, the awakening of employers to the fact that the Act was now in force and that they had new responsibilities with regard to the health and welfare of their staff. We have found quite a percentage of employers who have shown little interest in registering, under one excuse or another and, indeed, not a few who resented the request to register.

Other points observed under the heading of registration were the number of mistakes found in completed O.S.P.1's, particularly in the classification of employees: some firms forgot to include employees in an attached warehouse and girls employed in the canteen; others forgot employees out ill and on leave and some thought unstaffed employees – such as message boys and temporary staff – were not to be included. These discrepancies are only found out and corrected during a general inspection.

On the 31st December, 1968 a total of 4,071 registrations has been received by the Department, of which 133 related to premises outside the scope of Belfast Health Authority and these were forwarded to the Factory Inspectorate of the Ministry of Health and Social Services, leaving a total of 3,938 with the Department.

*Inspection*

Our Inspectors have reported that the provisions of the Act were in general well received and welcomed by employers and employees alike. Apart from a few exceptions, Inspectors were treated with courtesy and given every assistance during their visits. There were only four occasions when inspection was resented and two when admission was refused, but after further verbal representations and warning letters, the objections were withdrawn. It was found generally that employers had a genuine sense of responsibility towards their employees and were anxious to effect improvements. Indeed the Department received more requests from employers for an inspection to be carried out of their premises in order to comply with the provisions of the Act than we had from employees about non-compliance. It was also interesting to note the number of complaints we received from the general public, who phoned or called personally about insufficient heating or poor ventilation in shops they had visited. The Department gave priority to those premises newly coming under the Act which had not received attention under other enactments, such as office buildings, warehouses, wholesalers and non-food shops.

At the end of December, 1968, the first general survey of all premises coming within the scope of the Act had not been completed, but we are well advanced and it is thought that in mid-1969 the general survey should be completed. Special attention is being given to plans for alterations and the

rebuilding of premises coming within the Act so that the new provisions are incorporated as far as possible. Close liaison is maintained at all levels with the Factory Inspectorate of the Ministry and co-operation has been excellent.

*Cleanliness:* (*Section* 4)

During the period from 1st July, 1967 to 31st December, 1968 there were 382 instances of uncleanliness discovered which were actionable under the provisions of this Section. While the figure may appear high for this particular type of contravention, the actual percentage of gross uncleanliness found was comparatively small; the greater proportion were of a less serious nature such as variants of failures to secure the proper cleansing of walls, ceilings, windows, fittings, etc. Some doubts have been expressed as to whether the cleanliness provisions of this Section can include redecoration and enforcing Inspectors are concerned at the many instances of faded, discoloured and cracked paintwork, stained and discoloured wallpaper and flaking distemper which cannot be cleansed effectively otherwise than be redecoration. Up to the moment there have been no disputes on this question and possibly only a court case could decide the issue. Nevertheless, if redecoration was included in the provisions, a high degree of hygiene would result.

In office buildings, the worst conditions of uncleanliness were found in the common parts, particularly in the small buildings let out to several tenants, and where no-one seems to have any responsibility for even normal brushing (never mind regular cleansing). In the larger multi-occupied office buildings, cleanliness was indifferent. It was also observed that where the common parts of office buildings were ill-kept, there was a corresonndingly lower standard of cleanliness in the occupied offices. The storage of ashbins, bundles of wastepaper, old disused furniture, etc., on landings and stairways is a common practice found in shared office buildings. In shops, the store rooms, stairways, passages not in view of the public and the sanitary conveniences were the places in which cleanliness was lacking.

*Overcrowding:* (*Section* 5)

There were 33 instances of overcrowding under Section 5, but only in a few of these could it be said that the contravention was gross. Overcrowding is a new provision in Northern Ireland as far as office and shop premises are concerned and the Section lays down a minimum of 40 sq. feet (where the ceiling of the room is at least 10 ft. high) for each person employed (400 cubic feet per person where the ceiling height is less than 10 ft.). It was anticipated that this provision might cause hardship, expense and perhaps inconvenience to firms in their having to seek larger premises or having to make extensions or structural alterations to existing properties, so a proviso was inserted in the Section that these space requirements would not apply for a period of three years after the coming into operation of the Section (except in the case of rooms so overcrowded as to cause risk of injury to the health of the persons employed therein). Only in about a dozen of the 33 instances of overcrowding will structural alterations be necessary and these will not be of major consequence, as the firms concerned in two of the three bad cases have already moved to larger premises and one is in the process of negotiating an extension. The Department is of the opinion that the space standards in this Section will not present a great problem in the City and that by 1970, when the provisions come fully into force, there will be few contraventions. As the space standards do not apply to rooms to which members of the public are invited to resort, nearly all the contraventions were confined to office accommodation.

*Temperature:* (*Section* 6)

There were 2,203 contraventions actionable under the temperature section of the Act, but 1,959 concerned simple failure to provide or maintain thermometers, leaving some 244 contraventions of a more serious nature, consisting of failures to provide or maintain such heating facilities as to secure the minimum temperature prescribed under the Act, or the use of unsuitable heating apparatus giving off fumes likely to be injurious or offensive to the persons employed. In this connection it was surprising to find such a large number (137) of unsuitable appliances being used for heating purposes, particularly in offices, ranging from gas stoves without flues (in some cases the existing flues had been deliberately blocked up), to free-standing paraffin heaters without flues and requiring attention. Many of the unsuitable and dangerous heating appliances were found in small offices where one or two persons were employed and where the ventilation was poor or not being maintained. In one case of a small office where one female was employed and where the temperature of the office was reasonable, it was found that the oven of a gas cooking stove was being used for heating purposes, the door of the oven being left open to let out the heat and the stove not provided with a flue for the removal of fumes. The employee said that when the place got too warm she turned the oven off or opened the door a bit!

There were 36 instances of a reasonable temperature not being maintained; 57 cases where no heating facilities had been provided and 14 instances where facilities for warming had not been provided. The most numerous complaints received by the Department referred to inadequate heating in one form or another and, in those cases where the complaints were justified, most managements took immediate steps to remedy the conditions on our representations. We experienced some difficulty with a certain number of shops in the City who insist on keeping the entrance doors open during working hours, stating that their business would otherwise be affected. In such instances problems arise during a spell of cold weather, particularly when the heating facilities provided are adequate under normal circumstances.

*Lighting:* (*Section* 8)

In general survey we found 818 contraventions of the lighting provisions of Section 8 of the Act, mostly due to insufficient artificial and natural lighting in offices where persons were employed and absence of, or insufficient lighting on, stairways, landings, passages, storerooms, etc. The lighting provisions were also found interesting from the enforcement aspect in that, apart from the more modern buildings and the progressive employers who have realized the importance of good balanced lighting, the majority of employers and employees alike appeared to have given little or no thought to the subject and accepted what was really poor lighting as a matter of fact. This unawareness is borne out by the comparatively large number of contraventions found on inspection and yet not one complaint regarding lighting was received by the Department since the Act came into operation. Genuine surprise and interest was shown in many cases by employers and employees when informed of sub-standard lighting and when shown the recordings on light meters. Again, in the majority of instances, promises were given to have improvements carried out as soon as possible without the inspectors having to exert any marked persuasion. It was also gratifying to hear the many satisfied comments when good balanced lighting was provided.

We had one case of a single employee in an office where 5 lumens were recorded, who pleaded not to have improvements carried out as she thought it would have a bad effect on her eyes and another case of an employee who carried a 100 watt electric lamp in his pocket which he substituted for the existing 40 watt lamp when he found he couldn't see too well! We had cases in offices where the glare was very bad and other cases where the electric lighting gave readings of over 50 lumens in offices and the passages leading to and from the offices gave readings as low as 4 lumens. Buildings in multiple occupation had poor records for lighting to stairways, landings, passages and sanitary conveniences.

Section 8 (sub-section (1)) calls for effective provision to be made for securing and maintaining, in every part of premises in which persons are working or passing, sufficient and suitable lighting and sub-section (2) empowers the Ministry to make regulations prescribing standards of lighting, conformity with which shall be obligatory and sufficient to comply with sub-section (1).

Regulations prescribing standards have not yet been made under the Northern Ireland Act nor under the corresponding Act in Great Britain (which is two years longer in existence). Some enforcing authorities are critical of this lack and have expressed disappointment that standards of lighting have not been defined by regulations, so as to ensure uniformity of enforcement throughout the service. From our experience during practical survey of the lighting provisions to date, the Ministry's reluctance to make regulations may well be justified, having regard to the large number of premises covered by the Act, the varying conditions that may be found in them and the different attitudes adopted by employers from the very good to the very bad. It is also felt that the Ministry would have to take into consideration the prevailing conditions and available facilities in remote parts of the Province and, to meet all the problems that could arise, the standards might have to be set too low, which would be detrimental to the majority of the persons employed and out of step with the spirit of the Section.

Uniformity of enforcement could be achieved without regulations and the Ministry's letter in April 1967, proposing recommended standards of lighting and advice on the subject, is to be commended and may well be the most practical approach to the matter. The recommended standards are reasonably high but they can be enforced without undue hardship; not being legal they can be applied with flexibility to meet the few instances where special circumstances prevail. Indeed, up to the present, we have found no difficulty in applying the recommended standards provided they are applied with commonsense, but it cannot be too strongly stressed that enforcing authorities should get together to attain uniformity of approach and action, based on the Ministry's recommendations.

*Sanitary Conveniences:* (*Section* 9)

Contraventions under Section 9 of the Act and the Regulations made thereunder totalled 1,520, which was higher than expected, because of the fact that nearly all the shops in the City had received

attention in this respect under the old Shops Act (N.I.) 1946. It follows that most of the contraventions were found in office premises. The contraventions fell into the following categories:–

(a) 96 unsuitable sanitary conveniences; i.e., absence of intervening ventilated spaces between the water-closet apartments and the workrooms where persons were employed and unsuitable sanitary conveniences because of their type, position and accessibility;

(b) 116 instances of insufficient sanitary conveniences, either through absence of sanitary accommodation or less accommodation available to the persons employed than is required under the Regulations;

(c) 365 instances of sanitary conveniences not being maintained; i.e., defective basins and drainage; want of sufficient supply of water for flushing purposes; want of or defective seats; defective joints, etc.;

(d) 417 instances of uncleanliness, such as dirty basins; unclean floors, walls, ceilings, windows, etc.;

(e) 320 instances of inadequate lighting; absence of electric lighting, defective fittings; missing lamps and blacked out windows;

(f) 8 instances where the accessibility of the sanitary conveniences was unsuitable for various reasons;

(g) 198 instances where suitable provision had not been made for the disposal of sanitary dressings.

In only a small number of cases will there be difficulty in complying with the requirements. Mechanical ventilation had to be accepted in a few instances because of the situation of the sanitary conveniences and insufficient space for the provision of suitable intervening ventilated spaces. It was found that shared sanitary accommodation was the worst kept and the most difficult to keep clean and maintain in efficient order. The removal of fittings and the soiling of floors and walls were common features.

*Washing Facilities:* (*Section* 10)

There were 1,838 contraventions under Section 10 of the Act and the Regulations made thereunder (relating to the provision of suitable and sufficient washing facilities). The requirements are comprehensive and specific in their coverage, prescribing a supply of clean, running hot and cold or warm water with soap and clean towels or other suitable means of cleansing or drying. The place where the washing facilities are provided must be under cover, unclosed and reasonably accessible to the persons employed. The place and the facilities must be effectively lighted and ventilated, maintained in a clean condition and all the apparatus kept in good working order. The Regulations also specify the number of wash-basins to be provided for the number of persons employed and require the provision of separate facilities for each sex.

Of the 1,838 contraventions there were:–

(a) 1,387 straighforward cases of the absence of hot and cold or warm water laid on to the wash-basins;

(b) 178 instances of unsuitability or insufficiency for reasons of situation; unsatisfactory basins; sharing of facilities under unsuitable conditions; accessibility; not available at all times during working hours, etc., or insufficient facilities for the number of persons employed;

(c) 160 instances of unclean conditions relating to the wash-basins and apparatus and the apartment where the facilities were provided;

(d) 57 instances of inadequate lighting;

(e) 56 cases where soap and drying facilities were not provided.

There were very few instances where no washing facilities at all were available to the persons employed and little trouble is expected in this direction. The cleanliness and maintenance provisions present (and will present) problems in the many cases where shared washing facilities only are available and no-one appears to be responsible for their maintenance. Section 42 buildings have already shown this, where hot water apparatus has been removed, broken or put out of order within a short time

after installation; electric lamps removed; wash-basins abused and newly decorated walls defaced. There are no easy solutions in such cases except by trying to get co-operation by discussion with the sharing parties.

*Supply of Drinking Water:* (*Section* 11)

126 contraventions were recorded under this section concerning the provision and maintenance, at suitable places conveniently accessible to the persons employed, of an adequate supply of wholesome drinking water. This figure could very well be considerably increased when the full circumstances of the difficulties found during the initial survey are analysed. It can be appreciated that, during inspections, it is difficult to determine readily whether a drinking supply from a tap is direct from the mains or from a cold water storage tank somewhere in the roof of the building. This is especially the case in old buildings, where branches have been taken off over the years from whatever pipe is most convenient. There are other problems to be ironed out; for example, when the drinking supplies are found in water closet cubicles and are not accessible by other employees when the water closets are in use.

Further investigations are necessary, supported by samples of water submitted for bacteriological examination.

*Accommodation for Clothing:* (*Section* 12)

No difficulties were experienced under this Section, which requires the provision of accommodation for the external clothing of the persons employed not worn by them during working hours and for facilities for drying such clothing. As the requirements are so easy to comply with (ranging from a heated room specially provided for that purpose to cupboards or lockers and even nails in the wall in a heated atmosphere), the 65 contraventions recorded were mostly found in non-food shops where space was restricted and clothing was being accommodated in the water closet apartment or the wash-up room. The Section empowers the Ministry to make regulations determining what are suitable and sufficient facilities and prescribing a standard of arrangements for drying clothing but these have not yet been made.

*Sitting Facilities and Eating Facilities:* (*Section* 13)

The provision contained in Section 13 concerning opportunities for employees to use sitting facilities without detriment to the business and Section 15, requiring that persons who eat meals on the premises are to be provided with suitable and sufficient facilities, refer to shop premises only and are similar to the provisions of the old Shops Act (N.I.) 1946; consequently, only 39 contraventions were found. We did receive several complaints and enquiries about eating facilities in office premises but as they are **not** covered by the Act no action could be taken.

*Floors, Passages and Stairs:* (*Section* 16)

The large number of 718 contraventions discovered under this Section relating to defective construction of, and proper maintenance of, stairways, gangways, floors in workrooms, passages, landings, etc., keeping them free from obstruction and from any substance likely to cause persons to trip or slip, the absence of handrails or handholds, the absence of suitable guards to open sided stairways and gangways to prevent persons accidentally falling through the open spaces and the absence of guards or fencings to openings in floors, etc., shows the necessity for the provisions of the Section. It is one of the most important in the Act, requiring commonsense measures of safety to be applied to premises which were not covered specifically by previous legislation and which are responsible for the highest proportion of accidents. The enforcement of the provisions is not without problems and Inspectors often find they are the most difficult to put across. Both employers and employees may have grown up with conditions contrary to the provisions of the Section and are inclined to scoff at the requirements, often pointing out the number of years they have carried on business without anything happening. One employer who was persuaded to provide a handrail to a stairway which was used to convey large cartons of goods to and from a store above, phoned to say the handrail we made him provide was the cause of the first accident he had from he started business (his employee who had become so used to the stairway over the years forgot about the new handrail and struck it with a carton in his arms, fell, and sprained his back). The fencing of openings in floors where goods are lowered and sometimes thrown to floors below for storage or loading purposes and the protection of an area below the opening to prevent persons being struck, is objected to because it would slow down or interfere with normal practices.

Enforcing Inspectors have to be aware of the best methods to effect improvements without hampering trade and have to approach the matter with care and respect for the other person's point of view.

*Fencing of Exposed Parts of Machinery:* (*Section* 17 *to* 19)

There were 162 instances where it was considered that the exposed parts of machines and equipment were not adequately protected against the possible risk of injury to operators or to other persons employed in the premises and where it was necessary that fencing or guards or other safety devices be fitted. It is possible that the number of contraventions may be on the low side because of our lack of experience. It is a new field of operation for Public Health Inspectors. The Factory Inspectorate of the Ministry of Health and Social Services gave us great help to get off the ground with their lectures and discussions on safety precautions and the issue of Circulars and Supplements giving details and technical advice on dangerous machinery likely to be encountered. Two of our Inspectors attended a course of lectures and practical demonstrations giving by practising safety officers, which proved very beneficial and well worth the effort.

Under Sections 17 to 19 every dangerous part of machinery must be fenced unless the machine is so placed or so constructed as to be considered safe to the persons operating it and to the other persons working on the premises. Where fixed guards or fencing cannot be achieved without impairing the nature of the work of the machine, the fitting of an automatic device, which will stop the machine or prevent the operator coming into contact with the dangerous part, can be accepted in lieu. It is an offence under the Sections not to maintain in good working order or to keep in position any safety fencing or safety devices except when they need to be removed for examination, lubrication or adjustment of the machine (and then only by experienced persons over the age of 18). No young person under 18 years of age is allowed to clean dangerous machines or equipment if by so doing there is the risk of injury and no person of any age shall operate a dangerous machine unless he has been fully instructed as to the dangers and the safety precautions to be observed and has had sufficient training to operate the machine, or is under the supervision of a competent person who has thorough knowledge of the machine.

In the early stages of our survey of premises the Department decided to concentrate on office premises, wholesale shops and warehouses, which had received little prior attention under other enactments, with the result that the instances of machinery and equipment in offices, non-food shops, etc., are reflected in our returns on contraventions discovered. It was found that hand-operated guillotines without guards accounted for a large proportion of the contraventions. Guillotines are very common equipment in offices and departmental stores and are usually operated by junior staff and there were few instances of guards being fitted, either because they were old models manufactured without guards, or the original guards had been removed to accommodate larger operations than the machine was designed for. We made a point of discussing guillotines with insurance officials during our visits to their premises under the Act. They are considered the most dangerous items of office equipment and, over the years, have resulted in a startling number of claims. One official believes the number of minor injuries caused by unguarded guillotines and not reported would go into hundreds per year.

It was not unusual to find small circular saws, band saws and electric drill type saws in the "do it yourself" shops, warehouses and other premises coming under the Act, where the guards were absent or had been removed and where they were being operated under the most unsatisfactory conditions, such as overcrowded rooms with piles of timber and hardboard all over the place and under the feet of the operators. The sawing of butchers' meat with band saws is becoming more common and, because of the large opening required to carry out this operation, the resultant long length of exposed blade, together with the weight and bulk and the slippery conditions, make this machine extremely difficult to guard effectively and it presents grave hazards to the operator and to the other employees in close proximity. Another machine which is becoming increasingly common is the waste disposal unit at sinks. These have circular openings up to 5 inches in diameter to receive the waste materials and metal objects, such as spoons, forks, knives and even bones, which may accidentally fall into the opening during the emptying of plates and containers, have the effect of jamming the grinding blades. Apparently the only way to remove an obstruction is to put the hand down and pull it out. As these machines are usually operated by an ordinary wall switch it is an insufficient safeguard merely to ensure that the switch is off before removing an obstruction by hand. Some other – and automatic – safety device is required.

Other dangerous practices found were: open motor rooms to lifts and these rooms sometimes being used for storage purposes; unprotected vee-belt drives to compressors; paper bursting machines; rollers of conveyor belt systems; duplicating machines and food slicing machines.

We received 3 complaints of alleged dangerous machinery and surprisingly enough these were all in coin-operated launderettes. One of these was a spin dryer which had broken loose from its mountings during operation. No one was hurt but customers had been frightened. The offending spin dryer had been removed before we arrived and the only information available was that it was due to defective assembly. The second was on a similar machine where a child had received a severe fright and had to be taken to hospital with a twisted hand and wrist after attempting to remove clothing from a spin dryer. On examination it was found that the dryer, after automatically switching itself off, continued to revolve at high speed for 10 seconds with the lid open. We followed the investigation up with the other launderettes in the city and found quite a number which acted in the same way. We discussed the matter with the local distributors of the machine, who stated a braking device which operated with the opening of the lid and stopped the drum almost immediately was now a standard fitting to the newer models but it would be a major operation, involving removal and sending to England, to have the device fitted to existing models. Meanwhile the supervisors have promised not to allow children to use the offending spin dryers and to warn other users of the danger. The third complaint was of excessive fumes from a coin-operated dry cleaner; this was found to be a combination of a badly fitted flue, a clogged exhaust fan which was not working effectively and an uncleaned sludge box.

*Notification of Accidents:* (*Section* 47)

Under this section, where an accident occurs in any premises to which this Act applies and results in the death of a person employed, or disables any such person from doing his usual work for a period of more than three days, notice of the accident must be forthwith sent in a prescribed manner to the appropriate authority. In the case of an occupier of premises who is not the actual employer of the person killed or injured, the actual employer is subject to a penalty of ten pounds if he fails to report the accident to the occupier of the premises where the accident took place; for example if a lorry driver delivering goods to premises is involved in an accident such as falling down stairs and is off work for more than three days, the employer of the lorry driver must immediately inform the occupier of the premises where the accident took place and the occupier in turn must notify the appropriate authority for enforcing the Act. Under this Section we received only 54 notifications of accidents over the period and it is highly probable that, by comparing returns of other similar cities in England, where the same provisions are in operation, we are receiving only a small proportion of the actual number of notifiable accidents which occur in the City. It may be that the Act is not long enough in operation for employers to become familiar with their obligation to report accidents, but there is no doubt that strong action needs to be taken to focus attention on this important duty of employers.

The causes of the reported accidents were as follows:–

| | |
|---|---|
| Falls on the same level | 11 |
| Handling goods | 9 |
| Falls on or from fixed stairs | 6 |
| Struck by falling objects | 6 |
| Power driven machinery in motion | 5 |
| Falls from ladders or step ladders | 2 |
| Hand tools | 2 |
| Falls from one level to another | 2 |
| Non power driven machinery in motion | 1 |
| Vehicle in motion not moved by power | 2 |
| Stepping on or striking object or person | 2 |
| Machine or relevant part at rest | 1 |
| Vehicle in motion moved by power | 1 |
| Causes not otherwise specified | 4 |

The nature of injuries were:–

| | |
|---|---|
| Bruising, crushing and concussion | 19 |
| Sprains and strains... | 10 |
| Fractures and dislocations | 9 |
| Open wound and surface injury | 9 |
| Burns | 4 |
| Internal injury | 1 |
| Amputation | 1 |
| Other injuries | 1 |

A large number of the accidents were caused by falls and the handling of goods and in most cases there were no breaches of the provisions, but in a number of instances the firms were given advice regarding the storage of goods on inaccessible shelves and on stairways, etc. There were two cases of accidents caused by the removal by employees of guards to machines and as there were doubts of the employers' knowledge of the deliberate breach, warning letters were issued. There were four instances in which we sought the advice of the Factory Inspector: one of an operator of an off-set printing machine being injured and additional protection was recommended and provided; in the other three cases valuable information was given to employers and employees and additional safeguards suggested to prevent recurrence.

There was one fatal accident during the period: this occured at a warehouse, the person involved being crushed between two trailers which were loading goods at the premises. The accident was notified to this Department by the Chief Inspector of Factories who had already investigated it. The Ministry's Factory Inspector also attended at the Coroner's inquest.

No prosecutions were instituted under any of the provisions of the Act. In all instances where contraventions were discovered, verbal notices were given to the employers and, where conditions were bad or really hazardous, employers were required by letter to take action quickly.

The following tables summarise the work carried out by the Department and the conditions found under the various provisions of the Act.

**TABLE B** 28

| Particulars | Contraventions |
|---|---|
| Cleanliness | 382 |
| Overcrowding | 33 |
| Temperature: | |
| Insufficient heating provided | 36 |
| Thermometers not prvided | 1,959 |
| No heating facilities provided | 57 |
| Facilities for warming not provided | 14 |
| Facilities giving off noxious fumes | 137 |
| Ventilation | 329 |
| Lighting | 818 |
| Seating facilities | 17 |
| Drinking water | 126 |
| Outdoor clothing | 65 |
| Eating facilities | 22 |
| Sanitary accommodation: | |
| Unsuitable | 96 |
| Insufficient | 116 |
| Not maintained | 365 |
| Cleanliness | 417 |
| Lighting | 320 |
| Accessibility | 8 |
| Unsuitable facilities for sanitary dressings | 198 |
| Washing facilities: | |
| Unsuitable or insufficient | 172 |
| Accessibility | 6 |
| Soap, towels, etc., not provided | 56 |
| Hot and cold or warm water not provided | 1,387 |
| Unclean conditions | 160 |
| Unsuitable lighting | 57 |
| First Aid facilities not provided | 2,146 |
| Dangerous machinery | 162 |
| Dangerous floors, stairways, etc. | 718 |
| Dangerous fittings | 39 |
| Abstract of the Act not provided | 2,751 |
| Excessive weights and loads | 5 |
| Total | 13,174 |

*Registration and general inspection*

**TABLE B 29**

| Class of Premises | Premises registered during the year | Registered premises at end of year | Registered premises receiving a general inspection during the year |
|---|---|---|---|
| Offices | 1,981 | 1,946 | 1,639 |
| Retail shops | 2,370 | 2,338 | 1,748 |
| Wholesale shops, warehouses | 352 | 347 | 284 |
| Catering establishments open to the public, canteens | 330 | 326 | 151 |
| Fuel storage depots | 1 | 1 | 1 |
| Total | 5,034 | 4,958 | 3,823 |

*Visits of all kinds by inspectors to registered premises* – 7,464

*Analysis of recorded particulars of persons employed in registered premises by workplace*

**TABLE B 30**

| Class of workplace | Persons employed |
|---|---|
| Offices | 20,792 |
| Retail shops | 12,439 |
| Wholesale departments, warehouses | 4,115 |
| Catering establishments open to the public | 2,775 |
| Canteens | 261 |
| Fuel storage depots | 1 |
| Total | 40,383 |
| Total Males | 18,654 |
| Total Females | 21,729 |

*Exemptions*

**TABLE B 31**

Part I Space (Sec. 5(2)) Part II Temperature (Sec. 6)
Part III Sanitary conveniences (Sec. 9) Part IV Washing facilities (Sec. 10)

| Class of Premises | Exemptions current at 31st Dec. | Exemptions granted or extended during year | Applications refused or exemptions withdrawn during year | Cases in cols. (3) and (4) where employees opposed application | Appeals to Courts in connection with exemptions | |
|---|---|---|---|---|---|---|
| | | | | | Decided during the year | Allowed |
| Offices<br>Retail shops<br>Wholesale shops, warehouses<br>Catering estab. open to the public<br>Canteens<br>Fuel storage depots | NIL | NIL | NIL | NIL | NIL | NIL |

| | |
|---|---|
| Prosecutions .. .. .. .. .. .. | Nil |
| Complaints made under Section 22 ... ... ... ... | Nil |
| Interim orders granted ... ... ... ... ... | Nil |

Inspectors appointed under section 51 (1) of the Act – 2 full-time inspectors and 7 part-time. Other staff employed for most of their time on work in connection with the Act – 2.

### Pharmacy and Poisons Act (N.I.) 1955

*Poisons Regulations (N.I.)* 1956

The following is a summary of the work carried out under the above Act and Regulations:–

| | |
|---|---|
| Inspections ... ... ... ... ... ... | 267 |
| Premises on register at 1st January, 1968 ... ... ... | 243 |
| Deletions from the register during the year ... ... ... | 13 |
| Additions (new registrations) ... ... ... ... | 7 |
| Premises on register at 31st December, 1968 ... ... ... | 237 |
| Contraventions discovered ... ... ... ... ... | 19 |

### Rag Flock Act, 1911 and Rag Flock Regulations, 1912

In connection with the above Act and Regulations the following work was carried out during the year:–

| | |
|---|---|
| Inspections of premises ... ... ... ... ... | 47 |
| Premises where rag flock is used ... ... ... ... | 35 |
| Samples of rag flock submitted for analysis ... ... ... | 33 |
| Samples of rag flock in compliance with regulations ... ... | 31 |

Two of the samples submitted for analysis did not meet the requirements of the Rag Flock Regulations, 1912 with respect to cleanliness and, as the contraventions were of a gross nature, prosecutions were instituted, resulting in fines being imposed in each case.

### Fabrics (Misdescription) Act, 1913

*Fabrics (Misdescription) Regulations (N.I.)*, 1959

The Fabrics (Misdescription) Act is designed to protect the public against the sale of clothing or fabrics falsly described as flame or fireproof or fire resistant. The Act makes it unlawful for any person to sell or expose for sale or have in his possession for sale any textile fabric, either in the piece or made up into garments, or in any other form, to which is attributed the quality of non-inflammability or safety from fire, either by markings, labelling or by verbal representation at the time of sale, unless such clothing or fabrics conform with the standards of non-inflammability prescribed by the Regulations. Two samples of fabrics described as low flammability and one sample of a child's nightdress also labelled as of low flammability were procured under the Act during the year and submitted to the prescribed tests: all three samples were in compliance.

### Toys (Safety) Regulations (N.I.), 1967

The Toys (Safety) Regulations made under the Consumer Protection Act (N.I.) 1965 came into operation on the 1st April, 1968, to provide safeguards against the sale of certain children's toys which might be dangerous or injurious to health. The Regulations prohibit the use of celluloid in children's toys (except table tennis balls) and impose restrictions on the amount of dangerous substances which may be contained in paint used on children's toys. In connection with the Regulations, four samples of toys were procured and were all found to be in compliance.

**Inspections of Shops under the Public Health Acts (N.I.) 1878 to 1967**

| | |
|---|---|
| Public Health nuisances discovered ... ... ... ... | 211 |
| Notices issued ... ... ... ... ... ... | 122 |
| Nuisances abated ... ... ... ... ... ... | 120 |
| Reports of contraventions of bye-laws ... ... ... | 15 |
| Reports of dangerous conditions ... ... ... ... | 12 |

## FOOD AND DRUGS

The following regulations relating to food were made during the year:–

*The Labelling of Food Regulations (N.I.)* 1968 (operative part 4.1.68; remainder 4.1.71):–

These regulations supersede certain provisions of the Labellling of Food Regulations (N.I.) 1961 relating to the labelling and description of food, to the extent that they apply to any food (other than a soft drink) containing cyclamate. The regulations in this respect came into operation on 4th January, 1968; in all other respects they come into operation on 4th January, 1971. The regulations:–

(a) amend the provisions relating to the labelling of pre-packed food for sale by retail and the list of foods to which they apply;

(b) similarly amend the provisions relating to the labelling of pre-packed food sold otherwise than by retail and the list of foods to which they apply;

(c) impose requirements as to the advertisement of certain foods for sale by retail which are not pre-packed;

(d) impose requirements as to the advertisement of food for sale from vending machines;

(e) provide for the labelling and advertisement of tenderised meat;

(f) impose restrictions on the use of the word "milk" on labels or advertisements; and

(g) amend the Meat Pie and Sausage Roll Regulations (N.I.) 1967, the Canned Meat Product Regulations (N.I.) 1967 and the Sausage and Other Meat Product Regulations (N.I.) 1967 so that the provisions of these regulations relating to the manner of marking or labelling apply to descriptions or names used in accordance with those regulations. The regulations also contain provisions as to the labelling and advertisement of intoxicating liquors, processed peas and acetic acid.

*The Margarine Regulations (N.I.)* 1968 (operative 4.1.71):–

These regulations supersede the Food Standards (Butter and Margarine) Regulations (N.I.) 1960 (insofar as they relate to margarine) and –

(a) specify requirements as to the fat, water and vitamin content of margarine;

(b) specify requirements as to the wording of labels, tickets and notices displayed with margarine and in advertisements for margarine;

(c) restrict the use of the words "butter," "cream" and "milk" on labels, tickets, notices and advertisements relating to the sale of margarine; and

(d) specify requirements as to the use of the word "margarine" in advertisements for margarine.

*The Coffee and Coffee Products Regulations (N.I.)* 1968 (operative 4.1.71):–

These regulations supersede the provisions for liquid coffee essence or extract, liquid coffee and chicory essence or extract and coffee mixtures in the Food Standards (Miscellaneous Foods) Regulations (N.I.) 1960 and Regulation 9 of the Labelling of Food Regulations (N.I.) 1961 and –

(a) specify compositional requirements for coffee, decaffeinated coffee and coffee products;

(b) prescribe appropriate designations for decaffeinated coffee and coffee products;

(c) specify general requirements as to the composition, description, labelling and advertisement of coffee, decaffeinated coffee and coffee products and

(d) place restrictions on the words "french coffee" and "viennese coffee".

*The Ice-Cream and Other Frozen Confections (N.I.)* 1968 (operative 4.1.71):–

These regulations supersede (with amendments) the Ice-Cream (Composition Heat Treatment, Labelling, etc.) Regulations (N.I.) 1961 and 1963 and:–

(a) specify compositional requirements for ice-cream and parev ice, including any ice-cream and any parev ice present as an ingredient of any composite article of food;

(b) specify requirements as to the labelling and advertisement of ice-cream and parev ice; and

(c) specify heat treatment requirements for ice-cream, parev ice and similar frozen confections.

*The Fish and Meat Spreadable Products Regulations (N.I.)* 1968 (operative 15.3.71):–

These regulations supersede the provisions for fish paste and meat paste in the Food Standards (Miscellaneous Foods) Regulations (N.I.) 1960. They specify requirements for the description, composition, labelling and advertisement of meat paste and fish paste.

*The Skimmed Milk with Non-Milk Fat (Amendment) Regulations (N.I.)* 1968, (operative 26.9.68):–

These amending regulations further extend the Second Schedule to the Skimmed Milk with Non-Milk Fat Regulations (Northern Ireland) 1961 to exempt the foods S-M-A/S-26 Trufood V. Formula, Enfamil and a new form of the food S-M-A- from the requirements to bear on the label the declaration "Unfit for Babies" (or the permitted alternatives).

*The Sausage and Other Meat Product Regulations (N.I.)* (operative 31.5.69):–

These regulations amend the Sausage and Other Meat Product Regulations (N.I.) 1967 (operative 31.5.69) and:–

(a) provide that the principal regulations do not apply to a canned meat product after removal from its container; and

(b) restrict the use of the expression "ready meal" in relation to a meat product.

*The Canned Meat Product (Amendment) Regulations (N.I.)* 1968 (operative 31.5.69):–

These regulations amend the Canned Meat Product Regulations (N.I.) 1967 (operative 31.5.69) by –

(a) exempting canned sliced bacon from any requirements as to lean meat content;

(b) setting a separate standard for the meat content of chopped or minced meat which is suitable for slicing;

(c) restricting the use of the expression "ready meal" on the label of a canned meat product; and

(d) applying labelling requirements to canned meat products only when such products are in containers.

The Trade Description Act, 1968, replaces the Merchandise Marks Acts, 1887 to 1953, by fresh provisions prohibiting misdescription of goods, etc. Provision is made for a continuation for three years of Orders in Council requiring indication of origin, to enable the Parliament of Northern Ireland to make laws relating to merchandise marks.

## Food and Drugs Sampling

1,061 samples of food and drugs were submitted to the Public Analyst for chemical analysis; 38 of these were found to be adulterated, the majority of the adulterations being due to the excessive use of sulphur dioxide in meat products.

**TABLE B** 32

| Year | Number | | | Adulterated | | | Percentage adulterated | | |
|---|---|---|---|---|---|---|---|---|---|
| | Formal | Informal | Total | Formal | Informal | Total | Formal | Informal | Total |
| 1964 | 1,044 | 31 | 1,075 | 22 | 3 | 25 | 2.10 | 9.67 | 2.32 |
| 1965 | 1,014 | 69 | 1,083 | 52 | 5 | 57 | 5.13 | 7.25 | 5.26 |
| 1966 | 1,018 | 52 | 1,070 | 34 | 6 | 40 | 3.34 | 11.54 | 3.74 |
| 1967 | 1,013 | 51 | 1,064 | 44 | 7 | 51 | 4.34 | 13.72 | 4.8 |
| 1968 | 1,000 | 61 | 1,061 | 27 | 11 | 38 | 2.7 | 18.04 | 3.68 |

**TABLE B 33**

| Article | Number | Article | Number |
|---|---|---|---|
| Ale | 2 | Ham, chopped and pork | 1 |
| Almonds, ground | 2 | Honey | 1 |
| Baconburgers | 1 | Honey, liqueur | 1 |
| Bananas (Informal) | 1 | Hydrogen peroxide | 1 |
| Beans, baked (Informal) | 1 | Ice-cream | 58 |
| Beans, baked and frankfurters (Informal) | 1 | Ice-cream Sundae | 1 |
| Beefburgers | 2 | Iodine, tincture of | 1 |
| Beef, corned | 3 | Jelly, table | 4 |
| Beef, minced | 22 | Juice, fruit | 4 |
| Beef, minced (Informal) | 1 | Ketchup, tomato | 2 |
| Beer | 5 | Lard | 2 |
| Brandy | 6 | Lemons (Informal) | 1 |
| Brawn | 1 | Lentils | 1 |
| Bread, brown | 1 | Liver, pigs | 1 |
| Bread, milk | 2 | Loaf, corned beef | 1 |
| Bread, plain | 1 | Lollipops, iced | 6 |
| Butter | 6 | Margarine | 3 |
| Butter, peanut | 2 | Mayonnaise | 2 |
| Buttermilk | 8 | Meat, canned (Informal) | 1 |
| Cakes, chocolate | 1 | Meat, pork luncheon | 4 |
| Cakes, cream | 2 | Milk, condensed full cream unsweetened | 3 |
| Cakes, fresh cream | 2 | Milk, condensed skimmed sweetened | 1 |
| Cakes, fish | 2 | Milk, dried | 1 |
| Cakes, imitation cream | 2 | Milk, dried non-fat | 1 |
| Cereal (Informal) | 1 | Milk, evaporated full cream | 2 |
| Cheese, cheddar | 2 | Milk, instant non-fat | 1 |
| Cheese, full fat soft | 1 | Milk, substitute | 1 |
| Cheese, medium fat smoked | 1 | Mint, dried | 1 |
| Cherries, glace | 2 | Mix, iced lemon tea | 1 |
| Chocolate, instant drinking | 1 | Mixture, dried fruit | 1 |
| Cider (Informal) | 1 | Mixture, soup | 1 |
| Cinnamond, ground | 1 | Mustard, french | 1 |
| Coconut, desiccated | 2 | Nitre, sweet spirits of | 1 |
| Coffee, ground | 2 | Oil, camphorated | 1 |
| Coffee, instant | 2 | Oil, corn | 1 |
| Concentrate, fruit | 1 | Oil, olive | 1 |
| Condiment, non-brewed | 3 | Ointment, medicated | 1 |
| Condiment, salt-free | 1 | Ointment, zinc | 1 |
| Confectionery | 2 | Ointment, zinc and castor oil | 1 |
| Cream, double | 5 | Onions, instant | 1 |
| Cream, salad | 4 | Onions, pickled (Informal) | 1 |
| Cream, sterilized chocolate | 1 | Oranges (Informal) | 1 |
| Cream, whipping | 3 | Paraffin, liquid | 1 |
| Crumbs, cooking | 1 | Paraffin, liquid, BP | 2 |
| Crystals, table jelly | 1 | Paste, chicken | 1 |
| Custard | 1 | Pasties, cornish | 2 |
| Dessert, instant | 2 | Pastry, fresh cream | 2 |
| Doughnuts, fresh cream | 1 | Pate, chicken with wine | 1 |
| Dripping, beef | 1 | Pate de foie truffe | 1 |
| Eggs, pasteurised frozen (Informal) | 36 | Pate, duck liver | 1 |
| Essence, coffee and chicory | 3 | Pate, liver | 1 |
| Eucalyptus, oil of | 1 | Peanuts | 1 |
| Fat, cooking | 1 | Peanuts, salted | 1 |
| Flavouring, milk shake | 1 | Peas | 1 |
| Flavouring, rum | 1 | Peas, yellow split | 1 |
| Flour, plain | 1 | Pepper | 1 |
| Flour, self-raising | 2 | Pies, cornish | 1 |
| Fruit, canned | 2 | Pies, meat | 1 |
| Fruit, dried | 3 | Pies, pork | 1 |
| Fudge, buttered | 1 | Pies, steak and kidney | 3 |
| Gelatine | 1 | Pork, chopped (Informal) | 1 |
| Gelatine, powdered | 1 | Pork, picnic | 1 |
| Gin | 4 | Porter | 1 |
| Glycerine, BP | 1 | Potatoes (Informal) | 1 |
| Grapefruit (Informal) | 1 | Potato-bleach | 1 |
| Gum, chewing | 3 | Powder, baking | 2 |
| Hamburgers | 1 | Powder, boracic acid | 1 |
| | | Powder, borax, BP | 1 |

**TABLE B** 33 (contd.)

| Article | Number | Article | Number |
|---|---|---|---|
| Powder, curry | 1 | Sherbet | 1 |
| Powder, custard (1 Informal) | 3 | Sherry | 4 |
| Powder, Seidlitz | 1 | Soda, baking | 1 |
| Powder, skimmed milk | 1 | Soft drinks (6 Informal) | 15 |
| Preserves:— | | Spread, crab with butter | 1 |
| Curd, lemon | 2 | Spread, pork meat | 1 |
| Jam, apple and black-currant | 1 | Spread, salmon | 2 |
| Jam, apple and straw-berry | 2 | Spread, tomato and sardine | 1 |
| Jam, peach | 1 | Steakburgers | 1 |
| Jam, raspberry, home made | 2 | Steakettes | 2 |
| Jam, rhubarb and ginger, home made | 1 | Steak, minced | 172 |
| Jam, strawberry, home made | 1 | Suet, beef | 1 |
| Jelly, apple | 1 | Suet, shredded | 1 |
| Marmalade | 1 | Suet, shredded beef | 1 |
| Mincemeat | 2 | Sweetmilk (2 Informal) | 125 |
| Spread, jelly | 1 | Sweetener, artificial | 1 |
| Quinine, ammoniated tinc-ture of | 1 | Syrup, blackcurrant | 1 |
| Relish, hot dog | 1 | Syrup, milk shake | 1 |
| Rice, creamed (Informal) | 2 | Tablets, aspirin | 3 |
| Rice, ground | 2 | Tablets, saccharin | 2 |
| Rolls, sausage | 13 | Tablets, saccharin, BPC | 1 |
| Salad, paprika | 1 | Tablets, yeast, BPC | 1 |
| Salts, health | 1 | Tartar, cream of | 1 |
| Sal Volatile, spirits of | 1 | Tea | 3 |
| Sauce | 2 | Tea, instant | 1 |
| Sauce, apple | 1 | Tenderiser, meat | 1 |
| Sauce, tomato | 1 | Topping, dessert | 1 |
| Sausages and sausage meat | 291 | Trifle (Informal) | 1 |
| Scones, buttered | 9 | Vinegar, pure malt | 4 |
| Scones, milk | 1 | Vodka | 5 |
| Semolina | 1 | Whiskey | 16 |
| | | Wholemeal | 1 |
| | | Wine | 2 |
| | | Wine, cherry | 1 |
| | | Total | 1,061 |

*Legal proceedings in respect of adulerated foods*

**TABLE B** 34

| Sample | Number taken | Adulterations | Prosecutions | Convictions | Fines | Costs |
|---|---|---|---|---|---|---|
| Beans, baked and frankfurters | 1 | 1 | — | — | — | — |
| Beef, minced | 22 | 3 | 3 | 3 | £12 | £7.4.7 |
| Beef, prime minced | 1 | 1 | — | — | — | — |
| Cereal | 1 | 1 | — | — | — | — |
| Cider | 1 | 1 | — | — | — | — |
| Eggs, pasteurised frozen | 36 | 1 | — | — | — | — |
| Ice-cream | 58 | 1 | 1 | 1 | £5 | £2.7.6 |
| Nitre, sweet spirits of | 1 | 1 | — | — | — | — |
| Pork, chopped | 1 | 1 | — | — | — | — |
| Potatoes | 1 | 1 | 1 | 1 | £2 | 7.0 |
| Preserves | 15 | 2 | — | — | — | — |
| Sausages and sausage meat | 291 | 7 | 7 | 7 | £28 | £16.12.7 |
| Scones, buttered | 9 | 1 | 1 | 1 | £2 | £2.8.6 |
| Soft drinks | 15 | 4 | 1 | 1 | £1 | 7.0 |
| Steak, minced | 172 | 10 | 10 | 10 | £30 | £24.6.1 |
| Sweetmilk | 125 | 1 | — | — | — | — |
| Whiskey | 16 | 1 | 1 | 1 | — | £10.16.0 |
| Totals | 766 | 38 | 25 | 25 | £80 | £64.9.3 |

In the case of the following samples no legal proceedings were instituted:– baked beans and frankfurters 1; prime minced beef 1; cereal 1; cider 1; pasteurised frozen eggs 1; sweet spirits of nitre 1; chopped pork 1; preserves 2; soft drinks 3; sweetmilk 1.

*Particulars of samples specially reported by the Public Analyst:–*

*Baked beans.* A sample of baked beans, alleged to have a bitter taste, was found to be more acidic than normal and was returned as inferior.

*Baked beans and frankfurters.* A sample of baked beans and frankfurters contained 59½ per cent of meat and no baked beans.

*Buttered scones.* The fat spread on a sample of buttered scones contained only 15 per cent of butter, the remaining 85 per cent having the composition of margarine, and it was returned as adulterated.

*Canned meat.* A sample of canned meat consisted of finely ground meat containing 38 per cent of total meat.

*Canned minced beef.* One sample of canned minced beef in gravy was contaminated by numerous small hairs of bovine origin and was returned as adulterated.

*Cereal.* A sample of breakfast cereal contained solid pieces of a translucent gum-like adhesive and was returned as adulterated.

*Chicken pate with wine.* Attention was drawn to the labelling of this sample. In the list of ingredients declared to be present, which are required by the Labelling of Food (N.I.) Regulations to be placed in quantitative order, 'Wine' was omitted. The sample was found to be genuine.

*Chopped pork.* A sample of chopped pork in an open can was found to be soiled by an encrustation of ferruginous matter admixed with a few vegetable fibres; it was returned as adulterated.

*Cider.* One sample of cider was found to be contaminated by black coloured carbonaceous material, possibly derived from the use of a bottle previously having held oily matter. The sample was returned as adulterated.

*Creamed rice.* Two samples of creamed rice were examined. In both cases the contents of the tins were found to be free from metallic impurity and they were returned as genuine.

*Double thick cream.* Exception was taken to the description of a cream sample as "Double Thick Cream." The product contained 51 per cent of fat, 3 per cent more fat than the amount required for "Double Cream," namely 48 per cent. The sample was returned as genuine.

*Ice-cream.* One sample of ice-cream was deficient in content of fat, containing only 3.4 per cent against the 5 per cent minimum required by the Ice-Cream (N.I.) Regulations. The sample was returned as adulterated.

*Milk substitute of vegetable origin.* While the sample was reasonably well compounded for the purpose for which it was intended, the description on the label was not looked on with favour. The sample was returned as genuine.

*Minced beef.* Three samples of minced beef contained sulphur dioxide in amounts of 100, 140 and 270 parts per million. (The addition of sulphur dioxide to minced beef is prohibited).

*Minced steak.* Ten samples of minced steak contained sulphur dioxide in amounts ranging from 120 to 1,000 parts per million. (The use of sulphur dioxide in minced steak is prohibited).

*Pasteurised eggs.* One sample of liquid egg was ineffectively pasteurised and failed to pass the alpha-amylase test. The sample was returned as adulterated.

*Potatoes.* One sample of whole potatoes was heavily contaminated by colouring matter – methyl violet – and was returned as adulterated. Methyl violet is not a permitted colouring matter.

*Preserves.* Two samples of home-made raspberry jam were deficient in soluble solids. Both contained only 65 per cent whereas a minimum of 68½ per cent fruit content is prescribed by the Preserves (N.I.) Regulations. Both samples were returned as adulterated.

*Sausage and sausage meat.* Six samples contained sulphur dioxide in amounts ranging from 650 to 2,200 parts per million. One sample had the composition of minced beef with sulphur dioxide present. (Sausage meat may contain a maximum of 450 parts per million when declared).

*Soft drinks.* One sample of cream soda consisted virtually of carbonated water and was contaminated by suspended matter containing mould and other matter of vegetable origin. One sample of orange drink contained copper much above the recommended limit, while a sample of concentrated orange drink showed a copper content well within the recommended limit. A sample of kali water was contaminated by traces of a petroleum product, presumably through the use of a contaminated bottle. A sample in an unopened polythene satchel was contaminated with objectionable gelatinous mould growths. Objection was taken to the use of the term "Whole Orange Drink" as a description for a comminuted orange drink.

*Sweet spirit of nitre.* A sample of sweet spirit of nitre contained only 0.08 per cent w/v of Ethyl Nitrite. The required amount is between 1.25 and 2.5 per cent. The sample was returned as adulterated.

*Sweetmilk.* One sample of sweetmilk was contaminated by the presence on the inner surfaces of the bottle of organic debris, vegetable fibres and mineral matter. This sample was returned as adulterated. A sample consisting of 2 separate pint bottles was returned as inferior due to the presence of a small amount of foreign matter adhering to the inner surface of the glass.

*Trifle and custard powder.* A sample of each commodity examined as the result of a complaint was found to be normal and returned as genuine.

*Whiskey.* One sample of whiskey was 39.97 degrees under proof and therefore below the strength required, which is 35 degrees under proof. The sample was returned as adulterated.

## MILK CONTROL

The following tables indicate the control exercised over milk sold within the city.

| | |
|---|---|
| Dairies where milk is pasteurised ... ... ... ... | 2 |
| Gallons of milk pasteurised per day (average) ... ... ... | 37,000 |
| Retail distributors of milk ... ... ... ... ... | 1,330 |
| Inspections of milk shops ... ... ... ... ... | 1,053 |
| Samples of sweetmilk taken for chemical analysis ... ... | 125 |
| Samples of sweetmilk taken for bacteriological examination ... | 900 |
| Samples of sweetmilk taken for culture examination ... ... | 150 |

*Particulars of sweetmilk samples procured for chemical analysis during five years* 1964–1968

**TABLE B** 35

| Year | Number | Adulterated | Percentage adulterated |
|---|---|---|---|
| 1964 | 161 | — | — |
| 1965 | 164 | 4 | 2.4 |
| 1966 | 141 | 1 | 0.7 |
| 1967 | 136 | — | — |
| 1968 | 125 | 1 | 0.8 |

*Average monthly composition of milk samples examined by Public Analyst*

**TABLE B** 36

| Month | Number | Total solids per cent | Fat per cent | Solids not fat per cent |
|---|---|---|---|---|
| January | — | — | — | — |
| February | 15 | 12.1 | 3.5 | 8.6 |
| March | 3 | 12.2 | 3.7 | 8.5 |
| April | — | — | — | — |
| May | 10 | 12.2 | 3.6 | 8.6 |
| June | 23 | 12.1 | 3.4 | 8.7 |
| July | — | — | — | — |
| August | 8 | 12.3 | 3.7 | 8.6 |
| September | 9 | 12.5 | 3.8 | 8.7 |
| October | 24 | 12.5 | 3.9 | 8.6 |
| November | 28 | 12.5 | 3.9 | 8.6 |
| December | 5 | 12.4 | 3.9 | 8.5 |

*Particulars of bacteriological examination of milk*

**TABLE B 37**

| Test | Grade | Samples examined | Satisfactory | | Unsatisfactory | |
|---|---|---|---|---|---|---|
| | | | Number | Per cent | Number | Per cent |
| Plate Count | Farm bottled | 144 | 109 | 75.7 | 35 | 24.3 |
| Coliform | Farm bottled | 144 | 144 | 100 | — | — |
| | Pasteurised | 756 | 692 | 91.5 | 64 | 8.5 |
| Phosphatase | Pasteurised | 756 | 756 | 100 | — | — |
| Culture | Farm bottled | 150 | 150 | 100 | — | — |
| Viable organisms | Farm bottled | 150 | 92 | 61.3 | 58 | 38.7 |

*Bacteriological examination of milk supplied to schools*

**TABLE B 38**

| Test | Grade | Samples examined | Satisfactory | | Unsatisfactory | |
|---|---|---|---|---|---|---|
| | | | Number | Per cent | Number | Per cent |
| Coliform | Pasteurised | 78 | 57 | 73 | 21 | 27 |
| Phosphatase | Pasteurised | 78 | 78 | 100 | — | — |

*Mineral waters*

There were no adverse reports on the 181 samples of mineral waters submitted for bacteriological examination.

*Frozen confectionery*

375 samples were examined: 119 of these were found to be unsatisfactory due to the presence of coliform organisms. These adverse results were reported to the Health Authority in whose area the confectionery was manufactured.

*Bacteriological examination of eggs*

Samples taken for examination:–

Frozen liquid eggs ... ... ... ... ... 46

No salmonella organisms were isolated in any of these samples.

*Pasteurisation of liquid eggs*

36 samples were procured from bakeries and bakery sundriesmen and submitted to the Public Analyst for the Alpha-Amylase test. One sample did not comply with this test and, as it had been pasteurised outside the City, the Health Authority concerned was notified.

*Desiccated coconut*

52 samples were taken during the year for bacteriological examination. All were found to be satisfactory.

*Imported fruits*

Samples of citrus fruit and bananas were submitted for examination for the presence of colouring matter and antibiotics. All compiled with the relevant Regulations.

*Merchandise Marks Acts, 1887 to 1926*

Verbal warnings were given to vendors whose labels on imported foods did not comply with the Marking Orders made under the above Acts. On subsequent inspections their labels were found to be in compliance.

*The control of food unfit for human consumption*

The following tables show the varied selection of unfit foodstuffs examined by the Food Inspection staff and destroyed under their supervision. Fire damage in 3 food premises and the residue stock from 2 bankrupt firms accounted for a large amount of the food which had to be destroyed. 5,787 certificates were issued to traders in connection with unfit food surrendered.

*Poultry inspection*

There are three poultry killing premises within the City. It would appear that poultry are now being culled on the farms, thus reducing the percentage of unfit carcases slaughtered, as will be seen from the following table:–

**TABLE B** 39

| | Poultry examined | Number condemned |
|---|---|---|
| 1965 (part) | 20,551 | 237 |
| 1966 | 37,339 | 592 |
| 1967 | 40,927 | 457 |
| 1968 | 50,931 | 320 |

*Poultry examined during the year*

**TABLE B** 40

| | Examined | Condemned | % |
|---|---|---|---|
| Bowling Fowl | 48,149 | 320 | 0.66 |
| Roasting fowl | 1,171 | — | — |
| Ducks | 294 | — | — |
| Turkeys | 1,251 | — | — |
| Geese | 66 | — | — |
| Totals | 50,931 | 320 | 0.63 |

*Conditions and diseases for which seized*

**TABLE B** 41

| Diseases | Bowling fowl |
|---|---|
| Leucosis | 34 |
| Tumours | 32 |
| Ascites | 133 |
| Injuries | 54 |
| Abscesses | 2 |
| Decomposition | 3 |
| Emaciation | 25 |
| Moribund | 37 |
| Totals | 320 |

*Unfit foodstuffs surrendered by traders after inspection and destroyed*

**TABLE B** 42 (a)

| Articles | Containers | Articles | Containers |
|---|---|---|---|
| Baby food | 621 | Milk | 1,313 |
| Beans | 5,043 | Miscellaneous | 1,153 |
| Beetroot | 253 | Peas | 4,414 |
| Biscuits | 1,225 | Pickles | 317 |
| Carrots | 876 | Pie filling | 283 |
| Cereal | 485 | Preserves | 787 |
| Cheese | 646 | Puddings | 771 |
| Confectionery | 9,131 | Ravioli | 144 |
| Corn | 232 | Rice | 2,971 |
| Cream | 292 | Sauce, ketchup and salad cream | 437 |
| Curry | 56 | Soup | 7,628 |
| Fish | 1,493 | Spaghetti | 780 |
| Frozen food | 8,229 | Stew | 109 |
| Fruit | 13,165 | Tomatoes | 1,769 |
| Fruit juice | 329 | Tomato juice | 363 |
| Ham | 1,345 | Vegetables | 777 |
| Macaroni | 103 | Vegetable juice | 76 |
| Meat | 4,107 | | |

**TABLE B** 42 (b)

| Articles | Tons | Cwts. | Lbs. | Articles | Tons | Cwts. | Lbs. |
|---|---|---|---|---|---|---|---|
| Beans | — | 3 | 88 | Lard | — | — | 32 |
| Butter | — | 1 | 64 | Meat | 6 | 14 | 53 |
| Carrots | — | 3 | 53 | Onions | 12 | 5 | 84 |
| Cheese | — | 7 | 67 | Peas | 1 | 10 | 75 |
| Confectionery | — | 2 | 79 | Rice | — | 10 | 92 |
| Cooking fat | — | 6 | 59 | Sugar | — | 4 | 18 |
| Fish | — | 4 | 24 | Tea | — | 5 | 70 |
| Flour | — | 6 | 43 | Tomatoes | 1 | 1 | 64 |
| Fruit | 14 | 1 | 34 | Tomato puree | — | 1 | 56 |
| Fruit (dried) | — | — | 1 | Vegetables | — | 12 | 6 |
| Ham | 19 | 7 | 6 | | | | |

*Unsound food seized and destroyed in pursuance of Magistrates' Orders*

2 chickens; 3 boxes of chocolate; 2 chocolate biscuits; 1 packet of baby food; 1 fruit cake; 3 jars of jelly; 1 Cornish pasty; 28 cwts. of potatoes; 2 tins of corned beef; 5 carcases of mutton; 1 carcase of veal; 1 apple pie; 3 meat pies; 1 tin of pineapple pieces; 2 bottles of sweetmilk; 2 salad sandwiches; 1 tin of chopped pork; quantity of assorted groceries and confectionery; 2 sausage rolls; 10 packets of breakfast rusks; 2 lollipops; 2 packets of dried milk; quantity of tinned foods; 1 packet of oat flakes; 1 packet of cereal; portion of roast meat; 9 packets of bacon; 1½ cwts. of flour; 7 lb. of jam; 14 lb. of raisins; 3 gallons of buttermilk; 10 lbs. of cooking fat; 22 lbs. of dates.

*Foreign matter in food*

Moth larva in box of chocolates
Insect in tin of fruit (2 instances)
Mould on box of chocolates
Maggot in packet of milk food
Taint of oil in tin of orange juice
Maggot in chocolate biscuit (2 instances)
*Metal bolt in fruit cake
Piece of woven material in tin of corned beef
*Mould on jars of jelly (2 instances)
*Mould in apple pie

Foil wrapper of chocolate biscuit in bottle of sweetmilk
Carbonaceous material in bottle of cider
Mould on meat pie (3 instances)
Maggots and mites in boxes of dates
Slugs in salad sandwich
Insect in tin of pineapple pieces
Taint of oil in bottle of kali water
*Insect in meat pie
*Mould on sauasage rolls
Foreign matter in tin of chopped pork
Foreign matter in bottle of sweetmilk (2 instances)
Piece of hide in tin of corned beef
Hairs in tin of minced beef
Maggots in 11 packets of breakfast rusks
Adhesive materials in packet of breakfast cereal
*Foreign matter in fruit drinks
Piece of polystyrene in bottle of sweetmilk
Cork in bottle of beer
Portion of nut shell in bar of nut chocolate
Insect in packet of dried milk
Maggot in packet of oat flakes
Piece of hide in meat pie
*Maggot in packet of cereal
Insect and particles of glass in bottle of sweetmilk
*Insect in salad sandwich
Slug in tin of salmon
Insect in rolled breast of lamb
Fragments of plastic in salad sandwich
Insect in tin of corned beef
Foreign matter in fried fish
Foreign matter in tin of corned beef
Drawing pin in bottle of sweetmilk
Insects in 2 boxes of chocolates
Animal tooth in tin of chopped ham
*Mould on 9 packets of bacon
Sandwich cake with piece of wire adhering
*Loaf of bread containing piece of metal
Wasp in loaf of bread
Wasp in apple square
*Portion of rubber glove in plain scone
Fly in a pie
Fly in a scone
Mould in a Swiss apple pastry
Mineral crystals in plain loaf
Insect in soda farl
Mould on plain loaf (2 instances)
Stone in a scone
*Fly in a savoury pie

*Denotes legal proceedings taken.

## ICE-CREAM

58 formal samples of ice-cream were purchased for chemical analysis: one was found to contain 3.4 per cent fat, 5.0 per cent being the statutory minimum. Legal proceedings were instituted and a fine of £5 plus £2 7s. 6d. extra costs was imposed. Soft ice-cream continues to be popular: a large percentage of mobile traders have their vehicles fitted with machines for the sale of this product.

*Particulars of premises registered for the manufacture and sale of ice-cream*

**TABLE B 43**

| | Manufacture | Manufacture and sale | Manufacture and sale of soft ice-cream | Sale only | Vending machines | Storage | Total |
|---|---|---|---|---|---|---|---|
| Premises registered at 1st January, 1968 | 3 | 37 | 14 | 1,013 | — | 3 | 1,070 |
| Deletions | — | 3 | 2 | 175 | — | — | 180 |
| Registrations | — | 1 | 4 | 136 | — | — | 141 |
| Premises on register at 31st December, 1968 | 3 | 35 | 16 | 974 | — | 3 | 1,031 |

| | |
|---|---|
| Inspections ... ... ... ... ... ... | 1,291 |
| Summonses for selling ice-cream in unregistered premises ... | 1 |
| Samples submitted for bacteriological examination ... ... | 730 |
| Samples submitted for chemical analysis ... ... ... | 58 |
| Cautionary letters sent ... ... ... ... ... | 78 |

*Particulars of ice-cream samples taken during the year for chemical analysis*

**TABLE B 44**

| Complied with standards | | Did not comply with standards | |
|---|---|---|---|
| No. | % | Fat | Total solids |
| 57 | 98.3 | 1 | — |

*The Ice-cream (Heat Treatment, etc.) Regulations (N.I.)* 1961

*Methylene Blue Tests* (730 samples)

**TABLE B 45**

| Grade | Number | Percentage |
|---|---|---|
| 1 | 573 | 78.5 |
| 2 | 79 | 10.8 |
| 3 | 44 | 6.0 |
| 4 | 34 | 4.7 |

*Conditions discovered on inspection of ice-cream premises*

**TABLE B 46**

| Conditions | Instances | Remedied | In progress | Out-standing |
|---|---|---|---|---|
| Unsuitable cloakroom accommodation | — | 1 | — | — |
| First-aid materials not provided | 1 | 1 | — | — |
| Preparation room: walls, ceilings, floors, windows, etc., in disrepair | 1 | 1 | — | — |
| Wash-up room: | | | | |
| walls, ceilings, floors, windows, etc., in disrepair | 1 | 1 | — | — |
| lighting and ventilation not provided and maintained | 1 | 1 | — | — |
| Totals | 4 | *5 | — | — |

* Defects remedied include one outstanding defect from the previous year

## FOOD HYGIENE

There are approximately 7,000 food premises within the City. Regular visits are made to these establishments to ensure that all relevant legislation is complied with. During the year a Chinese translation of the Food Hygiene (General) Regulations was distributed to the proprietors of Chinese restaurants to enable them and their employees to understand in Chinese the general purport of the Regulations.

In conjunction with the Public Health Laboratory, the bacteriological sampling of foods has been increased to include cooked and uncooked foods, prepared open pack meat products and ingredients. Where unsatisfactory results are reported the Food Inspectors advise the management and staff on the cleansing of utensils and equipment. These results are being used for advisory purposes until a working bacteriological standard is established.

*Details of plans showing proposed alterations to food premises*

110 plans were submitted to the Department to ensure that the premises classified as follows complied or would comply with the relevant legislation.

| | |
|---|---|
| Bottling premises | 4 |
| Cafes | 7 |
| Catering college | 1 |
| Chemists | 4 |
| Confectionery | 3 |
| Fish and chip shops | 2 |
| Fruit and vegetables | 5 |
| Grocers | 10 |
| Hostels | 4 |
| Hotels | 9 |
| Ice-cream factory | 1 |
| Licensed premises | 31 |
| Meat factory | 1 |
| Restaurants | 13 |
| School meals kitchens | 6 |
| Supermarkets | 4 |
| Works canteens | 5 |

The City Planning Officer requested our comments on 2 cases of proposed conversion of existing property into the following types of food premises:–

| | |
|---|---|
| Meat factory | 1 |
| Fried fish shop | 1 |

## Inspection of food premises

**TABLE B 47**

| Trade or business | Inspections | Trade or business | Inspections |
|---|---|---|---|
| Bacon curing stores | 28 | Institutional kitchens | 38 |
| Bakeries | 144 | Licensed clubs | 29 |
| Bottling stores | 21 | Markets | 573 |
| Butchers | 1,486 | Meat factories | 55 |
| Cafes and restaurants | 1,046 | Milk retailers | 1,053 |
| Chemists | 107 | Mineral water factories | 109 |
| Cold stores | 56 | Mobile vans | 22 |
| Confectionery | 2,249 | Pastry shops | 17 |
| Fish | 503 | Pet food manufacturers | 104 |
| Fish and chip shops | 540 | Pet food shops | 4 |
| Food manufacture | 52 | Poultry | 752 |
| Fruiterers | 1,194 | Provisions | 661 |
| Grocers | 3,437 | Public houses | 590 |
| Hawkers carts | 66 | School meals kitchens | 84 |
| Hotels and guest houses | 159 | Shellfish on foreshore | 38 |
| Ice-cream | 1,291 | Supermarkets | 758 |
| Industrial canteens | 87 | Wholesale stores | 818 |
| | Total 18,171 | | |

## Butchers' premises

| | |
|---|---|
| Premises registered at 1st January 1968 ... ... ... | 365 |
| Deletions ... ... ... ... ... ... ... | 26 |
| Registrations ... ... ... ... ... ... | 29 |
| Premises registered at 31st December 1968 ... ... ... | 368 |
| Inspections ... ... ... ... ... ... | 1,486 |

*Defective conditions discovered on inspection of butchers' premises*

**TABLE B 48**

| Conditions | Instances | Remedied | In progress | Out-standing |
|---|---|---|---|---|
| Unsuitable cloakroom accommodation | 1 | — | 1 | 1 |
| Proper bins not provided for storage of bones and refuse | 1 | — | — | 2 |
| Foodstore: walls, floors, ceilings, windows, etc., required cleansing | 1 | — | — | 1 |
| Foodstore: walls, floors, ceilings, windows, etc., in disrepair | 4 | 3 | — | 2 |
| Foodstore: lighting and ventilation not provided and maintained | 1 | 1 | — | — |
| Preparation room: walls, floors, ceilings, windows, etc., required cleansing | 1 | 1 | — | — |
| Preparation room: walls, floors, ceilings, windows, etc., in disrepair | 2 | 1 | 1 | 1 |
| First-aid materials not provided | 2 | 1 | 1 | 2 |
| Suitable and sufficient personal washing facilities not provided | 14 | 8 | 1 | 5 |
| Supply of soap and towels not provided or not sufficient | 8 | 4 | — | 4 |
| No wash hand basin for personal washing facilities | 8 | 3 | 1 | 4 |
| Utensils: unsatisfactory method of cleansing | 4 | 4 | — | — |
| Wash-hand basin and sink: hot and cold water not provided or insufficient | 14 | 11 | 1 | 4 |
| No sink for utensil washing | 2 | 2 | — | 1 |
| Other defects | 11 | 12 | — | — |
| *Sanitary accommodation:* | | | | |
| Floors, basins, seats, walls, etc., required cleansing | 1 | 1 | — | — |
| Floors, basins, seats, walls, etc., in disrepair | 1 | — | 1 | 1 |
| Flush to water-closet defective or inadequate | 1 | — | — | — |
| Totals | 77 | *52 | 7 | 28 |

* Defects remedied include outstanding defects from the previous year

*Defective conditions discovered in food premises (excluding butchers, ice-cream, fish and chip shops, restaurants, cafes, snack-bars, canteens and licensed premises)*

**TABLE B 49**

| Conditions | Instances | Remedied | In progress | Outstanding |
|---|---|---|---|---|
| Unsuitable cloakroom accommodation | 12 | 7 | — | 7 |
| Sanitary conveniences within or communicating direct with food room | 15 | 8 | — | 9 |
| Suitable and sufficient personal washing facilities not provided | 56 | 34 | 1 | 29 |
| Supply of soap and towels not sufficient or not provided | 47 | 25 | 1 | 29 |
| Drain inlets within, or communicating direct with food room | 2 | — | — | 2 |
| Kitchen: walls, ceilings, floors, windows, etc., required cleansing | 1 | 2 | — | 1 |
| Kitchen: walls, ceilings, floors, windows, etc., in disrepair | 1 | 1 | — | 1 |
| Foodstore: walls, ceilings, floors, windows, etc., required cleansing | 22 | 12 | — | 11 |
| Foodstore: walls, ceilings, floors, windows, etc., in disrepair | 44 | 24 | 1 | 23 |
| Foodstore: lighting and ventilation not provided and maintained | 17 | 7 | — | 11 |
| First-aid materials not provided | 40 | 21 | — | 19 |
| Utensils and glasses: unsatisfactory method of cleansing | 24 | 8 | — | 18 |
| Sink: wastepipe untrapped or connected direct to drain | 1 | 1 | — | — |
| No wash hand basin for personal washing facilities | 42 | 24 | 1 | 22 |
| No sink for washing utensils | 15 | 3 | — | 15 |
| Wash hand basin and sink: hot and cold water not provided or insufficient | 76 | 38 | 1 | 44 |
| Other defects | 51 | 52 | — | 5 |
| *Sanitary accommodation:* | | | | |
| Floors, basins, seats, walls, etc., dirty or defective | 11 | 6 | — | 6 |
| Flush to water-closets defective or inadequate | 8 | 7 | — | 1 |
| Light and ventilation not provided or insufficient | 1 | — | — | 1 |
| Totals | 486 | *280 | 5 | 254 |

* Defects remedied include outstanding defects from the previous year

*Note.*—The number of outstanding defects is large because it would be unreasonable to enforce extensive alterations in premises now scheduled for demolition in slum clearance areas and road widening schemes.

*Defective conditions discovered in restaurants, cafes, snack-bars and industrial canteens*

**TABLE B 50**

| Conditions | Instances | Remedied | Work in progress | Outstanding |
|---|---|---|---|---|
| Proper bins not provided for storage of bones and refuse | 1 | 1 | — | — |
| Suitable and sufficient personal washing facilities not provided | 2 | 1 | — | 1 |
| Supply of soap and towels not sufficient or not provided | 1 | 1 | — | — |
| No wash hand basin provided for personal washing facilities | 1 | 1 | — | — |
| No sink for washing utensils | 1 | 1 | — | — |
| Wash hand basin and sink: hot and cold water not provided or insufficient | 3 | 3 | — | — |
| Utensils: unsatisfactory method of cleansing | 1 | 1 | — | — |
| Preparation room: lighting and ventilation not provided and maintained | 1 | 1 | — | — |
| Other defects | 5 | 5 | — | 1 |
| *Sanitary accommodation:* | | | | |
| Sanitary accommodation not provided or insufficient for both sexes | 2 | — | — | 2 |
| Flush to water-closet defective or inadequate | 1 | — | — | 1 |
| Totals | 19 | *15 | — | 5 |

* Defects remedied include outstanding defects from the previous year

*Defective conditions discovered in licensed premises and bottling stores*

**TABLE B** 51

| Conditions | Instances | Remedied | In progress | Out-standing |
|---|---|---|---|---|
| Unsuitable cloakroom accommodation | 4 | 1 | — | 3 |
| Sanitary conveniences within, or communicating direct with foodroom | 9 | 8 | 1 | 1 |
| Suitable and sufficient personal washing facilities not provided | 22 | 8 | 1 | 14 |
| Supply of soap and towels not sufficient or not provided | 13 | 4 | 1 | 8 |
| Drain inlets within, or communicating direct with foodroom | 1 | 1 | — | — |
| Kitchen: walls, floors, ceilings, windows, etc., required cleansing | 1 | — | — | 1 |
| Foodstore: walls, floors, ceilings, windows, etc., required cleansing | 2 | 1 | — | 2 |
| Foodstore: walls, floors, ceilings, windows, etc., in disrepair | 2 | 2 | — | — |
| Bar: walls, floors, ceilings, windows, etc., required cleansing | 2 | — | — | 2 |
| Bar: walls, floors, ceilings, windows, etc., in disrepair | 8 | 8 | — | — |
| Bar: lighting and ventilation not provided and maintained | 2 | 1 | — | 1 |
| Beer cellar: walls, floors, ceilings, windows, etc., required cleansing | 2 | 2 | — | — |
| Beer cellar: walls, floors, ceilings, windows, etc., in disrepair | 2 | 2 | — | — |
| Bottling store: walls, floors, ceilings, windows, etc., required cleansing | 8 | — | 1 | 7 |
| Bottling store: walls, floors, ceilings, windows, etc., in disrepair | 5 | 1 | — | 4 |
| Fixtures and fittings in a state of disrepair | 1 | — | — | 1 |
| First-aid materials not provided | 17 | 6 | — | 11 |
| Improper receptacles for storage of refuse | 1 | — | — | 1 |
| Glasses: unsatisfactory method of cleansing | 10 | 6 | 1 | 3 |
| No sink for utensil (glasses) washing | 1 | 1 | — | — |
| Wash hand basin and sink: hot and cold water not provided or insufficient | 31 | 15 | 2 | 14 |
| No wash hand basin for personal washing facilities | 16 | 4 | 1 | 12 |
| Other defects | 12 | 8 | — | 4 |
| *Sanitary accommodation:* | | | | |
| Floors, basins, seats, walls, etc., dirty or defective | 7 | 1 | 1 | 6 |
| Urinals: defective or insanitary | 2 | 2 | — | — |
| Light and ventilation not provided and maintained | 1 | 2 | — | — |
| Totals | 182 | *84 | 9 | 95 |

* Defects remedied include outstanding defects from the previous year

## Fish and chip premises

| | |
|---|---|
| Premises registered at 1st January 1968 ... ... ... | 192 |
| Deletions ... ... ... ... ... ... ... | 22 |
| Registrations ... ... ... ... ... ... | 25 |
| Premises registered at 31st December 1968 ... ... ... | 195 |
| Inspections ... ... ... ... ... ... | 540 |

*Defective conditions discovered in fish and chip premises*

**TABLE B** 52

| Conditions | Instances | Remedied | In progress | Outstanding |
|---|---|---|---|---|
| Sanitary conveniences within or communicating direct with foodroom | — | 1 | — | — |
| Suitable and sufficient personal washing facilities not provided | 2 | 4 | — | — |
| Supply of soap and towels not sufficient or not provided | 1 | 3 | — | — |
| Drain inlets within, or communicating direct with foodroom | — | 1 | — | — |
| Foodstore: walls, floors, ceilings, windows, etc., required cleansing | 2 | 2 | — | — |
| Foodstore: walls, floors, ceilings, windows, etc., in disrepair | 2 | 2 | — | — |
| Preparation room: walls, floors, ceilings, windows, etc., in disrepair | 1 | 2 | — | 2 |
| No proper potato store | 1 | — | — | 1 |
| No wash hand basin for personal washing facilities | 1 | 3 | — | — |
| Wash hand basin and sink: hot and cold water not provided or insufficient | 2 | 4 | — | — |
| Unsuitable cloakroom accommodation | 2 | — | — | 2 |
| Other defects | 3 | 4 | — | — |
| Totals | 17 | *26 | — | 5 |

* Defects remedied include outstanding defects from the previous year

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

**TABLE B** 52

| Type of Business | Food Hygiene General Regulations (N.I.) 1964 | Public Health Acts (N.I.) 1878–1967 | Belfast Corporation Acts | Bye-Laws | Totals |
|---|---|---|---|---|---|
| Butchers | 16 | 11 | 1 | 1 | 29 |
| Cafes, restaurants, milk bars | 2 | 3 | 2 | 1 | 8 |
| Chemists | 7 | 2 | — | — | 9 |
| Confectioners | 16 | 9 | — | — | 25 |
| Fish | 2 | 1 | — | — | 3 |
| Fish and chips | 5 | 2 | — | — | 7 |
| Food manufacturers | 3 | — | — | — | 3 |
| Fruiterers | 7 | 5 | — | 2 | 14 |
| Grocers | 60 | 30 | — | 5 | 95 |
| Hotels and guest houses | — | 1 | — | — | 1 |
| Ice-cream | 2 | — | — | — | 2 |
| Licensed clubs | 3 | 2 | — | — | 5 |
| Public houses | 34 | 11 | 1 | — | 46 |
| Wholesale stores | 3 | — | — | — | 3 |
| Totals | 160 | 77 | 4 | 9 | 250 |

## RODENT CONTROL

During 1968 the Pests Control Officer of the Health Department carried out 287 campaigns for the destruction of rodents, and 262 campaigns were also carried out in the sewerage system of the City. Many of the infestations dealt with were discovered during systematic surveys of premises, whilst others were brought to the attention of the Department by occupiers of premises who had asked for assistance in the work of disinfestation. Infestations of rats occured on sites where prefabricated bungalows were being demolished, the drains not having been effectively sealed. Infestations also occurred in the refuse chutes of blocks of flats, where containers were of insufficient capacity to cope with the volume of refuse being sent down the chutes, resulting in scraps of food, etc., being scattered on the floors at the bottom of chutes. Representations were made to the Estates Department to have the containers emptied more frequently. Rat infestations in two schools were found to have arisen through defective drains on the premises and these were repaired.

Details of the work of the Pests Control Section are as follows:–

*Statistical table*

| | |
|---|---|
| Surveys of land and premises | 17,489 |
| Lands and premises found infested | 500 |
| Rat infestation:– | |
| Food premises | 38 |
| Non-food premises | 315 |
| Mouse infestation:– | |
| Food premises | 54 |
| Non-food premises | 93 |
| Poison campaigns carried out for occupiers:– | |
| For rats | 206 |
| For mice | 81 |
| School buildings and school meals kitchen treated for Education Department:– | |
| For rats | 22 |
| For mice | 17 |
| Premises cleared of rats and mice by rodent control staff | 225 |
| Premises where the clearing process was not complete at the end of the year | 62 |
| Premises test-baited | 5,539 |
| Premises where the occupier undertook to eliminate rats and mice on statutory or verbal notice under the Rats and Mice (Destruction) Act, 1919:– | |
| For rats | 19 |
| For mice | 50 |
| Premises having no evidence of rodents at the time of survey, but with rodent destruction firms on contract:– | 157 |
| Premises where rat-proofing and other work was done to prevent re-infestation | 19 |
| Notices issued under the Rats and Mice (Destruction) Act, 1919 | 10 |
| Rat destruction campaigns at Corporation tipping grounds | 8 |

**Sewer Treatment**

Systematic campaigns to control the numbers of rats in the sewers of the city continued during the year. This plays a most important part in the rodent control effort, as the sewers form the main reservoir from which surface infestations may arise. The assistance and co-operation of the City Surveyor in providing the labour force to carry out these measures are gratefully acknowledged.

| | |
|---|---|
| Rate destruction campaigns carried out in the sewerage system | 262 |
| Sewer manholes treated | 6,156 |
| Pre-baits laid | 17,420 |
| Pre-baits taken | 8,886 |
| Poison baits laid | 11,236 |
| Poison baits taken | 8,156 |

## Insect Pests

Complaints of infestations of bed bugs, cockroaches, steamflies, fleas, flies, wood lice, and spider beetles were investigated. The persons concerned were advised on methods of disinfestation. Treatments were carried out free of charge in special circumstances in the homes of the aged and infirm. In other instances, treatments were carried out in catering establishments and in premises belonging to the Hospitals Authority and other Corporation departments, charges being made for such services.

| | |
|---|---|
| Inspections of premises on complaints of insects | 2,614 |
| Premises found to be infested:– | |
| Bed bugs | 39 |
| Cockroaches and steamflies | 158 |
| Fleas | 201 |
| Flies | 158 |
| Other insects | 41 |
| | 597 |
| Premises treated with insecticide | 583 |
| Stables and cattle-yards | 142 |
| Rag stores | 125 |
| Corporation tipping grounds | 13 |
| Visits to food shops, etc. | 957 |

### *Mosquito control*

From April until September, 1968, potential mosquito breeding areas were examined and treated. The following inspections were made, treatments carried out and materials used:—

| | |
|---|---|
| Surveys of mosquito areas | 87 |
| Areas treated with larvicide | 74 |
| Miles run by vehicles | 316 |
| Gallons of waste transformer oil used | 495 |
| Gallons of larvicide used | 30 |
| Gallons of paraffin used | 24 |
| Gallons of petrol used by vehicle and Tifa machine | 38 |

### *Methyl Bromide fumigations*

| | |
|---|---|
| Number of notifications of fumigations of tobacco leaf with methyl bromide | 10 |

### *Disinfection and Disinfestation*

At the Cleansing Clinic, Laganbank Road, more than twice the number of persons were treated for scabies during 1968 than during the previous year.

Other work done by the Pests and Disinfecting Section included the investigation of cases of infectious disease; disinfection of infectious premises; disinfestation of verminous premises; disinfestation and disinfestation station; delivery, collection, and cleansing of home nursing equipment; transport for Food and Drugs Inspectors; attendance on volumetric instruments for air pollution; miscellaneous transport services for stores, clinics and schools; and the testing of drains and sewers for Public Health Inspectors.

| | |
|---|---|
| Infectious premises disinfected | 146 |
| Verminous premises disinfected | 240 |

During the year the Disinfecting and Cleansing Station dealt with the following items:–

| | |
|---|---|
| Infectious articles disinfected by steam ... ... ... | 791 |
| Articles disinfected by formalin ... ... ... ... | 391 |
| Infectious articles destroyed on request ... ... ... | 111 |
| Public library books withdrawn from circulation ... ... | 199 |
| Articles of home nursing equipment cleansed and disinfected ... | 3,789 |

The Cleansing Clinic did the following work:–

| | |
|---|---|
| Verminous persons cleansed ... ... ... ... ... | 107 |
| Treatment for scabies:– | |
| First treatments ... ... ... ... ... | 677 |
| Subsequent treatments ... ... ... ... ... | 476 |
| Articles disinfected and disinfested ... ... ... ... | 6,983 |

Persons treated for scabies at the Cleansing Clinic over the past five years:–

**TABLE B 54**

| Year | First treatments | Subsequent treatments | Total |
|---|---|---|---|
| 1964 | 182 | 213 | 395 |
| 1965 | 66 | 60 | 126 |
| 1966 | 104 | 88 | 192 |
| 1967 | 290 | 257 | 547 |
| 1968 | 677 | 476 | 1,153 |

Four motor vehicles (excluding a Land Rover) are engaged in the work of the Department. During the year these vehicles covered 37,155 miles and used 1,873 gallons of petrol.

**Details of legal proceedings and fines, etc., imposed**

**TABLE B 55**

| Act | Offence | Summonses | Orders | Fines | Costs |
|---|---|---|---|---|---|
| | | | | £ s. d. | £ s. d. |
| Public Health Acts (N.I.) 1878 to 1967 | Failed to abate public health nuisances | 1,180 | 230 .. | 248 11 0 | 80 3 0 |
| | Disobedience of Magistrate's Orders to abate public health nuisances | 42 | — | 260 11 0 | 14 14 0 |
| | Water closets not provided with sufficient water for flushing | 46 | — | 159 0 0 | 16 2 0 |
| Ice-Cream Regulations (N.I.) 1961 | Sold ice-cream certified by the Public Analyst to be deficient in fat | 1 | — | 5 0 0 | 2 7 6 |
| Rats and Mice (Destruction) Act 1919 | Failed to take steps necessary and reasonable for the destruction of mice | 1 | — | 5 0 0 | 0 7 0 |
| Rag Flock Acts 1911 and 1928 | Flock which failed to conform to the standards of cleanliness prescribed by the Rag Flock (Ireland) Regulations 1912 | 2 | — | 4 0 0 | 0 14 0 |
| Belfast Corporation (General Powers) Act (N.I.) 1948– (Regulations re Fish Frying Premises) | 1. Failed to keep surfaces finished with hard, smooth and durable material | 1 | — | 2 0 0 | 0 7 0 |
| | 2. Failed to protect drains from entry of solid matter | 2 | — | 7 0 0 | 0 14 0 |
| | 3. Failed to keep premises clean | 2 | — | 7 0 0 | 0 14 0 |
| | 4. Failed to place refuse in proper receptacles | 2 | — | 7 0 0 | 0 14 0 |

**TABLE B 54** (contd.)

| Act | Offence | Summonses | Orders | Fines | Costs |
|---|---|---|---|---|---|
| | | | | £ s. d. | £ s. d. |
| The Preservatives in Food Regulations (N.I.) 1962 | Sold food containing preservative in excess of the permitted amount:– | | | | |
| | Sausage meat roll containing excess sulphur dioxide | 2 | — | 9 0 0 | 4 13 6 |
| | Beef sausages containing excess sulphur dioxide | 4 | — | 10 0 0 | 9 9 6 |
| | Steak sausages containing excess sulphur dioxide | 1 | — | 2 0 0 | 0 7 0 |
| | Sold food containing prohibited preservative:– | | | | |
| | Minced beef containing sulphur dioxide | 4 | — | 15 0 0 | 9 13 10 |
| | Minced steak containing sulphur dioxide | 10 | — | 30 0 0 | 24 4 6 |
| Food Hygiene (General) Regulations (N.I.) 1964 | Failed to keep equipment clean (Reg. 5) | 3 | — | 12 0 0 | 1 1 0 |
| | Failed to protect food from contamination (Reg. 7) | 4 | — | 10 0 0 | 1 8 0 |
| | Used tobacco where there was open food (Reg. 8) | 2 | — | 4 0 0 | 0 14 0 |
| | Food room communicating directly with a sanitary convenience (Reg. 13) | 1 | — | 3 0 0 | 0 7 0 |
| | Failed to keep clean the walls and floors of sanitary convenience, etc. (Reg. 13) | 1 | — | 5 0 0 | 0 7 0 |
| | Failed to provide wash-hand basins, hot water, soap, towels, etc. (Reg. 15) | 4 | — | 13 0 0 | 1 8 0 |
| | Failed to provide first aid materials (Reg. 16) | 2 | — | 4 0 0 | 0 14 0 |
| | Failed to provide accommodation for clothing (Reg. 17) | 2 | — | 4 0 0 | 0 14 0 |
| | Failed to provide and maintain sinks, hot water, etc., for washing food and equipment (Reg. 18) | 3 | — | 7 0 0 | 1 1 0 |
| | Used a food room as a living room (Reg. 20) | 3 | — | 6 0 0 | 1 1 0 |
| | Failed to maintain the cleanliness and repair of food room (Reg. 21) | 6 | — | 16 0 0 | 2 2 0 |
| | Failed to observe the requirements relating to stalls and vehicles (Reg. 24) | 14 | — | 25 10 0 | 6 13 0 |
| | Failed to suitably cover stalls (Reg. 25) | 2 | — | 10 0 0 | 0 14 0 |
| | Failed to provide water, etc., for use in stalls (Reg. 26) | 10 | — | 22 10 0 | 2 15 0 |
| | Transported unwrapped meat on a motor vehicle other than in a meat compartment or a meat container (Reg. 28) | 14 | — | 33 10 0 | 6 3 0 |
| | Transported meat in an unsuitable compartment or container (Reg. 33) | 3 | — | 9 0 0 | 1 1 0 |
| Food and Drugs Act (N.I.) 1958 | Obstructed an officer | 1 | — | 5 0 0 | 0 7 0 |
| | In possession of unfit food for the purpose of sale | 3 | — | 9 0 0 | 1 1 0 |
| | Sold food unfit for human consumption | 12 | — | 34 0 0 | 4 4 0 |
| | Exposed for sale food unfit for human consumption | 4 | — | 19 0 0 | 1 8 0 |
| | Sold food not of the substance demanded by the purchaser | 4 | — | 24 0 0 | 5 19 8 |
| | Sold butter containing less than 80% milk fat | 3 | — | 7 0 0 | 7 7 8 |
| | Sold ice-cream in unregistered premises | 1 | — | 10 0 0 | 0 7 0 |

## Conclusion

This section of the Report, dealing with the work of the Sanitary Branch of the Environmental Division of the Department, is a record of the excellent team-work of both the technical and clerical staff in carrying out the statutory duties of the Department relating to sanitary matters and for this I am truly grateful.

W. JENKINS, M.R.S.H., M.A.P.H.I.,
*Chief Public Health Inspector.*

## Total Slaughter

The total number of animals (181,906) slaughtered at the Belfast Abattoir in 1968 showed a decrease of 19,452; sheep and lambs a decrease of 52,083; pigs a decrease of 688 and goats a decrease of 150.

*Number and description of animals slaughtered each month*

**TABLE C 1**

| Month | Cows | Heifers | Bulls | Bullocks | Calves | Sheep | Goats | Pigs |
|---|---|---|---|---|---|---|---|---|
| January | 56 | 128 | 1 | 708 | 12 | 3,346 | 3 | 88 |
| February | — | — | — | 40 | — | — | — | — |
| March | 101 | 138 | 14 | 1,620 | 9 | 3,233 | 4 | 143 |
| April | 141 | 347 | 13 | 3,893 | 34 | 9,469 | 5 | 287 |
| May | 226 | 450 | 29 | 3,441 | 16 | 12,794 | 20 | 236 |
| June | 182 | 387 | 11 | 2,956 | 9 | 13,155 | 3 | 195 |
| July | 171 | 612 | 2 | 3,631 | 4 | 16,247 | 1 | 203 |
| August | 56 | 584 | 2 | 3,840 | 9 | 14,488 | 12 | 197 |
| September | 62 | 677 | 4 | 4,154 | 5 | 16,369 | 11 | 281 |
| October | 58 | 623 | 3 | 4,374 | 188 | 15,451 | 2 | 284 |
| November | 71 | 834 | 2 | 4,178 | 52 | 14,521 | 6 | 232 |
| December | 99 | 873 | — | 4,321 | 20 | 15,886 | 5 | 258 |
| Totals | 1,223 | 5,653 | 81 | 37,156 | 358 | 134,959 | 72 | 2,404 |
| Total Cattle | | | 44,471 | | | | | |

Grand total – 181,906

*Carcase condemnation*

The number of carcases totally condemned in 1968 was 503 compared with 631 in 1967, a decrease of 128. Total condemnations represented 0.28% of the total slaughter. 387 sheep carcases were seized, representing 0.29% of the total sheep kill and 46 pig carcases, representing 1.91% of the total pig kill.

*Total seizure from all causes*

**TABLE C 2**

| Class | 1968 | 1967 | Percentage of total kill |
|---|---|---|---|
| Cattle | 71 | 59 | 0.15 |
| Sheep and lambs | 386 | 496 | 0.29 |
| Pigs | 46 | 62 | 1.91 |
| Goats | — | 14 | — |
| Totals | 503 | 631 | 0.28 |

As far as individual disease conditions are concerned, the greatest losses were due to generalised oedema, emaciation, decomposition, pyaemia, septic pleurisy and septicaemia. Oedema and emaciation were most common in sheep and pyaemia in pigs. Total and partial seizure of carcase meat in all species amounted to 65,509 lbs.

*Reasons for total seizure*

**TABLE C 3**

| Cause | Cattle | Sheep | Pigs | Goats | Total |
|---|---|---|---|---|---|
| Abscesses | 2 | 4 | — | — | 6 |
| Anaemia | 1 | 3 | — | — | 4 |
| Arthritis | 2 | 1 | — | — | 3 |
| Bruising | 4 | 3 | 1 | — | 8 |
| Cysticercus Bovis | 1 | — | — | — | 1 |
| Contamination | — | 1 | — | — | 1 |
| Decomposition | — | 17 | — | — | 17 |
| Emaciation | 7 | 136 | — | — | 143 |
| Enteritis | 1 | 3 | — | — | 4 |
| Fatty changes | — | 4 | — | — | 4 |
| Fever | 3 | 4 | 1 | — | 8 |
| Fibrosis | 1 | 2 | — | — | 3 |
| Gangrene | — | 2 | 1 | — | 3 |
| Immaturity | 6 | — | — | — | 6 |
| Leukaemia | 1 | 3 | — | — | 4 |
| Melanosis | — | 1 | — | — | 1 |
| Meningitis | 1 | — | — | — | 1 |
| Navel ill | 3 | — | — | — | 3 |
| Necrosis | — | 1 | — | — | 1 |
| Neoplasms | 2 | 3 | 1 | — | 6 |
| Nephritis | 1 | — | 1 | — | 2 |
| Odour (abnormal) | — | 1 | — | — | 1 |
| Oedema | 10 | 135 | 1 | — | 146 |
| Pericarditis | 2 | 1 | 1 | — | 4 |
| Peritonitis | 2 | 9 | 2 | — | 13 |
| Pigmentation | 1 | — | — | — | 1 |
| Putrefaction | — | 2 | 1 | — | 3 |
| Pyaemia | 2 | 6 | 27 | — | 35 |
| Septic mastitis | 4 | 3 | — | — | 7 |
| Septic metritis | 2 | 5 | — | — | 7 |
| Septic pleurisy | — | 23 | 3 | — | 26 |
| Septic pneumonia | 1 | 2 | — | — | 3 |
| Septicaemia | 6 | 10 | 5 | — | 21 |
| Strongylosis | — | 1 | — | — | 1 |
| Toxaemia | 4 | — | — | — | 4 |
| Tuberculosis | 1 | — | 1 | — | 2 |
| Totals | 71 | 386 | 46 | — | 503 |

## Bovine Cysticercosis

**TABLE C 4**

| Month | Cases detected | Total slaughter (Cattle) | Percentage incidence |
|---|---|---|---|
| January | 63 | 905 | 6.96 |
| February | 7 | 40 | 17.5 |
| March | 127 | 1,882 | 6.75 |
| April | 271 | 4,428 | 6.12 |
| May | 305 | 4,162 | 7.33 |
| June | 322 | 3,545 | 9.08 |
| July | 420 | 4,420 | 9.50 |
| August | 459 | 4,491 | 10.22 |
| September | 498 | 4,902 | 10.16 |
| October | 378 | 5,246 | 7.2 |
| November | 454 | 5,137 | 8.84 |
| December | 426 | 5,313 | 8.02 |
| Totals | 3,730 | 44,471 | 8.39% |

The percentage incidence of 8.39% shows an increase of 1.73% compared with 1967.

### Slaughterhouses (Hygiene) Regulations (N.I.) 1964

Infringements of these regulations regrettably continue to occur on occasions and during 1968 proceedings were taken against eight persons for unsatisfactory protective clothing. Convictions were obtained in all cases.

### Mass X-Ray Radiography

A visit was made to the Municipal Abattoir on 20th December, 1968 by the mobile unit and some 250 workers from all sections of the premises presented themselves for examination. This figure represented approximately 75% of the total employees and is considered highly satisfactory. The examinations were organised in such a way that there was no reduction of slaughtering throughput.

### Health Education

In addition to the provision of X-ray examinations, steps were taken to improve hygiene standards by the use of posters and other notices. A booklet on hygiene is being prepared and each Meat Plant employee will be provided with one. While noticeable improvements in personal hygiene have been achieved there is still a great need for a much higher standard. Health education at primary school level is an urgent necessity if high standards of hygiene in the meat industry are to be achieved.

### Transport of Meat

Criticism has already been made of the intermediate size of vehicle in the transportation of meat and offal in that this type of vehicle necessitates men walking in and out for loading and off-loading purposes. Not only does this risk contamination of the meat but the meat quality is reduced due to stacking. It is considered that carcase meat in sides and quarters should be transported in two types of vehicle only, viz., large vehicles fitted with rails for bulk transport or small vans for individual retailer use. Consideration should also be given to the use of polythene sheeting, etc., for carrying offal.

### Meat Inspection

Fascioliasis continues to be a serious cause of liver loss in cattle and sheep, some 400 tons of both types being condemned annually in Northern Ireland abattoirs. In order that the seriousness of this situation might be fully brought home to livestock producers, a system of notifying owners of the incidence of fascioliasis in animals presented under the Fatstock Guarantee Scheme has been developed and has been widely welcomed.

### Laboratory Examinations of Meat and Meat Products

The routine bacteriological examination of samples from emergency slaughter animals and other doubtful cases and from various sites and persons in the abattoir serves the important function of assisting the assessment of meat fitness for human consumption, as well as determining the general standard of cleanliness and promoting employee interest in hygiene.

### Use of Detergents and Bactericidal Agents

The opportunity to test various cleansing agents is taken when new types become available on the market. The application of these is a difficult matter under present conditions which will be obviated with the use of in-place cleansing systems in the new Meat Plant.

### Industrial Training Act (Northern Ireland) 1964

The Ministry of Health and Social Services intends to set up an Industrial Training Board for the Food and Drink Industry in the near future. Consultations have already taken place between the Ministry and the employers' and workers' organisations in the meat industry. Such a proposal will be welcomed by all concerned with the Province's important livestock and meat industry. The City of Belfast with its new Meat Trades Training School, Meat Plant and College of Technology will undoubtedly play a major part in training of the various personnel engaged in the trade.

### Presentation of Stock for Slaughter

The attention of livestock producers has been drawn both by the Ministry of Agriculture and the Northern Ireland Livestock Marketing Commission to the all too frequent dirty state of cattle and sheep entering abattoirs. Besides lowering the value of hides because of damaged grain, extra freight,

labour costs, etc., this unsatisfactory situation makes for extreme difficulty in dressing. Some contamination of carcases is inevitable: indeed, it is amazing that more contamination does not occur and this is to the credit of the meat operatives. In spite of the publicity given and the warning that dirty animals may not be accepted under the Fatstock Guarantee Scheme, the situation has not improved. It would appear that stronger action by Ministry of Agriculture Grading staff at livestock certification centres is necessary.

### Meat Inspection and Meat Technology Lectures

It is hoped that photographic equipment will be available in the near future in order that full use be made of the valuable pathological material encountered on meat inspection for educational purposes.

### City of Belfast Meat Plant - Duncrue Pass

The construction of the new Meat Plant is now well advanced and it is hoped to commence operations in the autumn of 1969. The completion of the wholesale meat and by-products premises adjoining the Meat Plant will not be effected until February, 1970.

J. F. GRACEY, Ph.D., B.Agr., M.R.C.V.S., D.V.S.M.,
*City Veterinarian.*

# REPORT OF SENIOR MEDICAL OFFICER, COMMUNITY HEALTH DIVISION, FOR THE YEAR 1968

## Notification of Births

The total number of births notified as occurring in Belfast during the year was 10,568. Of these 5,432 were males and 5,115 were females. Included in this total were 192 stillbirths.

**TABLE D 1**

| Births occurring in:– | |
|---|---|
| Hospitals | 9,920 |
| Private nursing homes | 80 |
| Other institutions | 42 |
| Home | 486 |
| Home (Hosp. district cases) | 40 |

## Infant Mortality

During the year, 234 children died under the age of 12 months giving an infant mortality rate of 31. The rate for the previous year was 28.

## Neonatal and Perinatal Mortality

Deaths occurring during the first month of life numbered 141, giving a neonatal mortality rate for the year of 18. The rate for the previous year was 17. The perinatal rate, i.e., stillbirths and deaths during the first week per 1,000 total births (live and still), was 36 against 34 in the previous year.

## Maternal Mortality

There was 1 death during the year attributable to pregnancy, childbirth and the puerperal state, (1 last year).

## Health Visiting

60 Health Visitors were employed at the end of the year. In continuing the process of decentralisation of staff begun last year by the transfer of Health Visitors working in North district to Lincoln Avenue Clinic, Health Visitors working in West were transferred to Cupar Street Clinic and those working in the East District to 195 Templemore Avenue. Health Visitors working in South district remain at 16 College Street. Throughout the year a comprehensive follow-up of all children under five was maintained. Routine screening of all babies for phenylketonuria and for defects of hearing was continued and special attention was given to children in problem families, those on the "at risk" register and children suffering from handicapping conditions. The care of the elderly in the community makes constantly increasing demands on the Health Visitors' time, as does the after-care of patients discharged from hospital, the supervision of patients on special diets and cases in which medical equipment has been issued.

Several of the Health Visitors are specially allocated to the visitation of patients suffering from tuberculosis and other chest diseases and the follow-up of contacts. This work is done in co-operation with the Central Chest Clinic. A number having special training in mental illness devote part of their time to the after-care of psychiatric cases. They visit mental hospitals, attend sessions at day hospitals and work closely with the psychiatrists and psychiatric social workers.

In May, one of our Health Visitors attended a special courses on venereal diseases at a London hospital. She is now attached to the V.D. department at the Royal Victoria Hospital, where she attends once each week, and also visits the V.D. department at the Ulster Hospital as required. She undertakes follow-up visits to the homes of patients and helps in the tracing of contacts of known cases. Two of our staff devote a proportion of their time to diabetic cases: they attend the Metabolic Unit at the Royal Victoria Hospital and visit patients in their homes. Nine others visit different hospitals and institutions and continue the long-established health visitor/hospital liaison which has proved so satisfactory and helps to resolve many problems.

During the year one Health Visitor has continued to work in full-time attachment with a group medical practice, and twenty-three others have had liaison attachments with medical practices. There is increasing appreciation of the value of this link-up between Health Visitors and general practitioners.

The Health Visitors also work closely with the Welfare Department in the administration of the Home Helps Scheme with regard to expectant mothers and mothers of young children and in various other aspects of district work.

### Health Education

A large part of the Health Visitors' time is spent on domiciliary health education and group teaching at clinics, covering such subjects as mothercraft, nutrition and food hygiene, prevention of home accidents, care of the aged at home, care of the feet, dental care, etc. There was considerable extension of the health education programme during the year. Evening classes for mothers were held in all four divisions of the city and the series included talks and discussions, the showing of films and filmstrips, also demonstrations, including cookery. St. John Ambulance child care courses were organized for mothers at Spier's Place, Highfield and Ballymurphy Clinics and following a series of weekly lectures an examination was held in which all the entrants were successful. A programme for Mental Health Week was organized and carried out at all the clinics in the city in June. Talks were given at different hospitals to student nurses on the Community Health Services and the work of the Health Visitor. Talks were also given by members of the staff to Youth Organizations, Parents' Associations, British Red Cross, St. John Ambulance Brigade and various other groups.

The work of the senior staff included lectures to fifth year medical students and student district nurses on their training course, also the examination in child care of nursery nurse students at the Rupert Stanley College of Further Education. Educational programmes were prepared during the year for students to see something of the work carried out in the different community health departments. Those who attended included 18 medical students, 15 student health visitors, 21 student district nurses, 8 welfare students and 117 student nurses in training at the Royal Victoria, City and Mater Infirmorum hospitals. Groups of secondary school pupils attended Child Health clinics and were given talks on the Community Health Services and members of staff gave advice and guidance in the setting up and equipping of play groups.

Research projects carried out by Health Visitors during the year included subjects such as the assessment of the needs of the elderly for chiropody treatment and investigation into cytology testing in the various age groups.

*Visits by Health Visitors during the year*

**TABLE D 2**

| | |
|---|---|
| Expectant mothers | 4,671 |
| Nursing mothers | 41,905 |
| Other mothers | 32,750 |
| Children under 1 year of age | 50,841 |
| Children 1–4 years | 72,048 |
| Children 5–14 years | 424 |
| Mentally disordered persons | 2,864 |
| Tuberculous patients and contacts | 4,352 |
| Old people | 9,068 |
| Other persons | 21,093 |
| Total visits | 240,016 |

### Antenatal Clinics

There has been a continued increase in the number of institutional confinements with an associated change in the pattern of antenatal care. This is now largely carried out at the hospitals and by general practitioners at their own surgeries. The resulting decline in numbers attending local authority antenatal clinics led to the closure, in April, 1968, of the session held weekly at Mountcollyer Street and at the end of the year, of those held at Cupar Street and Spier's Place.

*Antenatal clinic attendances*

**TABLE D 3**

| | 1st visit | Re-visit |
|---|---|---|
| Mountcollyer Street | 5 | 60 |
| Spiers Place | 46 | 375 |
| Cupar Street | 67 | 403 |
| Totals | 118 | 838 |

1,295 blood tests were carried out during the year.

## Cervical Cytology

Cytology examinations were carried out at three centres throughout the year. In addition to taking the cervical smear for the early detection of cancer, a full gynaecological examination was carried out, with breast examination and urine testing for diabetes and kidney disease, so that the clinics tend to be more the "well woman" type. The women are instructed in self-examination of the breasts for early detection of abnormality. In all cases a report is sent from the clinic to the patient's own doctor.

There were three positive cervical smears during the year and three early breast cancers were detected. In addition a considerable number of other abnormalities requiring treatment were discovered.

*Summary of cases*

| | |
|---|---|
| Women examined ... ... ... ... ... ... | 2,027 |
| Positive cervical smears ... ... ... ... ... | 3 |
| Patients with abnormalities ... ... ... ... ... | 1,822 |

## Family Planning

As a result of the recommendation from the Ministry of Health and Social Services in December, 1967, arrangements were made for the Family Planning Association, as agents of the Health Committee, to start a clininc at Lincoln Avenue. One session per week was undertaken from March, 1968 and the demand for appointments necessitated a second session which commenced in June.

**TABLE D 4**

| | |
|---|---|
| Sessions held | 65 |
| 1st visits | 332 |
| Revisits | 337 |
| Total attendances | 669 |
| Appliances issues free or under-cost: | |
| (1) On medical grounds | 81 |
| (2) Para 4+ | 241 |
| Cervical smears | 170 |

## Child Health Centres

The number of sessions provided at the end of the year remained at 41 per week. Of these, 17 were in buildings owned by the Health Authority, one was held in Ormeau Road Health Centre and the other 23 in halls, etc., rented on a sessional basis. A new centre was opened at Brookeborough Hall, Sandown Road, and the attendances have been encouraging. Decreased attendances at Cupar Street Clinic led to a reduction to three weekly sessions instead of four, by closing the Friday clinic at the end of the year. As there is no alternative accommodation available in some areas a number of

sessions continue to be held in very unsuitable premises. A prominent part of the work was the educational aspect already mentioned. The members of the Voluntary Workers' Association continued to help in weighing the babies and arranging social functions for the mothers: we again thank them for their continued interest in our work.

*Child Health Centre attendances*

**TABLE D 5**

| | | Under 2 years | Over 2 years |
|---|---|---|---|
| Monday | Highfield | 1,351 | 204 |
| | York Street | 408 | 172 |
| | Ariel Street | 1,556 | 320 |
| | Bloomfield | 4,297 | 1,237 |
| | Cupar Street | 1,924 | 685 |
| | Donegall Road | 2,267 | 556 |
| | Knock | 1,778 | 344 |
| | Ormeau Road | 1,694 | 566 |
| | Ballymurphy | 950 | 313 |
| Tuesday | Glenard | 2,605 | 1,057 |
| | Havelock Place | 1,109 | 501 |
| | Donegall Road | 1,941 | 607 |
| | Cupar Street | 1,387 | 417 |
| | Mount Street | 2,252 | 817 |
| | Ariel Street | 1,758 | 311 |
| | Ballymurphy | 720 | 259 |
| | Lincoln Avenue | 2,161 | 790 |
| Wednesday | Avoca Street | 1,698 | 503 |
| | Cupar Street | 1,554 | 744 |
| | Ligoniel | 2,955 | 1,221 |
| | Seaview | 2,367 | 1,054 |
| | Windsor | 1,330 | 516 |
| | Mount Street | 2,969 | 349 |
| | Palmerston Road | 1,609 | 317 |
| | Susan Street | 2,634 | 342 |
| | Sandown Road* | 1,148 | 135 |
| Thursday | Avoca Street | 1,351 | 530 |
| | Kimberley Street | 2,160 | 582 |
| | Greencastle | 1,796 | 764 |
| | Mountcollyer | 1,941 | 779 |
| | Spier's Place | 2,386 | 446 |
| | Stranmillis | 1,617 | 785 |
| | Susan Street | 1,991 | 387 |
| | Mount Street | 2,309 | 957 |
| Friday | Malone | 697 | 554 |
| | Ariel Street | 2,543 | 708 |
| | Cupar Street† | 1,203 | 640 |
| | Joanmount | 2,177 | 858 |
| | Spier's Place | 1,651 | 377 |
| | Strandtown | 2,449 | 1,168 |
| | Mount Street | 987 | 480 |
| | Ballymurphy | 1,513 | 475 |
| | Total attendances | 78,243 | 25,327 |

* Opened April, 1968

† Closed December, 1968

## Mother and Baby Homes

*(Ante and post-natal Hostels)*

**TABLE D 6**

| Name and address of Hostel | BEDS | | | | | | Average length of stay | |
|---|---|---|---|---|---|---|---|---|
| | Ante-natal | Post-natal | Labour | Isolation | Maternity (excluding labour and isolation) | Cots | Ante-natal | Post-natal |
| (a) Hopedene | 11 | 3 | — | — | — | 11 | 11 weeks | 3 weeks |
| (b) Thorndale | 12 | 16 | 2 | 1 | 17 | 17 | 6 weeks | 6-8 weeks |

The total number of City cases admitted during the year was 21.

These hostels receive a grant from the Health Committee.

## Residential Nurseries

**TABLE D 7**

| Name and address of Nursery | | Beds provided at the end of year | | | | |
|---|---|---|---|---|---|---|
| | | 0–9 mths. | 10 mths–2 years | 2–5 years | Girls over 5 | Boys over 5 |
| Glendhu Hostel, Holywood Road<br>(A voluntary Hostel; receives a grant from the Health Committee). | Short stay | 1 | — | 6 | 4 | 4 |

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

## Communicable Diseases

**TABLE D 8**

| | Ophthalmia Neonatorum | | Pemphigus Neonatorum | | Puerperal pyrexia | |
|---|---|---|---|---|---|---|
| | Dom. confinements | Instit. confinements | Dom. confinements | Instit. confinements | Dom. confinements | Instit. confinements |
| Cases notified during year | — | — | — | — | — | 4 |
| Cases visited | — | — | — | — | — | 4 |
| Cases in which home nursing provided | — | — | — | — | — | — |
| Cases removed to hospital | — | — | — | — | — | — |

## Midwives

During the year 22 midwives were employed on a full-time salaried basis and 6 on a part-time basis. Two hostels are in operation, one at Springfield Road (where there is accommodation for student midwives) and the other at Templemore Avenue. One midwife is resident in a self-contained flat at the Ballymurphy Child Health Clinic, where there is also accommodation for a student midwife.

In January, 1968, the organisation of training of student midwives for Part 2 (domiciliary confinements) was completely undertaken by this department. Approved midwives on our staff take students from both Jubilee and Royal Maternity Hospitals and 134 were given training during the year.

Towards the end of the year we were asked to take part in a pilot scheme in preparation for the introduction of the Guthrie test for phenylketonuria throughout the Province in 1969. All our midwives were trained in the technique of obtaining blood samples from babies and took part in the scheme during November and December. This test ensures much earlier diagnosis and treatment of phenylketonuria, which, if unrecognised, can lead to severe mental handicap in children.

The majority of the midwives attend general practitioners' antenatal clinics and amongst other duties take blood samples from patients who were formerly sent to our antenatal clinics and assist with antenatal and postnatal examinations.

Midwives receive allowances to cover uniform, laundry and travelling expenses, the uniform being that prescribed 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, but the trend is for these babies to be admitted to special units attached to the two large maternity hospitals in the City. Refresher courses for midwives are arranged from time to time, each midwife attending a course every seven years.

The number of domiciliary confinements attended by midwives during the year dropped to 577, but there was an increase to 6,190 in the number of cases attended after discharge from hospital. It was not found necessary to suspend any midwife from practice during the year to prevent possible spread of infection.

*Notification of intention of midwives to practice*

**TABLE D 9**

| | Domiciliary | Institutions other than hospitals | Hospitals | Nursing homes | Total |
|---|---|---|---|---|---|
| Midwives notifying their intention to practice during the year | 42 | 21 | 264 | 7 | 334 |

Number of cases in which medical aid was summoned by a midwife during the year under Section 34 of the Nurses and Midwives Act (Northern Ireland), 1959 — Nil.

## Maternity Medical Services

General medical practitioners agreeing to provide maternity medical services in domiciliary cases are enrolled on the Obstetric List maintained in the department and are paid on a fee-per-case basis. Both the doctor and the midwife are paid 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 10**

| | |
|---|---|
| Domiciliary confinements at which General Practitioner attended | 481 |
| G.P. Maternity Hospital confinements at which General Practitioner attended | 1,947 |
| Women confined at home who were examined ante-natally | 478 |
| Ante-natal examinations made of women confined at home | 3,681 |
| Women referred to institutions for confinement who were examined ante-natally | 2,334 |
| Ante-natal examinations made of women confined in institutions | 15,443 |
| Final pelvic examinations made of women confined at home | 402 |
| Final pelvic examinations made of women confined in institutions | 1,202 |
| Cases of abortion attended | 602 |
| Anaesthetics given by second practitioner | 5 |

## Registration of Nursing Homes

**TABLE D** 11

| | Number | Beds provided for:– | | |
|---|---|---|---|---|
| | | Maternity | Other purposes | Total |
| Homes first registered during the year | 2 | — | 18 | 18 |
| Homes on register at end of the year | 10 | 26 | 84 | 110 |

Action during 1968:

| | |
|---|---|
| Number of applications for registration refused | — |
| Number of exemptions granted | — |
| Number of exemptions withdrawn | — |
| Number of registrations cancelled | — |
| Number of appeals by aggrieved persons to a Court of Summary Jurisdiction | — |
| Number of cases in which fines were imposed | — |
| Number of inspections | 16 |
| Number of registered homes not inspected | — |

The inspections during the year were made by the Clinic Medical Officer, the Superintendent Nursing Officer, and the Area Superintendent Health Visitors.

## Infant Mortality and Rates per live 1,000 births by cause and sex, 1968

**TABLE D** 12

| Causes of death | Under 1 month | | | | 1–11 months | | | Total under 1 year | |
|---|---|---|---|---|---|---|---|---|---|
| | M | F | Total | Rate | M | F | Total | No. | Rate |
| Typhoid fever | — | — | — | | — | — | — | — | |
| Bacillary dysentery and amoebiasis | 1 | — | 1 | 0.1 | — | — | — | 1 | 0.1 |
| Enteritis and other diarrhoeal diseases | — | 1 | 1 | 0.1 | 7 | 2 | 9 | 10 | 1.3 |
| Tuberculosis of respiratory system | — | — | — | | — | — | — | — | |
| Other tuberculosis | — | — | — | | — | — | — | — | |
| Diphtheria | — | — | — | | — | — | — | — | |
| Whooping cough | — | — | — | | — | 2 | 2 | 2 | 0.3 |
| Streptococcal sore throat and scarlet fever | — | — | — | | — | — | — | — | |
| Meningococcal infection | — | — | — | | — | — | — | — | |
| Acute poliomyelitis | — | — | — | | — | — | — | — | |
| Measles | — | — | — | | — | — | — | — | |
| Syphilis | — | — | — | | — | — | — | — | |
| Other infective and parasitic diseases | 1 | — | 1 | 0.1 | — | — | — | 1 | 0.1 |
| Cancer | — | — | — | | 1 | — | 1 | 1 | 0.1 |
| Hodgkin's disease | — | — | — | | — | 1 | 1 | 1 | 0.1 |
| Benign and unspecified neoplasms | — | — | — | | — | — | — | — | |
| Diabetes mellitus | — | — | — | | — | — | — | — | |
| Meningitis | — | — | — | | — | 1 | 1 | 1 | 0.1 |
| Cerebrovascular disease without hypertension | — | — | — | | 1 | — | 1 | 1 | 0.1 |
| Other diseases of circulatory system | — | 1 | 1 | 0.1 | — | — | — | 1 | 0.1 |
| Influenza | — | — | — | | 1 | — | 1 | 1 | 0.1 |
| Pneumonia | 3 | 1 | 4 | 0.5 | 25 | 20 | 45 | 49 | 6.4 |
| Bronchitis, emphysema and asthma | — | — | — | | 1 | — | 1 | 1 | 0.1 |
| Other diseases of respiratory system | — | — | — | | 1 | 1 | 2 | 2 | 0.3 |
| Intestinal obstruction and hernia | — | — | — | | 1 | — | 1 | 1 | 0.1 |
| Congenital anomalies | 17 | 18 | 35 | 4.6 | 7 | 12 | 19 | 54 | 7.1 |
| Birth injury, etc. | 41 | 14 | 55 | 7.2 | — | — | — | 55 | 7.2 |
| Other causes of peri-natal mortality | 29 | 12 | 41 | | — | — | — | 41 | 5.4 |
| Symptoms and ill-defined conditions | — | 1 | 1 | 0.1 | 1 | 2 | 3 | 4 | 0.5 |
| All other diseases | — | — | — | | 2 | 1 | 3 | 3 | 0.4 |
| Motor vehicle accidents | — | — | — | | — | — | — | — | |
| All other accidents | 1 | — | 1 | 0.1 | 1 | 2 | 3 | 4 | 0.5 |
| All other external causes | — | — | — | | — | — | — | — | |
| Totals | 93 | 48 | 141 | | 49 | 44 | 93 | 234 | |

## Infant Mortality (by age groups)

**TABLE D 13**

| | Under 1 day | 1–6 days | 1–3 weeks | 1 month | 2 months | 3–5 months | 6–11 months | Total | Deaths of illegitimate children |
|---|---|---|---|---|---|---|---|---|---|
| Males | 44 | 38 | 11 | 9 | 4 | 23 | 13 | 142 | 10 |
| Females | 21 | 15 | 12 | 11 | 7 | 15 | 11 | 92 | 3 |
| Total | 65 | 53 | 23 | 20 | 11 | 38 | 24 | 234 | 13 |

## Infant and Neo-Natal Mortality Rates, 1885—1968

**TABLE D 14**

| Year | Rate per 1,000 births | | Year | Rate per 1,000 births | |
|---|---|---|---|---|---|
| | Infant | Neo-natal | | Infant | Neo-natal |
| 1885 | 170 | — | 1955 | 37 | 21 |
| 1890 | 162 | — | 1956 | 29 | 18 |
| 1895 | 169 | — | 1957 | 33 | 22 |
| 1900 | 152 | — | 1958 | 30 | 19 |
| 1905 | 136 | — | 1959 | 33 | 22 |
| 1910 | 143 | — | 1960 | 28 | 20 |
| 1915 | 137 | — | 1961 | 33 | 23 |
| 1920 | 132 | — | 1962 | 29 | 20 |
| 1925 | 104 | — | 1963 | 29 | 19 |
| 1930 | 78 | — | 1964 | 31 | 20 |
| 1935 | 112 | — | 1965 | 27 | 18 |
| 1940 | 122 | 40 | 1966 | 32 | 19 |
| 1945 | 84 | 40 | 1967 | 28 | 17 |
| 1950 | 49 | 25 | 1968 | 31 | 18 |

— indicates information not available

## Stillbirth and Perinatal Mortality Rates 1936—1968

**TABLE D 15**

| Year | Registered live births | *Stillbirths | Total births | Registered deaths during 1st week | Perinatal deaths | Stillbirth rate | Perinatal mortality rate |
|---|---|---|---|---|---|---|---|
| 1936 | 9,242 | 452 | 9,694 | 263 | 715 | 46.6 | 73.8 |
| 1940 | 8,704 | 355 | 9,059 | 236 | 591 | 39.2 | 65.2 |
| 1945 | 9,853 | 303 | 10,156 | 225 | 528 | 29.8 | 52.0 |
| 1950 | 8,834 | 237 | 9,071 | 183 | 420 | 26.1 | 46.3 |
| 1955 | 8,100 | 236 | 8,336 | 138 | 374 | 28.3 | 44.9 |
| 1956 | 8,212 | 248 | 8,460 | 121 | 369 | 29.3 | 43.6 |
| 1957 | 8,459 | 219 | 8,678 | 159 | 378 | 25.2 | 43.6 |
| 1958 | 8,263 | 242 | 8,505 | 128 | 370 | 28.5 | 43.5 |
| 1959 | 8,365 | 183 | 8,548 | 160 | 343 | 21.4 | 40.1 |
| 1960 | 8,736 | 222 | 8,958 | 150 | 372 | 24.8 | 41.5 |
| 1961 | 8,806 | 231 | 9,037 | 163 | 394 | 25.6 | 43.6 |
| 1962 | 8,636 | 225 | 8,861 | 141 | 366 | 25.4 | 41.3 |
| 1963 | 8,839 | 173 | 9,012 | 150 | 323 | 19.2 | 35.8 |
| 1964 | 8,719 | 212 | 8,931 | 159 | 371 | 23.7 | 41.5 |
| 1965 | 8,447 | 150 | 8,597 | 137 | 287 | 17.5 | 33.4 |
| 1966 | 8,316 | 164 | 8,480 | 132 | 296 | 19.3 | 34.9 |
| 1967 | 7,997 | 156 | 8,153 | 119 | 275 | 19.1 | 33.7 |
| 1968 | 7,630 | 160 | 7,790 | 118 | 278 | 20.5 | 35.7 |

* Notified (Belfast addresses) prior to 1961: registered cases since 1961

**Births and Birth rates, Deaths and Death rates per 1,000 births**

*for certain age periods under one year*, 1936–1968

**TABLE D 16**

| Year | Live births | Birth rate | Under one day | | One day and less than 7 days | | Under one week | | Under four weeks | | Under one year | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Deaths | Rate | Deaths | Rate | Deaths | Rate | Deaths | Rate | Deaths | Rate |
| 1936 | 9,242 | *21.2* | 133 | *14* | 130 | *14* | 263 | *28* | 407 | *44* | 933 | *101* |
| 1940 | 8,704 | *19.6* | 115 | *13* | 121 | *14* | 236 | *27* | 350 | *40* | 1,065 | *122* |
| 1945 | 9,853 | *22.6* | 92 | *9* | 133 | *13* | 225 | *23* | 391 | *40* | 828 | *84* |
| 1950 | 8,834 | *19.6* | 98 | *11* | 85 | *10* | 183 | *21* | 224 | *25* | 431 | *49* |
| 1955 | 8,100 | *17.8* | 79 | *10* | 59 | *7* | 138 | *17* | 171 | *21* | 300 | *37* |
| 1956 | 8,212 | *18.5* | 62 | *8* | 59 | *7* | 121 | *15* | 146 | *18* | 240 | *29* |
| 1957 | 8,459 | *19.2* | 92 | *11* | 67 | *8* | 159 | *19* | 186 | *22* | 275 | *33* |
| 1958 | 8,263 | *18.9* | 89 | *11* | 39 | *5* | 128 | *15* | 154 | *19* | 251 | *30* |
| 1959 | 8,365 | *19.3* | 103 | *12* | 57 | *7* | 160 | *19* | 182 | *22* | 274 | *33* |
| 1960 | 8,736 | *20.1* | 93 | *11* | 57 | *7* | 150 | *17* | 173 | *20* | 243 | *28* |
| 1961 | 8,806 | *21.1* | 107 | *12* | 56 | *6* | 163 | *19* | 199 | *23* | 287 | *33* |
| 1962 | 8,636 | *20.9* | 90 | *10* | 51 | *6* | 141 | *16* | 172 | *20* | 252 | *29* |
| 1963 | 8,839 | *21.5* | 90 | *10* | 60 | *7* | 150 | *17* | 168 | *19* | 259 | *29* |
| 1964 | 8,719 | *21.3* | 107 | *12* | 52 | *6* | 159 | *18* | 175 | *20* | 266 | *31* |
| 1965 | 8,447 | *20.8* | 83 | *10* | 54 | *6* | 137 | *16* | 152 | *18* | 232 | *27* |
| 1966 | 8,316 | *20.6* | 79 | *9* | 53 | *6* | 132 | *16* | 155 | *19* | 264 | *32* |
| 1967 | 7,997 | *20.1* | 70 | *9* | 49 | *6* | 119 | *15* | 138 | *17* | 226 | *28* |
| 1968 | 7,630 | *19.5* | 65 | *9* | 53 | *7* | 118 | *15* | 141 | *18* | 234 | *31* |

(Full figures for each year from 1936 in Tables D15 and D16 were published in the Annual Report for 1967)

## After Care

During the year Health Visitors continued to supervise cases where cash supplements to cover special dietary requirements are paid to patients by the Supplementary Benefits Commission of the Ministry of Health and Social Services. This work is time consuming but often gives new and valuable contacts with persons who are in need of help and advice and who would otherwise not be known to the Department.

A wide range of equipment is supplied by the Medical Comforts scheme on the recommendation of district nurses, health visitors, hospitals and general practitioners. This includes items such as ripple beds, dunlopillo mattresses, air cushions, bed rests, rubber sheeting, bedpans and commodes, urinals, walking aids, etc., which are available on loan. A large number of incontinence pads are also supplied. During the year 2,055 such issues were made. In addition, there were 4,399 extensions to existing loans (mostly incontinence pads). 1,794 persons returned equipment which they had on loan. The number holding equipment at the end of the year was 2,057. This service does much to facilitate the care of patients in their own homes.

## Home Nursing Service

The Home Nursing staff consists of 1 Superintendent, 1 Assistant Superintendent, 59 Queen's Nurses, 3 State Registered Nurses and 4 State Enrolled Nurses. 15 nurses gained the Queen's Certificate during the year; 8 were Belfast candidates and 7 were county candidates.

The Queen's Institute of District Nursing decided to cease the award of the Queen's Certificate after May, 1968 and so it was necessary to introduce a new scheme of training. A non-residential course, comprising one month's block study at the District Nurse Training Centre, followed by two months' practical experience and assessment in the nurse's own area, was organized to conform with the requirements of the National Certificate in District Nursing. The first course under the new scheme was started in September, 1968, in preparation for the examination to be held in January, 1969 and 15 nurses were enrolled for training. We continue to undertake district nurse training for the other Health Committees in Northern Ireland.

Reference to Table D17 shows that the work done by the Home Nursing Service is still increasing rapidly. Extensive use was made of the facilities provided by the Medical Comforts section and the Marie Curie Fund was used for obtaining extra facilities for cancer patients, such as bedding, clothing, extra nourishment, night sitters, etc.

**TABLE D** 17

| | | | |
|---|---|---|---|
| **A.** | Number of Cases:– | | |
| | (i) Brought forward from 1967 | | 9,510 |
| | (ii) New cases taken on during 1968 | | 4,601 |
| | Analysis of new cases:– | | |
| | Tuberculosis | 42 | |
| | Cancer | 286 | |
| | Diabetes | 104 | |
| | Gynaecological | 119 | |
| | Pneumonia | 7 | |
| | Surgical | 1,040 | |
| | General medical | 3,003 | |
| | (iii) Removed during 1968 | | |
| | Causes of removal:– | | |
| | Convalescent | 1,587 | |
| | Died | 426 | |
| | To hospital | 716 | |
| | Other causes | 322 | |
| | Remaining on books at end of 1968 | | 11,060 |
| **B.** | Analysis of visits to all cases in 1968:– | | |
| | Tuberculosis | 2,408 | |
| | Cancer | 16,505 | |
| | Diabetes | 28,754 | |
| | Gynaecological | 1,893 | |
| | Pneumonia | 38 | |
| | Surgical | 42,448 | |
| | General medical | 131,036 | |
| | Total visits | 273,132 | |

## Chiropody

This scheme provides for treatment of the aged, handicapped persons and expectant and nursing mothers. During the year 3,354 sessions were held, 5,269 persons received treatment and the total number of treatments carried out was 18,343 – 13,666 at clinics and 4,677 at patients' homes. The work of this service is still severely limited by the difficulty in recruiting chiropodists. Three students sponsored by the Health Committee are at present in training, but there seems little prospect of being able to provide a service adequate to the needs of the community in the near future.

I wish in conclusion to express my appreciation of the loyal and efficient service given by all the members of staff throughout a year of considerable difficulty, since, in addition to the changes already mentioned, Dr. H. A. Warnock and Dr. K. M. Cathcart both retired after long and devoted service and were replaced by Medical Officers new to the Division.

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*Senior Medical Officer,*
*Community Health Division.*

**Belfast Grant-Aided Schools**

Section 42 of the Education Act (N.I.), 1947, as amended by the Education (Amendment) Act (N.I.), 1956, lays on the local authority's health committee the duties of providing for medical and dental inspection and treatment of all pupils attending grant-aided schools in their area; these duties are carried out by the School Health Service except at the three non-participating schools, which conduct their own schemes of inspection and treatment as provided in Section 62 (6) of the Education (Amendment) Act (N.I.), 1956. Five independent schools with a total enrolment of 324 pupils remain outside the scope of the School Health Service and do not have school medical inspections. Table E1 shows the various types of grant-aided schools in the County Borough of Belfast at 31st December, 1968 and the numbers of pupils attending them.

The school population at the end of the year was 82,621, a decrease of 349 compared with the previous year. Two new nursery schools were opened in 1968; New Lodge at Lepper Street in January, and Shaftesbury at Percy Street in November. Two Roman Catholic primary schools were closed in June; St. John's Boys' in Colinward Street, whose pupils were transferred to St. Paul's Boys' enlarged by additional premises at Mica Drive, and Lagan Village whose pupils were transferred to St. Anthony's in Willowfield Drive. The total number of the City's grant-aided schools thus remains unchanged at 191.

**Staff**

Near the end of the year one of our lady medical officers was given leave of absence to serve a period of two years overseas under a scheme sponsored by the Ministry of Overseas Development to provide doctors for underdeveloped countries. In her absence we appointed two part-time doctors both of whom have had considerable experience of school medical work. The Northern Ireland Hospitals Authority made their usual arrangements for secondment of ophthalmic, paediatric and orthopaedic specialists throughout the year to work in our clinics and special schools; ophthalmic specialists continue to be scarce and our waiting-list of children needing eye tests is too long.

For the first time in many years the School Health Division had no trainee health visitors for secondment to the health visitors' training course; four nurses who had been seconded in 1967 returned to duty in September 1968 as trained health visitors. We continued to employ several state registered nurses to deal with various duties such as minor ailments, hygiene inspections and sunray therapy in order to relieve the health visitors of these fairly routine tasks.

In addition to the therapists on the staff of the School Health Division, the Northern Ireland Council for Orthopaedic Development continued to second 6 or 7 physiotherapists and 5 or 6 occupational therapists for work with physically handicapped children. These therapists work mainly in the special schools and the Education Committee pays to the Orthopaedic Council approximately 80% of their salaries. In 1968 our speech therapy staff remained at one full-time and five part-time therapists and, although the part-timers worked an increased number of sessions, this is not sufficient to deal with the many children with speech problems. Training for a career in speech therapy lasts for three years and the student must live in Great Britain to attend one of the eight training centres. The Health Committee offers to suitable candidates a grant equivalent to a Major Award Scholarship covering tuition fees, examination fees, books, maintenance and travelling expenses; the student enters into an agreement to work for at least two years as a speech therapist in the School Health Division. This scheme has been widely publicised and officers of the Youth Employment Service have tried to find candidates but without success. The educational qualifications demanded by the speech therapy colleges are high enough to gain university entrance; this narrows the field of candidates, but we think that it is mainly the necessity to study outside Northern Ireland for three years which causes school-leavers to choose other careers and if training were available locally suitable students could be found.

The number of housemothers employed by the Education Committee was increased in 1968, mainly for work at Fleming Fulton School. These can be girls who have successfully taken the child care course at Rupert Stanley College, or suitable girls may be employed and seconded to the course after a period of work in the special schools, where they deal with the domestic problems of handicapped children such as incontinence. The course of training occupies an academic year and some students return for a further year to do an advanced course.

For the first time all the partially hearing units were staffed in 1968 by trained teachers-of-the-deaf and another teacher was at Manchester for training. No teachers-of-the-deaf could be found for peripatetic work, but the more urgent of our pre-school deaf and partially hearing children were dealt

with at the audiology clinic at Royal Belfast Hospital for Sick Children by a teacher who will take up duty at the St. Francis de Sales nursery school for deaf children when in opens in 1969; this teacher will work full-time in the clinic until her new school is ready.

In September 1967 a medical officer was seconded to the Department of Social and Preventive Medicine of Queen's University to study for the Diploma in Public Health. This officer returned to duty at Cupar Street Clinic in July 1968 having taken first place in the diploma examination and having been awarded the Carnwath Medal and Book Prize. Again this year medical officers attended courses of instruction organised by the Post-Graduate Medical Education Department of Queen's University and other scientific and clinical meetings arranged by the Paediatric Society, the Medical Women's Federation, the Society of Medical Officers of Health and others. A medical officer attended a six weeks' course in London on educationally subnormal and mentally retarded children organised by the National Association for Mental Health at University of London. Attendance at a course of this type is necessary before a doctor may be recognised by the Ministry of Education for certain duties under Sections 30 and 53 of the Education Act relating to handicapped pupils. The present rapid changes in medical knowledge and practice make it essential to keep our staff up to date and to keep all the activities of our department under continuous review; we are grateful for the Health Committee's recognition of this as shown by their readiness to approve attendance by our officers at these various meetings and courses. The staff of doctors, nurses and therapists must also do regular private study and are provided for this purpose with a regular supply of journals and other literature; staff meetings are held in the clinics at which talks are given, films are shown and discussion takes place on all aspects of our work.

**School Medical Inspections**

After a period of several years in which trial was given to different methods of finding and examining children with health problems, this year's medical inspection scheme remained as in 1967. Entrants and ten-year-olds received a detailed examination by the doctor and health visitor including audiometry and tests of visual acuity; the ten-year-olds were also tuberculin tested and given B.C.G. vaccination if necessary. Leavers were given a vision test and interviewed about their health as related to their future careers. This interview might lead to a full or partial examination, or the past history might show the need for examination. At all other ages the children were selected for examination only where this was found necessary as a result of information from parents, teachers, health visitors, welfare officers, and others. All children listed as having defects at previous examinations were re-examined to ensure that their defects had received all necessary attention.

Table E2 shows the numbers of children examined in the various age groups; together with the re-examinations shown in Table E12 these total nearly 42,000, or about half the school population. The numbers of parents who attended these school medical inspections is shown in Table E3.

**History of Infectious Disease in Schoolchildren**

Before a school medical inspection the parent is asked to complete a questionnaire about the child's past and present health. Table E5 shows the numbers and percentages at various ages giving a history of having had certain infectious diseases. The older the child, the longer has been his exposure to risk of infection and, as expected, the percentage said to have had each disease rises from entrants to leavers. Over 90% have had measles by the age of eight years (Group II); of leavers 66% have had chickenpox, 54% mumps and 46% whooping cough. German measles or rubella has reached 35% by eight years and only 36% by leaving age. This may be lower than the true rate because the disease is easily confused with measles or other diseases with a rash and because rubella is often mild and may pass unnoticed or be forgotten. The practical importance of this is, of course, that it is desirable for girls reaching child-bearing age to have had rubella and thus be immune to further attacks, because of the high risk of damage to the unborn child of a mother who contracts the disease during pregnancy. Scarlet fever is now much less common – 9% in leavers – and it is usually mild. Chorea and rheumatism are now fairly rare, in leavers 0.2% and 0.6%, but still of great importance owing to their potential for damaging the young growing heart. A history of diphtheria is given for 24 children of various ages, but most of these parents must be mistaken, for this disease is now very rare and we had not had nearly that number of cases here during the relevant period.

**Defects Discovered at Medical Inspections**

The defects found at routine medical inspections in 1968 are shown in Table E7, with the numbers and rates per thousand having the various defects. These rates show only minor changes in comparison with 1967. When a mother is present during a child's examination the doctor and health visitor will

discuss with her any defects noted and any problems she may raise about health, behaviour, or educational progress and the teaching staff will be involved in these discussions where necessary. Table E4 shows the action found necessary as a result of 1968's routine medical inspections and this includes reference to the family doctor for his advice and treatment, visits to the home by the health visitor and further investigation at the school clinic or elsewhere.

**Heights and Weights**

Table E6 shows the mean heights and weights of the children given full routine inspection in 1968. The standard error of the mean, the standard deviation, the co-efficient of variation, the median and the first and ninth deciles are also given.

**Vision**

Table E8 shows the visual acuity in right and left eyes of the children tested at medical inspections; it does not include the 6,097 children whose visual acuity was screened by the health visitors at school. Part (a) of the table shows the acuity without glasses and part (b) the corrected acuity of those children who had glasses at the time of the test. The proportion of glasses-wearers is somewhat greater than the 1,827 out of 20,698 shown in the table, because inevitably some children's glasses were lost, broken, or under repair at the time of the test. The visual acuity of 112 children could not be accurately assessed because of immaturity or unco-operation. Children with defective or doubtful vision are followed up and given appropriate treatment.

The growing eyes of all children need to be checked at intervals to look for refractive errors and if glasses are worn an annual retest is desirable. Visual defects usually develop gradually and children rarely complain about difficulty in seeing even when the defect has become very marked. At the school clinics this year, 6,584 children had the refraction of their eyes tested under a mydriatic to determine the need for glasses or a change of lenses; 3,541 of these had a second test after the effects of the mydriatic had worn off. The use of a mydriatic is necessary in children to enable the eye-specialist to measure accurately the refractive power of the lens system in the eyes when focused for distant vision. The muscle which alters the focus of the eyes is very strong in children and is constantly in action; the mydriatic puts this muscle out of action temporarily so that the eye is focused for distance and the pupil dilated, enabling the interior of the eye to be examined. Atropine ointment is used for this in younger children. The mother puts a small quantity in the child's eyes three times daily for three days before the test; the child's vision for near objects will be rather blurred by this, though his vision for more distant objects, say six feet away or more, will be unchanged and this blurring takes several days to wear off completely. In children over eight years and in some younger than this, we now use mydrilate which is put in the eyes by the clinic nurse about an hour before the refraction is done; this means an hour's wait for the test, but is preferable to the disturbance to school work caused by difficulty in reading and writing while the eyes are under the effects of atropine for some days before and after testing. The eyes have recovered from the influence of mydrilate after a few hours. The eye specialists also saw 853 children for eye trouble other than errors of refraction.

Squints are found in about 45 per thousand young Belfast children. This year 434 squinting children were referred to hospital for orthoptic treatment and in some cases operation to straighten the eye; before going to hospital they were refracted at the school clinic and provided with glasses. The great majority of these children were of pre-school age, for it is most important to have a squint corrected as early as possible if the squinting eye is not to become lazy and lose its visual acuity permanently. If treatment is not begun well before six or seven years of age binocular vision will not be established and though the appearance may be improved the child will remain effectively a one-eyed person for life. Therefore, one of the items particularly sought for by the health visitor is a recurrent or persistent squint in a baby aged more than about six months. Table E10 shows the prevalence of defective colour vision in schoolchildren. About one in twenty boys is found to have a gross defect of colour discrimination and this is one of the items that must be considered by the medical staff when advising about careers for schools leavers.

Children often break their glasses and a quick repair is important in the interests of educational progress; the normal process of approval for repair of spectacles under the national health service is modified by a procedure allowing the school medical officer to arrange repair of children's glasses by opticians at once, the approval procedure taking place in arrears. When glasses are lost or irretrievably smashed replacement can be made by the same procedure, though a child within a few months of his next refraction would be tested to see whether the prescription should be changed. Rapid repair or replacement of about 1,400 pairs of glasses was made in 1968.

**Tuberculin Tests and B.C.G. Vaccination**

Table E11 gives the results of tuberculin tests in children of sixteen years and under; 12.9% of children not previously vaccinated with B.C.G. and 97.0% of vaccinated children, gave positive reactions. The negative reactors of about ten years and over are offered B.C.G. vaccination and this year 3,509 children were vaccinated at school clinics and 1,881 at hospitals and other places.

**Handicapped Pupils**

The Education Act directs in Section 5 that there shall be "for all pupils opportunities for education offering such variety of instruction and training as may be desirable in view of their different ages, abilities and aptitudes." The same section also states, "In fulfilling their duties a local education authority shall, in particular, have regard to the need for securing that provision is made for pupils who suffer from any disability of mind or body by providing, either in special schools or otherwise, special educational treatment, that is to say, education by special methods appropriate for persons suffering from that disability." Section 29 directs the Ministry of Education to make regulations defining the several categories of pupils requiring special educational treatment and the latest version is The Handicapped Pupils and Special Schools Regulations (N.I.), 1957, defining ten different categories of educational handicap. Section 30 of the Act requires that all handicapped children over the age of two years shall be found and given suitable special educational treatment if any is required; Section 36 provides that the upper limit of compulsory school age of a registered pupil at a special school shall be sixteen years.

It is very important that handicapped children and their parents should be given suitable assistance as early as possible and it is part of the health visitor's duty to see that this is done, the mechanism being as follows: there is a statutory obligation on the part of persons present at the birth of a child to notify the Medical Officer of Health within 36 hours of a birth in his area and this is generally done by the midwife or doctor. Some notifications are received by Medical Officers of children born to mothers normally resident in another area; transfers of these notifications are made between Medical Officers daily. These notifications are checked with the Registrar General and errors and omissions are corrected. The midwife continues to supervise the health of mother and child until the tenth day after the birth when the health visitor takes over. She receives basic particulars about mother and child on a record card and she visits as soon after the tenth day as practicable and completes the card. The health visitor is responsible for satisfying herself that she is dealing with a normal child and is required to visit at certain intervals until the child goes to school. The visits are more frequent in the early years and where abnormality is suspected. Some parents do not wish to be visited, but although these are not unduly pressed the health visitor is expected to call at intervals even in these cases. Normally she should visit at least monthly during the first year, three-monthly during the second year and thereafter six-monthly until the child goes to school; more frequent visits are required in abnormal cases. Certain children can be recognised as being at a special risk of having a handicap because of unfavourable environment, family history, accident, or other circumstance before, during, or after birth and these are given special attention. In addition to supervising the general health and welfare of mother and child, the health visitor is expected to satisfy herself about the child's developmental progress, both physical and mental, and to assist her in this she has a set of criteria to look for at set ages. These criteria relate to posture, movement, behaviour, hearing, speech, eye and hand. Any failure to reach the expected developmental stage within a reasonable time is reported to the medical officer for further investigation and more detailed records are made.

All children if examined regularly will be found to have defects from time to time. These may be trivial or temporary and require no treatment, or they may be more serious and in need of treatment. When a defect is of sufficient severity and duration to interfere with the child's normal development and training it is classed as a handicap, but the border-line between defects and handicaps is not defined and a code of practice has developed among local authorities' staff which makes for reasonable uniformity of standards in different areas. When a health visitor notes a defect her action will depend on its nature and severity. Normally she will advise the mother to consult her family doctor and, if the defect is handicapping or potentially so, she will also report to the Health Department on a special defect card which must be revised at least six-monthly. The health visitor attached to a general practice will approach the family doctor direct and she may also get advice from medical officers at local authority clinics.

At the age of two years all those children with important defects are notified to the School Health Service, to assist the Education Authority in its duties under Section 30 and 53 of the Education Act to ascertain what children need special educational treatment. These children are then examined by a school medical officer, who may also be the clinic medical officer and in conjunction with the family

doctor any necessary specialist advice is obtained. The school medical officer makes repeated examinations over a period of months or years during which the child's development is watched and discussed with the parents. In the case of mental or behavioural defects an educational psychologist also examines as often as necessary. A report is made to the Education Authority who then provide any necessary special educational treatment from the age of two years until at least sixteen years. Not all handicapped children under five years need special educational treatment, but all those with serious defects of hearing or sight require it, as do many of those with crippling physical handicaps such as spasticity, athetosis, hydrocephalus or spina bifida. Re-assessment is made continually throughout the child's school life. Table E14 shows the numbers of educational handicaps affecting Belfast children over two years of age at 31st December, 1968. Many children are affected by several handicapping conditions simultaneously and this table refers to 5,250 handicaps in 4,482 children. Table E15 shows the numbers of children with a single handicap and Tables E16 and E17 show those with two or more.

**Fleming Fulton School**

The tendency for children to survive with handicaps of a severity that would have proved fatal in earlier years continues. A notable example of this trend is the congenital deformity spina bifida; at the end of 1968 we had 38 children with this disability attending Fleming Fulton School, although ten years ago when planning the school rebuilding we had expected to find only about six. These and other heavily handicapped children, apart from the education and therapy they require, pose great problems of hygiene and toileting. They may require to be taken by housemothers to be undressed and have leg and body splints removed as often as hourly for these purposes. This means that the school toilets are insufficient in number and size. A similar problem arises with the limbless children, who because of their diminished skin area are inclined to sweat more profusely than normal and need frequent bathing to keep from becoming offensive.

Table E19 shows the various disabilities affecting the Fleming Fulton children and it also shows that the numbers had risen to 164 by the end of the year. In spite of this increase we have a long waiting-list for admission and means to deal with this are being considered. The enlarged boarding accommodation was completed in 1968, including improved facilities for staff when off duty and accommodation for parents to make a short stay.

**Cedar Lodge School**

Table E20 shows the number of children admitted to Cedar Lodge School for delicate pupils in 1968 and the disabilities causing their admission. Financial stringency again this year prevented a start being made on the residential accommodation which is badly needed at this school, particularly for asthmatics.

**Greenwood House Diagnostic Unit**

It is well recognised that the younger the child the more difficult is the assessment of intellectual potential. When the child is handicapped in any way the difficulty is increased and, if more than one handicapping condition is present, prolonged and careful observation is likely to be the only method of accurate assessment. Greenwood House was opened by the Belfast Education Authority partly to facilitate this observation and partly to provide relief for harassed parents so that decision about future educational measures need not be hurried. The unit deals with about 40 children aged from about two to seven years, of whom six can be resident. The staff of trained nursery teachers and trained housemothers are experienced in handling retarded children, and regular supervision is given by a psychologist and a medical officer. A part-time speech therapist also attends. The children are in three groups, one of which allows for free play, another has children engaged in well organised activities and the third is intermediate. The unit provides generous play facilities and materials for nursery age children, both indoors and outdoors, in the charge of trained and sympathetic staff. The children are transported to and from the unit by three minibuses and the school day is from 10.00 a.m. to 2.30 p.m. Monday to Friday. The period spent at the unit varies from a few months to about two years. Some children pass on to special schools such as the junior school for the educationally subnormal at Harberton and a few to normal schools. If the child has a mental handicap so severe that he is unsuitable for education at school, the Education Authority notifies the management committee of the Special Care Service and reports of medical examinations and tests results are sent to their senior consultant. This year 50 children were notified to the Special Care Service under Section 53 of the Education Act and 11 under Section 32.

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## Belfast Grant-Aided Schools

**TABLE E 1**

| Type of School | | Number | Pupils |
|---|---|---|---|
| | Nursery schools and classes | 14 | 554 |
| Primary‡ | County Primary Schools | 63 | 25,345 |
| | Voluntary Primary Schools under Roman Catholic management | 56 | 19,186 |
| | Special Schools | 9 | 1,082 |
| | Day Instruction Centres | 4 | 364 |
| Secondary‡ | County Secondary Schools | 19 | 15,310 |
| | Voluntary Secondary Schools †(Participating) | 23 | 18,318 |
| | Voluntary Secondary Schools †(Non-participating)‡‡ | 3 | 2,462 |
| | Total | 191 | 82,621 |

‡ 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 provision of Section 42 (6) of the Education (Amendment) Act (N.I.), 1956.

† Includes preparatory school in most cases.

## School Medical Inspections

**TABLE E 2**

| Type of school | Sex | System of examination | Age Groups | | | | | | | | Re-examinations | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Nursery | I | II | III | IV interview | IV examination | V | Totals | | |
| Primary | Boys | Selective | 47 | 3,760 | 1,112 | 2,266 | — | 1 | — | 7,186 | 6,341 | 13,527 |
| | Girls | | 39 | 3,435 | 1,060 | 2,097 | — | 1 | — | 6,632 | 6,429 | 13,061 |
| Secondary | Boys | Selective | — | 107 | 57 | 206 | 1,922 | 1,742 | 15 | 4,049 | 4,170 | 8,219 |
| | Girls | | — | 140 | 123 | 126 | 1,521 | 1,111 | 8 | 3,029 | 2,955 | 5,984 |
| Special | Both | Routine | 31 | 51 | 170 | 191 | — | 161 | 13 | 617 | — | 617 |
| Nursery | Boys | Routine | 154 | — | — | — | — | — | — | 154 | — | 154 |
| | Girls | | 176 | — | — | — | — | — | — | 176 | — | 176 |
| Totals | Both | Both | 447 | 7,493 | 2,522 | 4,886 | 3,443 | 3,016 | 36 | 21,843 | 19,895 | 41,738 |

## Attendance of Parents at Routine Medical Inspections

**TABLE E 3**

| Age Group | Primary | | | | Secondary | | | |
|---|---|---|---|---|---|---|---|---|
| | Boys | | Girls | | Boys | | Girls | |
| | No. | % | No. | % | No. | % | No. | % |
| Entrants | 2,599 | 69.1 | 2,471 | 71.9 | 43 | 40.2 | 74 | 52.9 |
| II | 461 | 41.5 | 511 | 48.2 | 9 | 15.8 | 23 | 18.7 |
| III | 747 | 33.0 | 883 | 42.1 | 15 | 7.3 | 23 | 18.3 |
| IV | — | — | 1 | 100.0 | — | — | — | — |
| V | — | — | — | — | — | — | — | — |
| Totals | 3,807 | 53.3 | 3,866 | 58.6 | 67 | 1.7 | 120 | 4.0 |
| | 7,673 | | (55.9) | | 187 | | (2.6) | |
| | 7,860 | | (37.8) | | | | | |

**TABLE E 4** **Action to be taken as a result of Routine Medical Inspection**

| Age Group | Home visits | | To Family Doctor | | To School Clinic | | To Eye Specialist | | To E.N.T. Specialist | | To Hospital | | 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 |
| Entrants | 79 | 63 | 74 | 82 | 263 | 273 | 225 | 211 | 6 | 3 | 47 | 49 | 71 | 51 | 23 | 12 | 54 | 33 | 105 | 104 |
| II | 13 | 8 | 10 | 18 | 61 | 46 | 58 | 36 | — | — | 6 | 14 | 9 | 6 | 5 | 3 | 14 | 9 | 16 | 25 |
| III | 49 | 36 | 39 | 21 | 196 | 161 | 118 | 108 | — | 2 | 26 | 23 | 26 | 48 | 4 | 1 | 25 | 21 | 53 | 70 |
| IV Interview | 13 | 7 | 4 | 7 | 30 | 31 | 102 | 114 | — | 5 | 15 | 4 | 3 | 1 | 1 | — | 3 | 1 | 25 | 27 |
| Examination | 20 | 6 | 41 | 30 | 90 | 88 | 138 | 70 | 1 | 3 | 21 | 11 | 7 | 9 | 6 | — | 21 | 7 | 87 | 56 |
| V | — | 8 | — | — | 1 | — | 1 | — | — | — | — | — | 3 | — | 1 | — | 2 | — | — | — |
| Totals | 174 | 128 | 168 | 158 | 641 | 599 | 642 | 539 | 7 | 13 | 115 | 101 | 119 | 115 | 40 | 16 | 119 | 71 | 286 | 282 |
| | 302 | | 326 | | 1,240 | | 1,181 | | 20 | | 216 | | 234 | | 56 | | 190 | | 568 | |



**TABLE E 5** **History of Infectious Diseases**

| Age group | Number examined | Number and percentage giving history of | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Measles | | German measles | | Chicken-pox | | Scarlet fever | | Diphtheria | | Mumps | | Whooping cough | | Chorea | | Rheumatic fever | |
| | | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| Entrants | 7,442 | 5,635 | 75.7 | 1,295 | 17.4 | 2,617 | 35.2 | 361 | 4.9 | 7 | 0.1 | 1,927 | 25.9 | 1,778 | 23.9 | 3 | 0.04 | 3 | 0.04 |
| II | 2,352 | 2,156 | 91.7 | 828 | 35.2 | 1,499 | 63.7 | 196 | 8.3 | 1 | 0.04 | 1,144 | 48.6 | 672 | 28.6 | 1 | 0.04 | 7 | 0.3 |
| III | 4,695 | 4,338 | 92.4 | 1,660 | 35.4 | 2,946 | 62.7 | 355 | 7.6 | 5 | 0.1 | 2,413 | 51.4 | 1,688 | 36.0 | 7 | 0.1 | 9 | 0.2 |
| IV | 6,298 | 5,757 | 91.4 | 2,301 | 36.5 | 4,167 | 66.2 | 589 | 9.4 | 11 | 0.2 | 3,404 | 54.0 | 2,904 | 46.1 | 14 | 0.2 | 38 | 0.6 |
| V | 23 | 21 | 91.3 | 4 | 17.4 | 10 | 43.5 | — | — | — | — | 11 | 47.8 | 10 | 43.5 | — | — | — | — |
| Totals | 20,810 | 17,907 | 86.0 | 6,088 | 29.3 | 11,239 | 54.0 | 1,501 | 7.2 | 24 | 0.1 | 8,899 | 42.8 | 7,052 | 33.9 | 25 | 0.1 | 57 | 0.3 |

## Estimates of Height (ins.) and Weight (lbs.) of Boys according to age from Routine Medical Inspections, Year 1968

**TABLE E** 6 (a)

| Estimates, etc. | | Age group in years | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4– | 5– | 6– | 7– | 8– | 9– | 10– | 11– | 12– | 13– | 14– |
| Number of boys measured | | 313 | 2,536 | 1,018 | 127 | 68 | 974 | 2,059 | 405 | 6 | 1 | — |
| | | Height | | | | | | | | | | |
| Mean | in. | 41.6 | 43.6 | 45.2 | 46.8 | 50.8 | 53.2 | 54.1 | 55.4 | 55.0 | 55.0 | — |
| Standard error of mean | in. | 0.13 | 0.05 | 0.07 | 0.22 | 0.37 | 0.09 | 0.06 | 0.14 | 1.51 | — | — |
| Standard deviation | in. | 2.24 | 2.24 | 2.29 | 2.47 | 3.08 | 2.73 | 2.62 | 2.85 | 3.69 | — | — |
| First decile | in. | 38.8 | 40.9 | 42.4 | 43.8 | 47.7 | 49.9 | 50.8 | 52.1 | — | — | — |
| Median | in. | 40.6 | 43.6 | 45.2 | 46.9 | 50.8 | 53.2 | 54.1 | 55.4 | 54.2 | — | — |
| Ninth decile | in. | 44.3 | 46.3 | 48.1 | 49.9 | 54.4 | 56.3 | 57.5 | 60.0 | — | — | — |
| Co-efficient of variation | % | 5.38 | 5.14 | 5.06 | 5.28 | 6.06 | 5.14 | 4.83 | 5.15 | 6.70 | — | — |
| | | Weight | | | | | | | | | | |
| Mean | lb. | 40.1 | 43.2 | 45.5 | 48.7 | 59.2 | 67.6 | 70.2 | 74.4 | 74.0 | 66.0 | — |
| Standard error of mean | lb. | 0.28 | 0.11 | 0.19 | 0.63 | 0.99 | 0.36 | 0.26 | 0.67 | 3.80 | — | — |
| Standard deviation | lb. | 4.96 | 5.52 | 6.09 | 7.14 | 8.16 | 11.27 | 11.68 | 13.52 | 9.31 | — | — |
| First decile | lb. | 34.2 | 36.3 | 38.8 | 40.6 | 48.3 | 55.1 | 56.5 | 59.2 | — | — | — |
| Median | lb. | 39.4 | 41.9 | 44.0 | 48.6 | 59.0 | 65.5 | 68.7 | 71.2 | 69.8 | — | — |
| Ninth decile | lb. | 45.2 | 48.7 | 52.2 | 56.0 | 68.3 | 78.8 | 83.9 | 93.4 | — | — | — |
| Co-efficient of variation | % | 12.39 | 12.79 | 13.36 | 14.65 | 13.78 | 16.67 | 16.64 | 18.17 | 12.58 | — | — |

**Estimates of Height (ins.) and Weight (lbs.) of Girls according to age from Routine Medical Inspections, Year 1968**

**TABLE E** 6 (b)

| Estimates, etc. | | Age group in years | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4– | 5– | 6– | 7– | 8– | 9– | 10– | 11– | 12– | 13– | 14– |
| Number of girls measured | | 281 | 2,578 | 716 | 74 | 60 | 1,049 | 1,918 | 300 | 3 | 1 | 1 |
| | | Height | | | | | | | | | | |
| Mean | in. | 41.0 | 43.1 | 44.9 | 46.1 | 51.3 | 52.8 | 54.2 | 55.0 | 55.3 | 54.0 | 64.0 |
| Standard error of mean | in. | 0.15 | 0.05 | 0.09 | 0.35 | 0.33 | 0.09 | 0.07 | 0.21 | 2.60 | — | — |
| Standard deviation | in. | 2.52 | 2.46 | 2.52 | 3.04 | 2.54 | 2.88 | 3.06 | 3.56 | 4.51 | — | — |
| First decile | in. | 37.9 | 40.2 | 42.0 | 42.6 | 48.3 | 49.4 | 50.5 | 50.8 | — | — | — |
| Median | in. | 41.3 | 43.1 | 44.9 | 45.7 | 51.0 | 52.8 | 53.8 | 54.0 | 55.0 | — | — |
| Ninth decile | in. | 43.8 | 45.9 | 47.8 | 49.4 | 54.4 | 56.2 | 57.5 | 59.2 | — | — | — |
| Co-efficient of variation | % | 6.15 | 5.71 | 5.62 | 6.60 | 4.95 | 5.46 | 5.65 | 6.48 | 8.15 | — | — |
| | | Weight | | | | | | | | | | |
| Mean | lb. | 38.5 | 41.4 | 43.4 | 52.8 | 61.1 | 65.9 | 68.5 | 76.9 | 68.7 | 78.0 | 120.0 |
| Standard error of mean | lb. | 0.32 | 0.11 | 0.24 | 1.16 | 1.57 | 0.35 | 0.29 | 0.86 | 4.92 | — | — |
| Standard deviation | lb. | 5.29 | 5.60 | 6.35 | 9.96 | 12.15 | 11.24 | 12.83 | 14.83 | 8.53 | — | — |
| First decile | lb. | 31.6 | 34.7 | 37.0 | 37.7 | 50.5 | 53.4 | 55.2 | 55.9 | — | — | — |
| Median | lb. | 37.8 | 38.6 | 42.8 | 44.1 | 56.8 | 63.5 | 66.6 | 70.0 | 63.5 | — | — |
| Ninth decile | lb. | 44.1 | 48.3 | 51.5 | 53.4 | 77.5 | 81.3 | 84.4 | 91.4 | — | — | — |
| Co-efficient of variation | % | 13.75 | 13.52 | 14.65 | 18.87 | 19.90 | 17.06 | 18.74 | 19.28 | 12.42 | — | — |

## Defects Discovered at Routine Medical Inspection

**TABLE E 7**

| Defect | Age Group | Defective for treatment | Per 1,000 | Defective for observation | Per 1,000 | Total defective | Per 1,000 |
|---|---|---|---|---|---|---|---|
| Skin | Entrants | 96 | 12.9 | 194 | 26.1 | 290 | 39.0 |
| | Leavers | 109 | 17.3 | 117 | 18.6 | 226 | 35.9 |
| | Other ages | 110 | 15.6 | 166 | 23.4 | 276 | 39.0 |
| | Total | 315 | 15.2 | 477 | 22.9 | 792 | 38.1 |
| Eyes (a) vision | Entrants | 498 | 66.9 | 1,626 | 218.5 | 2,124 | 285.4 |
| | Leavers | 623 | 98.9 | 1,544 | 245.2 | 2,167 | 344.1 |
| | Other ages | 518 | 73.3 | 1,885 | 266.6 | 2,403 | 339.9 |
| | Total | 1,639 | 78.8 | 5,055 | 242.9 | 6,694 | 321.7 |
| (b) squint | Entrants | 110 | 14.8 | 223 | 29.9 | 333 | 44.7 |
| | Leavers | 27 | 4.3 | 115 | 18.3 | 142 | 22.6 |
| | Other ages | 28 | 4.0 | 209 | 29.6 | 237 | 33.6 |
| | Total | 165 | 7.9 | 547 | 26.3 | 712 | 34.2 |
| (c) other | Entrants | 23 | 3.1 | 44 | 5.9 | 67 | 9.0 |
| | Leavers | 29 | 4.6 | 17 | 2.7 | 46 | 7.3 |
| | Other ages | 32 | 4.5 | 35 | 5.0 | 67 | 9.5 |
| | Total | 84 | 4.0 | 96 | 4.7 | 180 | 8.7 |
| Ears (a) hearing | Entrants | 278 | 37.4 | 164 | 22.0 | 442 | 59.4 |
| | Leavers | 97 | 15.4 | 50 | 7.9 | 147 | 23.3 |
| | Other ages | 243 | 34.4 | 123 | 17.4 | 366 | 51.8 |
| | Total | 618 | 29.7 | 337 | 16.2 | 955 | 45.9 |
| (b) otitis media | Entrants | 19 | 2.5 | 81 | 10.9 | 100 | 13.4 |
| | Leavers | 14 | 2.2 | 39 | 6.2 | 53 | 8.4 |
| | Other ages | 15 | 2.1 | 46 | 6.5 | 61 | 8.6 |
| | Total | 48 | 2.3 | 166 | 8.0 | 214 | 10.3 |
| (c) other | Entrants | 98 | 13.2 | 72 | 9.6 | 170 | 22.8 |
| | Leavers | 44 | 7.0 | 26 | 4.1 | 70 | 11.1 |
| | Other ages | 123 | 17.4 | 34 | 4.8 | 157 | 22.2 |
| | Total | 265 | 12.7 | 132 | 6.3 | 397 | 19.0 |
| Nose and throat | Entrants | 113 | 15.2 | 1,042 | 140.0 | 1,155 | 155.2 |
| | Leavers | 48 | 7.6 | 201 | 31.9 | 249 | 39.5 |
| | Other ages | 73 | 10.3 | 431 | 61.0 | 504 | 71.3 |
| | Total | 234 | 11.2 | 1,674 | 80.4 | 1,908 | 91.6 |
| Speech | Entrants | 62 | 8.3 | 192 | 25.8 | 254 | 34.1 |
| | Leavers | 18 | 2.9 | 35 | 5.6 | 53 | 8.5 |
| | Other ages | 33 | 4.7 | 59 | 8.3 | 92 | 13.0 |
| | Total | 113 | 5.4 | 286 | 13.8 | 399 | 19.2 |
| Cervical glands | Entrants | 12 | 1.6 | 274 | 36.8 | 286 | 38.4 |
| | Leavers | 4 | 0.6 | 14 | 2.2 | 18 | 2.8 |
| | Other ages | 4 | 0.6 | 96 | 13.6 | 100 | 14.2 |
| | Total | 20 | 1.0 | 384 | 18.4 | 404 | 19.4 |
| Heart and circulation | Entrants | 90 | 12.1 | 210 | 28.2 | 300 | 40.3 |
| | Leavers | 32 | 5.1 | 70 | 11.1 | 102 | 16.2 |
| | Other ages | 65 | 9.2 | 152 | 21.5 | 217 | 30.7 |
| | Total | 187 | 9.0 | 432 | 20.8 | 619 | 29.8 |
| Lungs (a) | Entrants | 171 | 23.0 | 338 | 45.4 | 509 | 68.4 |
| | Leavers | 24 | 3.8 | 144 | 22.9 | 168 | 26.7 |
| | Other ages | 55 | 7.8 | 177 | 25.0 | 232 | 32.8 |
| | Total | 250 | 12.0 | 659 | 31.7 | 909 | 43.7 |
| (b) pulmonary tuberculosis | Entrants | — | — | 1 | 0.1 | 1 | 0.1 |
| | Leavers | 1 | 0.1 | 1 | 0.1 | 2 | 0.2 |
| | Other ages | — | — | 5 | 0.7 | 5 | 0.7 |
| | Total | 1 | 0.1 | 7 | 0.3 | 8 | 0.4 |
| Development | Entrants | 100 | 13.4 | 417 | 56.0 | 517 | 69.4 |
| | Leavers | 57 | 9.1 | 58 | 9.2 | 115 | 18.3 |
| | Other ages | 119 | 16.8 | 148 | 21.0 | 267 | 37.8 |
| | Total | 276 | 13.3 | 623 | 29.9 | 899 | 43.2 |

**TABLE E 7** (*continued*)

| Defect | Age Group | Defective for treatment | Per 1,000 | Defective for observation | Per 1,000 | Total defective | Per 1,000 |
|---|---|---|---|---|---|---|---|
| Orthopaedic (a) posture | Entrants | 18 | 2.4 | 8 | 1.1 | 26 | 3.5 |
| | Leavers | 24 | 3.8 | 10 | 1.6 | 34 | 5.4 |
| | Other ages | 45 | 6·4 | 13 | 1.8 | 58 | 8.2 |
| | Total | 87 | 4.2 | 31 | 1.5 | 118 | 5.7 |
| (b) feet | Entrants | 155 | 20.8 | 125 | 16.8 | 280 | 37.6 |
| | Leavers | 48 | 7.6 | 51 | 8.1 | 99 | 15.7 |
| | Other ages | 138 | 19.5 | 105 | 14.9 | 243 | 34.4 |
| | Total | 341 | 16.4 | 281 | 13.5 | 622 | 29.9 |
| (c) other | Entrants | 24 | 3.2 | 68 | 9.1 | 92 | 12.3 |
| | Leavers | 14 | 2.3 | 43 | 6.8 | 57 | 9.1 |
| | Other ages | 19 | 2.7 | 68 | 9.6 | 87 | 12.3 |
| | Total | 57 | 2.7 | 179 | 8.6 | 236 | 11.3 |
| Nervous system (a) epilepsy | Entrants | 1 | 0.1 | 26 | 3.5 | 27 | 3.6 |
| | Leavers | 4 | 0.6 | 16 | 2.5 | 20 | 3.1 |
| | Other ages | 5 | 0.7 | 15 | 2.1 | 20 | 2.8 |
| | Total | 10 | 0.5 | 57 | 2.7 | 67 | 3.2 |
| (b) other | Entrants | 5 | 0.6 | 28 | 3.8 | 33 | 4.4 |
| | Leavers | 4 | 0.6 | 19 | 3.0 | 23 | 3.7 |
| | Other ages | 6 | 0.9 | 15 | 2.1 | 21 | 3.0 |
| | Total | 15 | 0.7 | 62 | 3.0 | 77 | 3.7 |
| Psychological (a) development | Entrants | 119 | 16.0 | 108 | 14.5 | 227 | 30.5 |
| | Leavers | 4 | 0.6 | 50 | 7.9 | 54 | 8.5 |
| | Other ages | 25 | 3.5 | 245 | 34.7 | 270 | 38.2 |
| | Total | 148 | 7.1 | 403 | 19.4 | 551 | 26.5 |
| (b) stability | Entrants | 53 | 7.1 | 45 | 6.1 | 98 | 13.2 |
| | Leavers | 16 | 3.5 | 26 | 4.2 | 42 | 6.7 |
| | Other ages | 29 | 4.1 | 49 | 6.9 | 78 | 11.0 |
| | Total | 98 | 4.7 | 120 | 5.8 | 218 | 10.5 |
| Tuberculosis—non-pulmonary | Entrants | — | — | 2 | 0.3 | 2 | 0.3 |
| | Leavers | — | — | 2 | 0.3 | 2 | 0.3 |
| | Other ages | — | — | 3 | 0.4 | 3 | 0.4 |
| | Total | — | — | 7 | 0.3 | 7 | 0.3 |
| Other defects | Entrants | 76 | 10.2 | 98 | 13.2 | 174 | 23.4 |
| | Leavers | 34 | 5.4 | 79 | 12.5 | 113 | 17.9 |
| | Other ages | 56 | 7.9 | 87 | 12.3 | 143 | 20.2 |
| | Total | 166 | 8.0 | 264 | 12.7 | 430 | 20.7 |

The numbers of children seen were:—Entrants 7,442, Leavers 6,298, Other ages 7,070, Total 20,810.

The visual acuity could not be accurately assessed in 112 Entrants; in this table these are included in "Eyes (a) vision" among the 1,626 defective for observation.

## TABLE E 8

### Visual Acuity

(a) schoolchildren without glasses

| | | Left eye | | | | | | | | Right eye |
|---|---|---|---|---|---|---|---|---|---|---|
| | Visual acuity | 6/6 | 6/9 | 6/12 | 6/18 | 6/24 | 6/36 | 6/60 | <6/60 | Totals |
| Right eye | 6/6 | 14,530 | 818 | 181 | 97 | 60 | 48 | 28 | 9 | 15,771 |
| | 6/9 | 639 | 1,509 | 209 | 89 | 31 | 15 | 7 | 1 | 2,500 |
| | 6/12 | 147 | 216 | 404 | 125 | 35 | 26 | 6 | — | 959 |
| | 6/18 | 87 | 84 | 113 | 226 | 55 | 19 | 7 | 2 | 593 |
| | 6/24 | 45 | 23 | 38 | 64 | 128 | 40 | 5 | — | 343 |
| | 6/36 | 44 | 18 | 19 | 19 | 43 | 130 | 18 | 6 | 297 |
| | 6/60 | 22 | 12 | 12 | 8 | 11 | 19 | 93 | 6 | 183 |
| | <6/60 | 3 | 4 | 2 | — | 4 | 2 | 6 | 31 | 52 |
| Left eye | Totals | 15,517 | 2,684 | 978 | 628 | 367 | 299 | 170 | 55 | 20,698 |

(b) schoolchildren with glasses

| | | Left eye | | | | | | | | Right eye |
|---|---|---|---|---|---|---|---|---|---|---|
| | Visual acuity | 6/6 | 6/9 | 6/12 | 6/18 | 6/24 | 6/36 | 6/60 | <6/60 | Totals |
| Right eye | 6/6 | 664 | 143 | 64 | 28 | 17 | 6 | 8 | — | 930 |
| | 6/9 | 137 | 236 | 79 | 17 | 8 | 3 | 1 | 1 | 482 |
| | 6/12 | 53 | 58 | 110 | 30 | 3 | 5 | — | — | 259 |
| | 6/18 | 13 | 25 | 20 | 27 | 5 | 1 | 1 | — | 92 |
| | 6/24 | 7 | 8 | 5 | 5 | 4 | 1 | 1 | — | 31 |
| | 6/36 | 8 | 4 | 4 | 1 | 2 | 3 | — | — | 22 |
| | 6/60 | 5 | 1 | 2 | — | 1 | — | — | — | 9 |
| | <6/60 | 1 | — | 1 | — | — | — | — | — | 2 |
| Left eye | Totals | 888 | 475 | 285 | 108 | 40 | 19 | 11 | 1 | 1,827 |

## Nutrition

**TABLE E 9**

| Age Group | NORMAL (A) | | | | SUB-NORMAL (B) | | | | BAD (C) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boys | | Girls | | Boys | | Girls | | Boys | | Girls | |
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| Entrants | 3,627 | 93.8 | 3,317 | 92.8 | 216 | 5.6 | 225 | 6.3 | 22 | 0.6 | 32 | 0.9 |
| II | 1,117 | 95.6 | 1,113 | 94.1 | 49 | 4.2 | 68 | 5.8 | — | — | 2 | 0.2 |
| III | 2,356 | 95.3 | 2,128 | 95.7 | 110 | 4.5 | 88 | 4.0 | 3 | 0.1 | 2 | 0.1 |
| IV | 1 | 0.03 | 1 | 0.04 | — | — | — | — | 1 | 0.03 | — | — |
| V | — | — | — | — | — | — | — | — | — | — | — | — |
| Totals | 7,101 | 94.7 | 6,559 | 94.0 | 375 | 5.0 | 381 | 5.5 | 26 | 0.4 | 36 | 0.5 |

## Colour Vision

**TABLE E 10**

| Colour Vision | Boys | Girls | Total |
|---|---|---|---|
| Normal | 6,353 (92.5%) | 5,646 (99.5%) | 11,999 (95.6%) |
| Defective—safe | 215 (3.1%) | 26 (0.4%) | 241 (1.9%) |
| Defective—unsafe | 303 (4.4%) | 4 (0.1%) | 307 (2.5%) |
| Totals | 6,871 | 5,676 | 12,547 |

## Tuberculin Tests

**TABLE E 11**

| Age | Unvaccinated persons | | | | | Vaccinated persons | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Tested | Negative | | Positive | | Tested | Negative | | Positive | |
| | | No. | % | No. | % | | No. | % | No. | % |
| 0–4 | 259 | 217 | 83.8 | 42 | 16.2 | 169 | 3 | 1.8 | 166 | 98.2 |
| 5 | 2 | 2 | 100.0 | — | — | — | — | — | — | — |
| 6 | — | — | — | — | — | — | — | — | — | — |
| 7 | 4 | 4 | 100.0 | — | — | — | — | — | — | — |
| 8 | 45 | 31 | 68.9 | 14 | 31.1 | 13 | 2 | 15.4 | 11 | 84.6 |
| 9 | 859 | 795 | 92.5 | 64 | 7.5 | 510 | 19 | 3.7 | 491 | 96.3 |
| 10 | 1,801 | 1,622 | 90.1 | 179 | 9.9 | 1,051 | 31 | 2.9 | 1,020 | 97.1 |
| 11 | 353 | 297 | 84.1 | 56 | 15.9 | 163 | 4 | 2.5 | 159 | 97.5 |
| 12 | 14 | 5 | 35.7 | 9 | 64.3 | 1 | — | — | 1 | 100.0 |
| 13 | 49 | 27 | 55.1 | 22 | 44.9 | 35 | — | — | 35 | 100.0 |
| 14 | 318 | 229 | 72.0 | 89 | 28.0 | 277 | 7 | 2.5 | 270 | 97.5 |
| 15 | 41 | 34 | 82.9 | 7 | 17.1 | 28 | 1 | 3.6 | 27 | 96.4 |
| 16 | — | — | — | — | — | 2 | — | — | 2 | 100.0 |
| Totals | 3,745 | 3,263 | 87.1 | 482 | 12.9 | 2,249 | 67 | 3.0 | 2,182 | 97.0 |

## Re-examinations

**TABLE E** 12

| Defects for which re-examined | For treatment | For observation | Cured | Totals |
|---|---|---|---|---|
| Skin | 70 | 212 | 226 | 508 |
| Eyes (a) vision | 2,330 | 7,638 | 2,311 | 12,279 |
| (b) squint | 128 | 569 | 26 | 723 |
| (c) other | 48 | 66 | 132 | 246 |
| Ears (a) hearing | 829 | 646 | 573 | 2,048 |
| (b) otitis media | 67 | 104 | 72 | 243 |
| (c) other | 177 | 123 | 159 | 459 |
| Nose and throat | 282 | 1,373 | 1,127 | 2,782 |
| Speech | 175 | 413 | 338 | 926 |
| Cervical glands | 26 | 125 | 80 | 231 |
| Heart and circulation | 194 | 529 | 284 | 1,007 |
| Lungs (a) | 159 | 588 | 444 | 1,191 |
| (b) pulmonary tuberculosis | — | 1 | — | 1 |
| Development | 208 | 255 | 208 | 671 |
| Orthopaedic (a) posture | 16 | 27 | 63 | 106 |
| (b) feet | 120 | 282 | 253 | 655 |
| (c) other | 53 | 216 | 187 | 456 |
| Nervous system (a) epilepsy | 19 | 58 | 6 | 83 |
| (b) other | 31 | 118 | 45 | 194 |
| Psychological (a) development | 105 | 561 | 108 | 774 |
| (b) stability | 160 | 221 | 184 | 565 |
| Tuberculosis—non-pulmonary | — | 33 | 12 | 45 |
| Other defects | 270 | 417 | 335 | 1,022 |
| Totals | 5,467 | 14,575 | 7,173 | 27,215 |

27,215 defects in 19,895 children (primary 12,770 and secondary 7,125)

## Clinic Examinations

**TABLE E** 13

| Reason for examination | Number of examinations | Per cent |
|---|---|---|
| Skin | 1,407 | 6.9 |
| Eyes (a) vision | 296 | 1.5 |
| (b) squint | 49 | 0.2 |
| (c) other | 94 | 0.5 |
| Ears (a) hearing | 1,635 | 8.1 |
| (b) otitis media | 152 | 0.7 |
| (c) other | 313 | 1.5 |
| Nose and throat | 569 | 2.8 |
| Speech | 197 | 1.0 |
| Cervical glands | 33 | 0.2 |
| Heart and circulation | 356 | 1.8 |
| Lungs (a) | 541 | 2.7 |
| (b) pulmonary tuberculosis | 1 | 0.004 |
| Development | 375 | 1.9 |
| Orthopaedic (a) posture | 12 | 0.06 |
| (b) feet | 151 | 0.7 |
| (c) other | 102 | 0.5 |
| Nervous system (a) epilepsy | 38 | 0.2 |
| (b) other | 67 | 0.3 |
| Psychological (a) development | 489 | 2.4 |
| (b) stability | 296 | 1.5 |
| Tuberculosis—non-pulmonary | — | — |
| Other defects | 607 | 3.0 |
| B. C. G. vaccination | 3,509 | 17.3 |
| Tuberculin skin test | 5,670 | 28.0 |
| Pre-anaesthetic examination | 3,309 | 16.3 |
| Total | 20,268 | 100.0 |

**TABLE E 14** **Special Educational Treatment**

| 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 | 2 | 2 | 4 | 7 | — | — | 1 | 1 | — | — | 7 | 10 |
| Partially sighted | 20 | 14 | 2 | 2 | 27 | 22 | 2 | 3 | — | 1 | 51 | 42 |
| Deaf | 6 | 6 | — | 2 | — | — | 5 | 2 | — | — | 11 | 10 |
| Partially deaf | 23 | 32 | 3 | 2 | 216 | 189 | 6 | 3 | — | 1 | 248 | 227 |
| Delicate | 77 | 45 | 1 | 2 | 89 | 74 | 6 | 1 | 6 | 8 | 179 | 130 |
| Educationally subnormal | 389 | 239 | 22 | 7 | 761 | 440 | 36 | 19 | — | 2 | 1,208 | 707 |
| Epileptic | 30 | 18 | — | 3 | 76 | 61 | 7 | 2 | — | 1 | 113 | 85 |
| Maladjusted | 77 | 29 | 23 | 5 | 104 | 65 | 1 | — | 2 | — | 207 | 99 |
| Physically handicapped | 101 | 65 | 5 | 5 | 136 | 110 | 21 | 9 | 7 | 7 | 270 | 196 |
| Speech defect | 100 | 36 | 3 | 1 | 931 | 376 | 3 | — | — | — | 1,037 | 413 |
| Total handicaps | 825 | 486 | 63 | 36 | 2,340 | 1,337 | 88 | 40 | 15 | 20 | 3,331 | 1,919 |
| | 1,311 | | 99 | | 3,677 | | 128 | | 35 | | 5,250 | |
| Total pupils | 566 | 361 | 29 | 20 | 2,149 | 1,234 | 63 | 30 | 14 | 16 | 2,821 | 1,661 |
| | 927 | | 49 | | 3,383 | | 93 | | 30 | | 4,482 | |

5,250 handicaps in 4,482 pupils (2,821 boys; 1,661 girls). Of these 552 children have 2 handicaps, 99 have 3 handicaps, and 6 have 4 handicaps.

**TABLE E 15**

**Single Handicaps**

| Number of children affected | Handicap |
|---|---|
| 14 | Blind |
| 74 | Partially sighted |
| 17 | Deaf |
| 366 | Partially hearing |
| 256 | Delicate |
| 1,340 | Educationally sub-normal |
| 114 | Epileptic |
| 53 | Maladjusted |
| 347 | Physically handicapped |
| 1,244 | Speech defect |
| 3,825 | Total |

## Dual Handicaps

**TABLE E** 16

| Handicap | Blind | Partially sighted | Deaf | Partially deaf | Delicate | E.S.N. | Epileptic | Maladjusted | Physically handicapped | Speech defect |
|---|---|---|---|---|---|---|---|---|---|---|
| Speech defect | — | — | — | 8 | 6 | 113 | — | 3 | 10 | 140 |
| Physically handicapped | — | 5 | 2 | 10 | 4 | 51 | 1 | 2 | 85 | |
| Maladjusted | — | — | 1 | 2 | 9 | 179 | 4 | 200 | | |
| Epileptic | — | 1 | — | — | 4 | 51 | 61 | | | |
| E. S. N. | 2 | 8 | 2 | 56 | 14 | 476 | | | | |
| Delicate | — | 1 | — | 2 | 40 | | | | | |
| Partially deaf | — | 1 | — | 79 | | | | | | |
| Deaf | — | — | 5 | | | | | | | |
| Partially sighted | — | 16 | | | | | | | | |
| Blind | 2 | | | | | | | | | |

Showing the distribution of 1,104 handicaps among the 552 children who have two handicaps.

## Multiple Handicaps

**TABLE E 17**

| Number of children affected | Categories of handicaps coinciding | | |
|---|---|---|---|
| | First | Second | Third |
| 1 | Blind | E.S.N. | P. handicapped |
| 1 | P. sighted | E.S.N. | Maladjusted |
| 1 | P. sighted | E.S.N. | P. handicapped |
| 1 | P. sighted | E.S.N. | Speech defect |
| 3 | P. deaf | Delicate | E.S.N. |
| 1 | P. deaf | E.S.N. | Epileptic |
| 10 | P. deaf | E.S.N. | Maladjusted |
| 2 | P. deaf | E.S.N. | P. handicapped |
| 9 | P. deaf | E.S.N. | Speech defect |
| 1 | P. deaf | Maladjusted | Speech defect |
| 3 | Delicate | E.S.N. | Maladjusted |
| 3 | Delicate | E.S.N. | Speech defect |
| 1 | Delicate | Epileptic | P. handicapped |
| 1 | Delicate | P. handicapped | Speech defect |
| 4 | E.S.N. | Epileptic | Maladjusted |
| 5 | E.S.N. | Epileptic | P. handicapped |
| 9 | E.S.N. | Epileptic | Speech defect |
| 4 | E.S.N. | Maladjusted | P. handicapped |
| 26 | E.S.N. | Maladjusted | Speech defect |
| 10 | E.S.N. | P. handicapped | Speech defect |
| 1 | Epileptic | Maladjusted | P. handicapped |
| 2 | Epileptic | P. handicapped | Speech defect |
| 99 | Total with triple handicaps | | |

| | First | Second | Third | Fourth |
|---|---|---|---|---|
| 1 | P. deaf | E.S.N. | Maladjusted | P. handicapped |
| 2 | P. deaf | E.S.N. | P. handicapped | Speech defect |
| 1 | Delicate | E.S.N. | Maladjusted | Speech defect |
| 1 | Delicate | E.S.N. | P. handicapped | Speech defect |
| 1 | E.S.N. | Maladjusted | P. handicapped | Speech defect |
| 6 | Total with quadruple handicaps | | | |

## Intelligence Quotients of E.S.N. Pupils

**TABLE E 18**

| I.Q. | <45 | 45– | 50– | 55– | 60– | 65– | 70– | 75– | 80– | 90– | 100– | 110– | 120+ | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Boys | 18 | 19 | 29 | 54 | 79 | 93 | 131 | 156 | 303 | 204 | 98 | 20 | 4 | 1,208 |
| Girls | 6 | 9 | 25 | 26 | 55 | 83 | 87 | 98 | 175 | 96 | 38 | 8 | 1 | 707 |
| Both | 24 | 28 | 54 | 80 | 134 | 176 | 218 | 254 | 478 | 300 | 136 | 28 | 5 | 1,915 |

## Fleming Fulton School

**TABLE E** 19

| Reasons for admission | Belfast pupils | | | Other pupils | | |
|---|---|---|---|---|---|---|
| | Boys | Girls | Total | Boys | Girls | Total |
| Amyotonia congenita | — | — | — | 1 | — | 1 |
| Arthrogryposis | — | — | — | — | 1 | 1 |
| Ataxia | 2 | 3 | 5 | 1 | 1 | 2 |
| Brain tumour | — | 1 | 1 | — | — | — |
| Cerebral palsy | 26 | 16 | 42 | 21 | 10 | 31 |
| Cervical meningocele | 2 | 1 | 3 | — | 1 | 1 |
| Congenital deformities | 4 | 2 | 6 | 3 | 2 | 5 |
| Congenital dislocation of hip | — | 1 | 1 | — | — | — |
| Haemophilia | — | — | — | 1 | — | 1 |
| Hydrocelpalus | 2 | 2 | 4 | 1 | 1 | 2 |
| Klippel-Feil syndrome | — | 1 | 1 | — | — | — |
| Megalocephalus | — | 1 | 1 | — | — | — |
| Muscular dystrophy | 2 | 1 | 3 | 4 | — | 4 |
| Myositis | — | — | — | — | 1 | 1 |
| Osteogenesis imperfecta | 1 | 2 | 3 | — | 1 | 1 |
| Perthes's disease | 1 | — | 1 | — | — | — |
| Poliomyelitis | 1 | 1 | 2 | — | 2 | 2 |
| Rheumatoid arthritis | 1 | — | 1 | — | — | — |
| Spina bifida | 12 | 9 | 21 | 11 | 6 | 17 |
| Total | 54 | 41 | 95 | 43 | 26 | 69 |

## Cedar Lodge School

**TABLE E** 20

| Reasons for admission | Boys | Girls | Total |
|---|---|---|---|
| Asthma | 17 | 9 | 26 |
| Brain tumour | 1 | — | 1 |
| Congenital deformity of kidney | — | 1 | 1 |
| Congenital dislocation of hip | 1 | 1 | 2 |
| Congenital heart defect | 3 | 1 | 4 |
| Duodenal ulcer | 1 | — | 1 |
| Eczema | 1 | — | 1 |
| Epilepsy | 1 | 2 | 3 |
| Erb's palsy | 1 | — | 1 |
| Exomphalos | 1 | — | 1 |
| Fibrocystic disease | 3 | 1 | 4 |
| Maladjustment | 1 | — | 1 |
| Migraine | — | 1 | 1 |
| Nephrosis | — | 1 | 1 |
| Perthes's disease of hip | 4 | 1 | 5 |
| Rheumatic heart disease | 1 | — | 1 |
| Spastic paraplegia | 1 | — | 1 |
| Spina bifida | — | 2 | 2 |
| Number admitted during 1968 | 37 | 20 | 57 |
| Number discharged during 1968 | 27 | 26 | 53 |
| Average duration of stay in months | 37 | 41 | 39 |
| Total on roll at 31st December, 1968 | 92 | 69 | 161 |

TABLE E 21

## Miscellaneous

| | | |
|---|---|---|
| Ultra-violet light treatment | 2,005 | |
| Physiotherapy: | 985 | |
| Children treated | 10,979 | |
| Total attendances | 502 | |
| Cases discharged | 24 | |
| Waiting list | | |
| Speech therapy: | 6,616 | |
| Total attendances | | |
| Audiometry: | 13,871 | |
| Children sweep tested at school | 1,404 | |
| Children failing sweep test | 190 | |
| Children referred to specialist | | |
| Vision tests: | 6,097 | |
| Children tested by health visitors | | |
| Cleanliness: | 121,630 | |
| Children inspected | 8,017 | (6.6%) |
| Children found to have nits | 2,586 | (2.1%) |
| Children found to have vermin | 4,867 | |
| Children cleansed at clinics | | |
| B.C.G. vaccinations: | 3,509 | |
| Vaccinations at School Clinics | 1,881 | |
| Vaccinations by other authorities | 4,065 | |
| Children tuberculin tested | 482 | (11.9%) |
| Children showing positive reaction | 3,583 | (88.1%) |
| Children showing negative reaction | 3,381 | (97.1%) |
| Vaccinated children retested—positive | 101 | (2.9%) |
| Vaccinated children retested—negative | | |
| Nurses' home visits | 15,710 | |
| Nurses' school visits (other than routine inspections) | 1,629 | |
| Medical Officers' visits | 142 | |
| Eye specialist: | 6,584 | |
| Children refracted | 3,541 | |
| Children given post-mydriatic examination | 853 | |
| Children examined for other eye conditions | 434 | |
| Children referred for orthoptic treatment | | |
| Paediatrician: | 208 | |
| Children examined at special schools | | |
| Psychiatrist: | — | |
| New cases | — | |
| Total attendances | | |
| Surgeon: | 208 | |
| Children examined at special schools | | |
| General anaesthetics | 3,309 | |
| Education Act Sections 32 and 53: | 11 | |
| Children reported to N.I. Hospitals Authority (Section 32 A) | 74 | |
| Children reported to Welfare Authority (Section 32 B) | 50 | |
| Children reported to N.I. Hospitals Authority (Section 53) | | |
| Youth employment: | 243 | |
| Children examined under Employment Bye-Laws | — | |
| Children found unfit for employment | 255 | |
| Reports to Youth Employment Service on school-leavers | | |

During the year, the department fully discharged its obligations in regard to school dental inspection and the provision of dental care for school and pre-school children and, in addition, undertook a quinquennial survey of dental caries in children in age groups three, four, five, twelve, fourteen and fifteen.

### Dental Inspections in Schools

Children in all age groups attending grant-aided schools were provided with annual dental inspection, except in the case of children attending nursery and special schools, where dental inspection was twice annually. Table F1 details the number of children examined, those found defective and those consenting to dental care. Compared with 1967, the defective rate in 1968 has risen from 53.3% to 57%. Too much significance should not be attached to this apparent set-back in view of the survey findings, which will be dealt with later.

In 1967 consent to dental care was given for 91.7% of those children in need of care, of which total 29.1% elected to attend school clinics. The figures for 1968 show a substantial drop in the overall consent rate to 70.5%, of which total 31.9% elected to attend school clinics. While it is gratifying to observe that the school dental service continues to retain its popularity and continues to remain stable in regard to the number of children under its care, it is hoped that the sudden fall in the consent rate, which is almost entirely due to the failure of pupils attending intermediate schools to return forms of consent, is not really an expression of lack of interest in dental health.

### Attendances at Clinics

All requests for dental care at school clinics were fully met and a total of 10,344 children attended. This constitutes a 1½% increase over the 1967 total. Periodic check examinations in clinics totalled 10,938.

### Treatments

The filling rate per child continues to remain at 2.3 and the extraction rate at 0.7. It is gratifying to note that Dental Officers continue to practise treatments outside the normal routine procedures and this reflects the value of the Post-Graduate Courses which the Health Committee has from time to time approved for attendance of its Dental Officers. The orthodontic section continues to function, though seriously handicapped by lack of staff. Table F2 gives full details of all treatments carried out during the year.

### Child Health

For some years I have stressed the importance of securing a high standard of dental health in the pre-school child. Unless this can be achieved, there can be little hope of any reduction in the incidence of dental caries in the five year old schoolchild.

Although it is disappointing that the number of pre-school children now under dental supervision is not considerably larger, the department (in spite of the difficulties involved in making parental contact) has achieved much in having under its care slightly over 1,100 of these children in each of the past two years. The statistical evidence in the survey tables in respect of these children appears to indicate progress towards achieving a higher standard of dental health, but a substantially greater number of pre-school children will require to be brought under dental supervision before there is any significant reduction in the incidence of dental caries in the five year old schoolchild.

### Survey of Dental Caries Prevalence

The previous survey of dental caries prevalence was undertaken in the year 1963 and it was anticipated at that time that there would be repeat surveys every fifth year. All the criteria and procedures adopted in 1963 were repeated in 1968 with the exception that, in the latter year, only the age groups three, four, five, twelve, fourteen and fifteen were selected. In the first three age groups, the survey was concerned with the deciduous dentition only, while in the last three, the permanent dentition only was involved. In considering the statistics of the 1968 survey, the information most

sought is the trend of dental caries involvement in the five years since 1963. The statistics for the years 1963 and 1968 have accordingly been tabulated for ease of comparison and it is these tables upon which comment is made.

Table S1 details dental caries in the year 1968 for boys and girls collectively in the City of Belfast and Tables S2 and S3 detail the same information for boys and girls separately. Tables S4 to S15 segregate the above information for each of the four geographical areas of the City and Tables S16 to S20 provide a comparison of statistics for the years 1963 and 1968 for the City as a whole and for each of the four areas. For the purpose of this report, it is intended only to deal with Tables S16 to S20.

*Percentage Caries Free* (*Table S*16)

Examination of this table will show that, compared with the year 1963, boys and girls both collectively and separately in 1968 contribute to an increased percentage free from dental caries. The improvement is most marked in the three youngest age groups and much less satisfactory in the three older age groups, where some increase in dental caries, mainly in respect of girls, has been recorded.

*Average D.M.F. per child* (*Caries Index*)

The extent of dental caries for both sexes, as expressed by the caries index, shows some reduction in the year 1968 except in age groups three, five, twelve and fourteen and, while boys show a reduction in all age groups except age five (where the increase is marginal) girls fare less favourably, showing a varying degree of increase in the caries index in all age groups except four and twelve. A breakdown of Table S16 into the four geographical areas of Belfast is provided in Tables S17 to S20 and upon which the following comments are proffered.

*Percentage Caries Free*

It is interesting to note that, in 1968, the trend in the three youngest age groups towards an increasing percentage free from dental caries is maintained in each of the areas except East Belfast, where the situation has deteriorated except in age group five (no survey of three and four year old children was possible in South Belfast). That the two areas of the City where the Pre-School Dental Service is most active happen to be the areas where improvement is most marked, would appear to be of some significance. If the trend towards a lower incidence of dental caries is encouraging in the three youngest age groups, the situation is less satisfactory in the three older groups. Age groups twelve and fifteen contribute to a situation which in the five years since 1963 has deteriorated and, if boys are more involved than girls in all areas except West Belfast at age twelve, the converse is the case at age fifteen in all areas except East Belfast. West Belfast, of all the areas, has been consistent in a modest reduction in dental caries, which is most marked in the youngest age groups.

*Average D.M.F. per child* (*Caries Index*)

It will be observed from further study of Tables S17 to S20 that the trend of the Dental Caries Index is less clearly defined compared with the trend in freedom from dental caries. In the three youngest age groups, the trend is toward an increase in the caries index, especially in East Belfast. Both sexes have contributed to this increase; girls more so than boys. The position of the three older age groups is more encouraging and, collectively, boys and girls have contributed to a reduction in the caries index in all areas except South Belfast. An all-round reduction in the caries index in these three age groups is recorded for West Belfast and, if North Belfast shows a marginal increase of the index in boys at age twelve, East Belfast shows a slightly greater increase for girls at age fourteen. Viewed overall in respect of the six age groups, West Belfast has clearly made the greatest contribution towards a reduction in the extent of dental caries.

*Summary*

Children's teeth in all age groups continue to suffer heavily from dental caries. Both boys and girls are involved, the latter perhaps more so than boys. In the five years since the first dental caries survey in 1963, the greatest reduction in the incidence of dental caries has taken place in West Belfast and to a slightly lesser extent in North Belfast, while the situation in East and South Belfast has deteriorated. It is clear however that, while some reductions in dental caries have taken place, such reductions, when viewed against the background of the present day incidence of caries, appear insignificant.

The concept held by many people that the retention of natural dentition is not really necessary, could well be a strong contributory factor to the apathy which abounds in respect of dental health and consequently to the failure to control the spread of dental disease. The dental profession must clearly give an urgent and convincing rebuttal of this concept: until this is done, dental health education must labour under serious handicap. In the meantime, withdrawal of present day cariogenic substances from human consumption, coupled with fluoridation of public water supplies, appear to be the only measurers guaranteed to effect a substantial reduction in the incidence of dental disease in a comparatively short time.

My concluding remarks, at the end of a year which has made heavy demands upon the dental personnel, are in appreciation of the extensive co-operation extended by Principals and Teachers, Medical and Dental Staff and by the administrative and other staff at College Street Headquarters.

S. R. SHEANE, L.D.S.,

*Chief Dental Officer.*

## Dental Inspection

**TABLE F 1**

| | Participating schools | *Special | *Nursery | Non participating | Pre-school |
|---|---|---|---|---|---|
| Total on school rolls | 80,159 | 1,082 | 554 | 2,462 | — |
| Total inspected | 75,482 | 1,639 | 722 | 2,259 | 1,119 |
| Age groups 5 to 7 | 19,140 | 119 | — | — | — |
| Other age groups | 56,342 | 1,520 | — | — | — |
| Total defective | 43,050 | 69 | 266 | 616 | 643 |
| Defective percentage | 57.0 | 58.0 | 36.8 | 27.3 | 57.5 |
| Consenting to treatment | 32,358 | 706 | 244 | — | 643 |
| By Health Department | 10,334 | 392 | 91 | — | 643 |
| By own dentist | 22,024 | 314 | 153 | — | — |
| Appointments issued | 10,334 | 314 | 91 | — | 643 |
| Inspection sessions | 510 | 17 | 12 | — | 24 |
| Clinic check inspections | 10,938 | — | — | — | 475 |

* Special and Nursery Schools inspected twice annually. Figures extracted from participating schools totals.

## Dental Treatment

**TABLE F 2**

| | Participating schools | *Special | *Nursery | Pre-school | Totals |
|---|---|---|---|---|---|
| Extractions | | | | | |
| Temporary teeth | 5,559 | 160 | 28 | 576 | 6,135 |
| Permanent teeth | 1,532 | 79 | 1 | — | 1,532 |
| Total | 7,091 | 239 | 29 | 576 | 7,667 |
| Anaesthetics | | | | | |
| General | 3,309 | 112 | 15 | 323 | 3,632 |
| Local | 2,695 | 46 | 1 | 7 | 2,702 |
| Total | 6,004 | 158 | 16 | 330 | 6,334 |
| Fillings | | | | | |
| Temporary teeth | 6,486 | 100 | 95 | 1,023 | 7,509 |
| Permanent teeth | 17,672 | 824 | 6 | — | 17,672 |
| Total | 24,158 | 924 | 101 | 1,023 | 25,181 |
| Root canal therapy | 27 | 1 | — | — | 27 |
| Crowns | 18 | — | — | — | 18 |
| Gingevectomy | 1 | — | — | — | 1 |
| Scaling and polish | 1,357 | 82 | 2 | 46 | 1,403 |
| Dressings | 1,248 | 30 | 8 | 66 | 1,314 |
| Other operations | 1,014 | 70 | 10 | 39 | 1,053 |
| X-Ray films | 619 | 17 | — | 2 | 621 |
| Partial dentures provided | 25 | 4 | — | — | 25 |
| Total treatments | 41,561 | 1,525 | 166 | 2,082 | 43,643 |
| Individuals treated | 10,344 | 356 | 40 | 582 | 10,926 |
| Total treatment courses | 11,292 | 335 | 43 | 520 | 11,812 |
| Total treatment visits | 24,674 | 971 | 95 | 2,136 | 26,810 |
| Total treatment sessions | 4,290 | — | — | 44 | 4,334 |
| **Orthodontics:** | | | | | |
| Patients provided with appliances | 178 | 2 | — | — | 178 |
| Total appliances provided | 249 | 2 | — | — | 249 |
| Treatments completed | 143 | 2 | — | — | 143 |
| Treatments suspended | 20 | — | — | — | 20 |
| Total treatment visits | 2,265 | 25 | — | — | 2,265 |
| Total sessions | 349 | — | — | — | 349 |

* Figures extracted from participating schools totals.

**TABLE F 3**

| Clinic Accommodation | |
|---|---|
| North Belfast | Mountcollyer Street<br>Lincoln Avenue |
| South Belfast | Academy Street |
| East Belfast | Cherryville Street |
| West Belfast | Cupar Street |
| Mobile clinics | Nil |

**TABLE F 4**

| Staff Complement | |
|---|---|
| Chief Dental Officer | 1 |
| Clinic Dental Officers | 4 |
| Dental Officers (full-time) | 6 |
| Dental Officers (part-time) | 5 |
| Total (expressed as full-time equivalent) | 11.9 |
| Anaesthetists | 3 |

**TABLE S 1**

| Combined Areas | | | Temporary Dentition | | | | Permanent Dentition | | | | Boys and Girls | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Examined | Caries free | d | m | f | c.i. | D | M | F | C.I. | % Caries free | Av. D.M.F. per child |
| 3 | 405 | 163 | 763 | 51 | 73 | 887 | — | — | — | — | 40.2 | 3.7 |
| 4 | 353 | 65 | 945 | 136 | 111 | 1,192 | — | — | — | — | 18.4 | 4.1 |
| 5 | 961 | 178 | 2,532 | 885 | 437 | 3,854 | — | — | — | — | 18.5 | 4.9 |
| 12 | 985 | 23 | — | — | — | — | 1,653 | 632 | 2,948 | 5,233 | 2.5 | 5.7 |
| 14 | 931 | 10 | — | — | — | — | 2,102 | 1,059 | 4,680 | 7,841 | 1.1 | 8.5 |
| 15 | 549 | 5 | — | — | — | — | 898 | 707 | 3,902 | 5,507 | 0.9 | 10.1 |

**TABLE S 2**

| Combined Areas | | | Temporary Dentition | | | | Permanent Dentition | | | | Boys | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Examined | Caries free | d | m | f | c.i. | D | M | F | C.I. | % Caries free | Av. D.M.F. per child |
| 3 | 206 | 94 | 291 | 14 | 36 | 341 | — | — | — | — | 45.6 | 3.0 |
| 4 | 175 | 27 | 517 | 60 | 49 | 626 | — | — | — | — | 15.4 | 4.2 |
| 5 | 526 | 93 | 1,476 | 504 | 171 | 2,151 | — | — | — | — | 17.7 | 5.0 |
| 12 | 488 | 14 | — | — | — | — | 887 | 318 | 1,419 | 2,624 | 2.9 | 5.5 |
| 14 | 497 | 7 | — | — | — | — | 1,241 | 528 | 2,066 | 3,835 | 1.4 | 7.8 |
| 15 | 305 | 4 | — | — | — | — | 512 | 354 | 2,147 | 3,013 | 1.3 | 10.0 |

**TABLE S 3**

| Combined Areas | | | Temporary Dentition | | | | Permanent Dentition | | | | Girls | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Examined | Caries free | d | m | f | c.i. | D | M | F | C.I. | % Caries free | Av. D.M.F. per child |
| 3 | 199 | 69 | 472 | 37 | 37 | 546 | — | — | — | — | 34.7 | 4.2 |
| 4 | 178 | 38 | 428 | 76 | 62 | 566 | — | — | — | — | 21.3 | 4.0 |
| 5 | 435 | 85 | 1,056 | 381 | 266 | 1,703 | — | — | — | — | 19.5 | 4.9 |
| 12 | 447 | 9 | — | — | — | — | 766 | 314 | 1,529 | 2,609 | 2.0 | 6.0 |
| 14 | 434 | 3 | — | — | — | — | 861 | 531 | 2,614 | 4,006 | 0.7 | 9.3 |
| 15 | 244 | 1 | — | — | — | — | 386 | 353 | 1,755 | 2,494 | 0.4 | 12.2 |

**TABLE S 4**

| Area 1 (South) | | | Temporary Dentition | | | | Permanent Dentition | | | | Boys and Girls | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Examined | Caries free | d | m | f | c.i. | D | M | F | C.I. | % Caries free | Av. D.M.F. per child |
| 3 | — | — | — | — | — | — | — | — | — | — | — | — |
| 4 | — | — | — | — | — | — | — | — | — | — | — | — |
| 5 | 194 | 41 | 498 | 154 | 65 | 717 | — | — | — | — | 21.1 | 4.7 |
| 12 | 198 | 2 | — | — | — | — | 313 | 118 | 752 | 1,183 | 1.0 | 6.0 |
| 14 | 158 | 2 | — | — | — | — | 271 | 148 | 988 | 1,407 | 1.3 | 9.0 |
| 15 | 146 | 0 | — | — | — | — | 143 | 173 | 1,341 | 1,657 | 0.0 | 11.3 |

**TABLE S 5**

| Area 1 (South) | | | Temporary Dentition | | | | Permanent Dentition | | | | Boys | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Examined | Caries free | d | m | f | c.i. | D | M | F | C.I. | % Caries free | Av. D.M.F. per child |
| 3 | — | — | — | — | — | — | — | — | — | — | — | — |
| 4 | — | — | — | — | — | — | — | — | — | — | — | — |
| 5 | 104 | 20 | 288 | 86 | 24 | 398 | — | — | — | — | 19.2 | 4.7 |
| 12 | 95 | 1 | — | — | — | — | 149 | 72 | 337 | 558 | 1.1 | 5.9 |
| 14 | 83 | 2 | — | — | — | — | 146 | 66 | 451 | 663 | 2.4 | 8.2 |
| 15 | 74 | 0 | — | — | — | — | 75 | 80 | 688 | 843 | 0.0 | 11.4 |

**TABLE S 6**

| Area 1 (South) | | | Temporary Dentition | | | | Permanent Dentition | | | | Girls | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Examined | Caries free | d | m | f | c.i. | D | M | F | C.I. | % Caries free | Av. D.M.F. per child |
| 3 | — | — | — | — | — | — | — | — | — | — | — | — |
| 4 | — | — | — | — | — | — | — | — | — | — | — | — |
| 5 | 90 | 21 | 210 | 68 | 41 | 319 | — | — | — | — | 23.3 | 4.6 |
| 12 | 103 | 1 | — | — | — | — | 164 | 46 | 415 | 625 | 1.0 | 6.1 |
| 14 | 75 | 0 | — | — | — | — | 125 | 82 | 537 | 744 | 0.0 | 9.9 |
| 15 | 72 | 0 | — | — | — | — | 68 | 93 | 653 | 814 | 0.0 | 11.3 |

**TABLE S 7**

| Area 2 (North) | | | Temporary Dentition | | | | Permanent Dentition | | | | Boys and Girls | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Examined | Caries free | d | m | f | c.i. | D | M | F | C.I. | % Caries free | Av. D.M.F. per child |
| 3 | 233 | 114 | 344 | 23 | 30 | 397 | — | — | — | — | 48.9 | 3.3 |
| 4 | 167 | 43 | 480 | 75 | 63 | 618 | — | — | — | — | 25.7 | 5.0 |
| 5 | 256 | 37 | 731 | 282 | 104 | 1,117 | — | — | — | — | 14.5 | 5.1 |
| 12 | 240 | 5 | — | — | — | — | 453 | 174 | 824 | 1,451 | 2.1 | 6.2 |
| 14 | 276 | 3 | — | — | — | — | 631 | 344 | 1,432 | 2,407 | 1.1 | 8.8 |
| 15 | 158 | 2 | — | — | — | — | 282 | 230 | 1,041 | 1,553 | 1.3 | 10.0 |

**TABLE S 8**

| Area 2 (North) | | | Temporary Dentition | | | | Permanent Dentition | | | | Boys | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Examined | Caries free | d | m | f | c.i. | D | M | F | C.I. | % Caries free | Av. D.M.F. per child |
| 3 | 115 | 67 | 146 | 6 | 19 | 171 | — | — | — | — | 58.3 | 3.6 |
| 4 | 74 | 16 | 231 | 31 | 28 | 290 | — | — | — | — | 21.6 | 5.0 |
| 5 | 142 | 19 | 432 | 155 | 38 | 625 | — | — | — | — | 13.4 | 5.1 |
| 12 | 140 | 4 | — | — | — | — | 250 | 89 | 498 | 837 | 2.9 | 6.2 |
| 14 | 156 | 2 | — | — | — | — | 422 | 174 | 690 | 1,286 | 1.3 | 8.4 |
| 15 | 106 | 2 | — | — | — | — | 199 | 148 | 740 | 1,087 | 1.9 | 10.5 |

**TABLE S 9**

| Area 2 (North) | | | Temporary Dentition | | | | Permanent Dentition | | | | Girls | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Examined | Caries free | d | m | f | c.i. | D | M | F | C.I. | % Caries free | Av. D.M.F. per child |
| 3 | 118 | 47 | 198 | 17 | 11 | 226 | — | — | — | — | 39.8 | 3.2 |
| 4 | 93 | 27 | 249 | 44 | 35 | 328 | — | — | — | — | 29.0 | 5.0 |
| 5 | 114 | 18 | 299 | 127 | 66 | 492 | — | — | — | — | 15.8 | 5.1 |
| 12 | 100 | 1 | — | — | — | — | 203 | 85 | 326 | 614 | 1.0 | 6.2 |
| 14 | 120 | 1 | — | — | — | — | 209 | 170 | 742 | 1,121 | 0.8 | 9.4 |
| 15 | 52 | 0 | — | — | — | — | 83 | 82 | 301 | 466 | 0.0 | 9.0 |

**TABLE S 10**

| Area 3 (East) | | | Temporary Dentition | | | | Permanent Dentition | | | | Boys and Girls | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Examined | Caries free | d | m | f | c.i. | D | M | F | C.I. | % Caries free | Av. D.M.F. per child |
| 3 | 43 | 13 | 118 | 17 | 27 | 162 | — | — | — | — | 30.2 | 5.4 |
| 4 | 44 | 1 | 222 | 41 | 31 | 294 | — | — | — | — | 2.3 | 6.8 |
| 5 | 212 | 43 | 544 | 163 | 142 | 849 | — | — | — | — | 20.3 | 5.0 |
| 12 | 271 | 6 | — | — | — | — | 478 | 158 | 826 | 1,462 | 2.2 | 5.5 |
| 14 | 230 | 1 | — | — | — | — | 523 | 209 | 1,226 | 1,958 | 0.4 | 8.6 |
| 15 | 146 | 2 | — | — | — | — | 277 | 184 | 951 | 1,412 | 1.4 | 9.8 |

**TABLE S 11**

| Area 3 (East) | | | Temporary Dentition | | | | Permanent Dentition | | | | Boys | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Examined | Caries free | d | m | f | c.i. | D | M | F | C.I. | % Caries free | Av. D.M.F. per child |
| 3 | 25 | 8 | 53 | 8 | 15 | 76 | — | — | — | — | 32.0 | 4.5 |
| 4 | 28 | 1 | 154 | 19 | 21 | 194 | — | — | — | — | 3.4 | 7.2 |
| 5 | 115 | 24 | 292 | 88 | 56 | 436 | — | — | — | — | 20.9 | 4.8 |
| 12 | 137 | 4 | — | — | — | — | 260 | 69 | 344 | 673 | 2.9 | 5.1 |
| 14 | 105 | 0 | — | — | — | — | 270 | 80 | 415 | 765 | 0.0 | 7.3 |
| 15 | 74 | 1 | — | — | — | — | 149 | 76 | 439 | 664 | 1.4 | 9.1 |

**TABLE S 12**

| Area 3 (East) | | | Temporary Dentition | | | | Permanent Dentition | | | | Girls | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Examined | Caries free | d | m | f | c.i. | D | M | F | C.I. | % Caries free | Av. D.M.F. per child |
| 3 | 18 | 5 | 65 | 9 | 12 | 86 | — | — | — | — | 27.8 | 6.6 |
| 4 | 16 | 0 | 68 | 22 | 10 | 100 | — | — | — | — | 0.0 | 6.3 |
| 5 | 97 | 19 | 252 | 75 | 86 | 413 | — | — | — | — | 19.6 | 5.3 |
| 12 | 134 | 2 | — | — | — | — | 218 | 89 | 482 | 789 | 1.5 | 6.0 |
| 14 | 125 | 1 | — | — | — | — | 253 | 129 | 811 | 1,193 | 0.8 | 9.6 |
| 15 | 72 | 1 | — | — | — | — | 128 | 108 | 512 | 748 | 1.4 | 10.5 |

**TABLE S 13**

| Area 4 (West) | | | Temporary Dentition | | | | Permanent Dentition | | | | Boys and Girls | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Examined | Caries free | d | m | f | c.i. | D | M | F | C.I. | % Caries free | Av. D.M.F. per child |
| 3 | 129 | 36 | 301 | 11 | 16 | 328 | — | — | — | — | 27.9 | 3.5 |
| 4 | 142 | 21 | 243 | 20 | 17 | 280 | — | — | — | — | 14.8 | 2.3 |
| 5 | 299 | 57 | 759 | 286 | 126 | 1,171 | — | — | — | — | 19.1 | 4.8 |
| 12 | 226 | 10 | — | — | — | — | 409 | 182 | 546 | 1,137 | 4.4 | 5.3 |
| 14 | 267 | 4 | — | — | — | — | 677 | 358 | 1,034 | 2,069 | 1.5 | 7.9 |
| 15 | 99 | 1 | — | — | — | — | 196 | 120 | 579 | 895 | 1.0 | 9.1 |

**TABLE S 14**

| Area 4 (West) | | | Temporary Dentition | | | | Permanent Dentition | | | | Boys | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Examined | Caries free | d | m | f | c.i. | D | M | F | C.I. | % Caries free | Av. D.M.F. per child |
| 3 | 66 | 19 | 92 | 0 | 2 | 94 | — | — | — | — | 28.8 | 2.0 |
| 4 | 73 | 10 | 132 | 10 | 0 | 142 | — | — | — | — | 13.7 | 2.3 |
| 5 | 165 | 30 | 464 | 175 | 53 | 692 | — | — | — | — | 18.2 | 5.1 |
| 12 | 116 | 5 | — | — | — | — | 228 | 88 | 240 | 556 | 4.3 | 5.0 |
| 14 | 153 | 3 | — | — | — | — | 403 | 208 | 510 | 1,121 | 2.0 | 7.5 |
| 15 | 51 | 1 | — | — | — | — | 89 | 50 | 290 | 429 | 2.0 | 8.6 |

**TABLE S 15**

| Area 4 (West) | | | Temporary Dentition | | | | Permanent Dentition | | | | Girls | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Examined | Caries free | d | m | f | c.i. | D | M | F | C.I. | % Caries free | Av. D.M.F. per child |
| 3 | 63 | 17 | 209 | 11 | 14 | 234 | — | — | — | — | 27.0 | 5.1 |
| 4 | 69 | 11 | 111 | 10 | 17 | 138 | — | — | — | — | 15.9 | 2.4 |
| 5 | 134 | 27 | 295 | 111 | 73 | 479 | — | — | — | — | 20.1 | 4.5 |
| 12 | 110 | 5 | — | — | — | — | 181 | 94 | 306 | 581 | 4.5 | 5.5 |
| 14 | 114 | 1 | — | — | — | — | 274 | 150 | 524 | 948 | 0.9 | 8.4 |
| 15 | 48 | 0 | — | — | — | — | 107 | 70 | 289 | 466 | 0.0 | 9.7 |

## Comparision of Statistical Information for Years 1963 and 1968
## Combined Areas

**TABLE S** 16

| Sex | Age | No. Examined | | % Caries free | | Percentage | | Av. D.M.F. per child | | Percentage | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1963 | 1968 | 1963 | 1968 | Gain | Loss | 1963 | 1968 | Gain | Loss |
| Boys | 3 | 65 | 206 | 32.3 | 45.6 | 41.2 | — | 4.1 | 3.0 | 26.9 | — |
| Girls | 3 | 60 | 199 | 33.3 | 34.7 | 4.2 | — | 3.0 | 4.2 | — | 40.0 |
| Boys & Girls | 3 | 125 | 405 | 32.8 | 40.2 | 22.6 | — | 3.4 | 3.7 | — | 8.8 |
| Boys | 4 | 62 | 175 | 9.7 | 15.4 | 58.8 | — | 5.0 | 4.2 | 16.0 | — |
| Girls | 4 | 71 | 178 | 11.3 | 21.3 | 88.5 | — | 4.9 | 4.0 | 18.4 | — |
| Boys & Girls | 4 | 133 | 353 | 10.5 | 18.4 | 75.2 | — | 4.9 | 4.1 | 16.3 | — |
| Boys | 5 | 543 | 526 | 9.4 | 17.7 | 88.3 | — | 4.9 | 5.0 | — | 2.0 |
| Girls | 5 | 504 | 435 | 11.3 | 19.5 | 72.6 | — | 4.7 | 4.9 | — | 4.3 |
| Boys & Girls | 5 | 1,047 | 961 | 10.3 | 18.5 | 79.6 | — | 4.8 | 4.9 | — | 2.1 |
| Boys | 12 | 659 | 488 | 4.1 | 2.9 | — | 29.3 | 5.8 | 5.5 | 5.2 | — |
| Girls | 12 | 506 | 447 | 0.8 | 2.0 | 150.0 | — | 6.5 | 6.0 | 7.7 | — |
| Boys & Girls | 12 | 1,165 | 935 | 2.7 | 2.5 | — | 7.4 | 6.1 | 5.7 | 6.6 | — |
| Boys | 14 | 553 | 497 | 1.1 | 1.4 | 27.3 | — | 8.5 | 7.8 | 8.0 | — |
| Girls | 14 | 517 | 434 | 1.0 | 0.7 | — | 30.0 | 9.1 | 9.3 | — | 2.2 |
| Boys & Girls | 14 | 1,070 | 931 | 1.0 | 1.1 | 10.0 | — | 8.8 | 8.5 | 3.4 | — |
| Boys | 15 | 266 | 305 | 1.1 | 1.3 | 18.2 | — | 10.4 | 10.0 | 3.8 | — |
| Girls | 15 | 239 | 244 | 1.3 | 0.4 | — | 69.2 | 10.9 | 12.2 | — | 11.9 |
| Boys & Girls | 15 | 505 | 549 | 1.2 | 0.9 | — | 25.0 | 10.6 | 10.1 | 4.7 | — |

## Comparison of Statistical Information for Years 1963 and 1968
## South Belfast

**TABLE S** 17

| Sex | Age | No. Examined | | % Caries free | | Percentage | | Av. D.M.F. per child | | Percentage | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1963 | 1968 | 1963 | 1968 | Gain | Loss | 1963 | 1968 | Gain | Loss |
| Boys | 3 | — | — | — | — | — | — | — | — | — | — |
| Girls | 3 | — | — | — | — | — | — | — | — | — | — |
| Boys & Girls | 3 | — | — | — | — | — | — | — | — | — | — |
| Boys | 4 | — | — | — | — | — | — | — | — | — | — |
| Girls | 4 | — | — | — | — | — | — | — | — | — | — |
| Boys & Girls | 4 | — | — | — | — | — | — | — | — | — | — |
| Boys | 5 | 94 | 104 | 9.6 | 19.2 | 100.0 | — | 4.9 | 4.7 | 4.1 | — |
| Girls | 5 | 107 | 90 | 9.4 | 23.3 | 147.9 | — | 5.1 | 4.6 | 9.8 | — |
| Boys & Girls | 5 | 201 | 194 | 9.5 | 21.1 | 111.6 | — | 5.0 | 4.7 | 6.0 | — |
| Boys | 12 | 154 | 95 | 4.6 | 1.1 | — | 76.1 | 5.1 | 5.9 | — | 7.8 |
| Girls | 12 | 87 | 103 | 1.2 | 1.0 | — | 16.7 | 6.5 | 6.1 | 15.7 | — |
| Boys & Girls | 12 | 241 | 198 | 3.3 | 1.0 | — | 69.7 | 5.6 | 6.0 | — | 7.1 |
| Boys | 14 | 134 | 83 | 2.2 | 2.4 | 9.1 | — | 8.6 | 8.2 | 4.7 | — |
| Girls | 14 | 101 | 75 | 2.0 | 0.0 | — | 100.0 | 8.9 | 9.9 | — | 11.2 |
| Boys & Girls | 14 | 235 | 158 | 2.1 | 1.3 | — | 38.1 | 8.7 | 9.0 | — | 3.4 |
| Boys | 15 | 96 | 74 | 1.0 | 0.0 | — | 100.0 | 9.8 | 11.4 | — | 16.3 |
| Girls | 15 | 77 | 72 | 1.3 | 0.0 | — | 100.0 | 11.0 | 11.3 | — | 2.7 |
| Boys & Girls | 15 | 173 | 146 | 1.2 | 0.0 | — | 100.0 | 10.3 | 11.3 | — | 9.7 |

## Comparision of Statistical Information for Years 1963 and 1968
## North Belfast

**TABLE S 18**

| Sex | Age | No. Examined | | % Caries free | | Percentage | | Av. D.M.F. per child | | Percentage | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1963 | 1968 | 1963 | 1968 | Gain | Loss | 1963 | 1968 | Gain | Loss |
| Boys | 3 | 23 | 115 | 26.1 | 58.3 | 123.4 | — | 4.8 | 3.6 | 25.0 | — |
| Girls | 3 | 19 | 118 | 26.3 | 39.8 | 51.3 | — | 3.2 | 3.2 | — | — |
| Boys & Girls | 3 | 42 | 233 | 26.3 | 48.9 | 85.9 | — | 4.1 | 3.3 | 19.5 | — |
| Boys | 4 | 25 | 74 | 8.0 | 21.6 | 170.0 | — | 5.1 | 5.0 | 2.0 | — |
| Girls | 4 | 31 | 93 | 22.6 | 29.0 | 28.3 | — | 4.7 | 5.0 | — | 6.4 |
| Boys & Girls | 4 | 56 | 167 | 16.1 | 25.7 | 59.6 | — | 4.9 | 5.0 | — | 2.0 |
| Boys | 5 | 209 | 142 | 10.1 | 13.4 | 32.7 | — | 4.9 | 5.1 | — | 4.1 |
| Girls | 5 | 148 | 114 | 10.8 | 15.8 | 46.3 | — | 5.0 | 5.1 | — | 2.0 |
| Boys & Girls | 5 | 357 | 256 | 10.4 | 14.5 | 39.4 | — | 4.9 | 5.1 | — | 4.1 |
| Boys | 12 | 217 | 140 | 4.2 | 2.9 | — | 31.0 | 6.1 | 6.2 | — | 1.6 |
| Girls | 12 | 146 | 100 | 1.4 | 1.0 | — | 28.6 | 7.0 | 6.2 | 11.4 | — |
| Boys & Girls | 12 | 363 | 240 | 3.0 | 2.1 | — | 30.0 | 6.4 | 6.2 | 3.1 | — |
| Boys | 14 | 167 | 156 | 0.6 | 1.3 | 116.7 | — | 8.6 | 8.4 | 2.3 | — |
| Girls | 14 | 158 | 120 | 0.6 | 0.8 | 33.3 | — | 9.6 | 9.4 | 2.1 | — |
| Boys & Girls | 14 | 325 | 276 | 0.6 | 1.1 | 83.3 | — | 9.1 | 8.8 | 3.3 | — |
| Boys | 15 | 121 | 106 | 1.7 | 1.9 | 11.8 | — | 10.8 | 10.5 | 2.8 | — |
| Girls | 15 | 62 | 52 | 1.6 | 0.0 | — | 100.0 | 11.0 | 9.0 | 18.2 | — |
| Boys & Girls | 15 | 183 | 158 | 1.6 | 1.3 | — | 18.8 | 10.8 | 10.0 | 18.8 | — |

## Comparision of Statistical Information for Years 1963 and 1968
## East Belfast

**TABLE S 19**

| Sex | Age | No. Examined | | % Caries free | | Percentage | | Av. D.M.F. per child | | Percentage | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1963 | 1968 | 1963 | 1968 | Gain | Loss | 1963 | 1968 | Gain | Loss |
| Boys | 3 | 18 | 25 | 61.1 | 32.0 | — | 47.6 | 1.7 | 4.5 | — | 164.7 |
| Girls | 3 | 29 | 18 | 51.7 | 27.8 | — | 46.2 | 1.7 | 6.6 | — | 288.2 |
| Boys & Girls | 3 | 47 | 43 | 55.3 | 30.2 | — | 45.4 | 1.6 | 5.4 | — | 237.5 |
| Boys | 4 | 24 | 28 | 12.5 | 3.4 | — | 72.8 | 3.8 | 7.2 | — | 89.5 |
| Girls | 4 | 24 | 16 | 4.2 | 0.0 | — | 100.0 | 5.1 | 6.3 | — | 23.5 |
| Boys & Girls | 4 | 48 | 44 | 8.3 | 2.3 | — | 72.3 | 4.5 | 6.8 | — | 51.1 |
| Boys | 5 | 93 | 115 | 8.6 | 20.9 | 143.0 | — | 5.3 | 4.8 | 9.4 | — |
| Girls | 5 | 116 | 97 | 9.5 | 19.6 | 106.3 | — | 5.1 | 5.3 | — | 3.9 |
| Boys & Girls | 5 | 209 | 212 | 9.0 | 20.3 | 125.6 | — | 5.2 | 5.0 | 3.8 | — |
| Boys | 12 | 137 | 137 | 3.6 | 2.9 | — | 19.4 | 6.0 | 5.1 | 15.0 | — |
| Girls | 12 | 131 | 134 | 0.0 | 1.5 | + | — | 6.2 | 6.0 | 3.2 | — |
| Boys & Girls | 12 | 268 | 271 | 1.9 | 2.2 | 15.8 | — | 6.1 | 5.5 | 9.8 | — |
| Boys | 14 | 128 | 105 | 0.0 | 0.0 | — | — | 8.4 | 7.3 | 13.1 | — |
| Girls | 14 | 136 | 125 | 0.7 | 0.8 | 14.3 | — | 9.1 | 9.6 | — | 5.5 |
| Boys & Girls | 14 | 264 | 230 | 0.4 | 0.4 | — | — | 8.7 | 8.6 | 1.1 | — |
| Boys | 15 | 19 | 74 | 0.0 | 1.4 | + | — | 11.3 | 9.1 | 19.5 | — |
| Girls | 15 | 69 | 72 | 0.0 | 1.4 | + | — | 10.7 | 10.5 | 1.9 | — |
| Boys & Girls | 15 | 88 | 146 | 0.0 | 1.4 | + | — | 10.8 | 9.8 | 9.3 | — |

**Comparison of Statistical Information for Years 1963 and 1968**
**West Belfast**

**TABLE S 20**

| Sex | Age | No. Examined | | % Caries free | | Percentage | | Av. D.M.F. per child | | Percentage | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1963 | 1968 | 1963 | 1968 | Gain | Loss | 1963 | 1968 | Gain | Loss |
| Boys | 3 | 24 | 66 | 16.7 | 28.8 | 72.5 | — | 5.2 | 2.0 | 61.5 | — |
| Girls | 3 | 12 | 63 | 0.0 | 27.0 | + | — | 6.0 | 5.1 | 15.0 | — |
| Boys & Girls | 3 | 36 | 129 | 11.1 | 27.9 | 151.4 | — | 5.5 | 3.5 | 36.4 | — |
| Boys | 4 | 13 | 73 | 7.7 | 13.7 | 77.9 | — | 6.8 | 2.3 | 66.2 | — |
| Girls | 4 | 16 | 69 | 0.0 | 15.9 | + | — | 5.1 | 2.4 | 52.9 | — |
| Boys & Girls | 4 | 29 | 142 | 3.5 | 14.8 | 322.9 | — | 5.9 | 2.3 | 61.0 | — |
| Boys | 5 | 147 | 165 | 8.8 | 18.2 | 106.8 | — | 4.8 | 5.1 | — | 6.3 |
| Girls | 5 | 133 | 134 | 15.0 | 20.1 | 34.0 | — | 4.3 | 4.5 | — | 4.7 |
| Boys & Girls | 5 | 280 | 299 | 11.8 | 19.1 | 61.9 | — | 4.5 | 4.8 | — | 6.7 |
| Boys | 12 | 151 | 116 | 4.0 | 4.3 | 7.5 | — | 5.7 | 5.0 | 12.3 | — |
| Girls | 12 | 142 | 110 | 0.7 | 4.5 | 542.9 | — | 6.3 | 5.5 | 12.7 | — |
| Boys & Girls | 12 | 293 | 226 | 2.4 | 4.4 | 83.3 | — | 6.0 | 5.3 | 11.7 | — |
| Boys | 14 | 124 | 153 | 1.6 | 2.0 | 25.0 | — | 8.5 | 7.5 | 11.8 | — |
| Girls | 14 | 122 | 114 | 0.8 | 0.9 | 12.5 | — | 8.8 | 8.4 | 4.5 | — |
| Boys & Girls | 14 | 246 | 267 | 1.2 | 1.5 | 25.0 | — | 8.6 | 7.9 | 8.1 | — |
| Boys | 15 | 30 | 51 | 0.0 | 2.0 | + | — | 10.3 | 8.6 | 16.5 | — |
| Girls | 15 | 31 | 48 | 3.2 | 0.0 | — | 100.0 | 10.5 | 9.7 | 7.6 | — |
| Boys & Girls | 15 | 61 | 99 | 1.6 | 1.0 | — | 37.5 | 10.5 | 9.1 | 13.3 | — |

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