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CITY OF LEEDS

REPORT

ON THE

HEALTH

OF THE CITY

FOR THE YEAR 1957

BY

I. G. DAVIES, Q.H.P., M.D., B.S., F.R.C.P., M.R.C.S., D.P.H.

Medical Officer of Health and Principal School Medical Officer.

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HEALTH COMMITTEE

LORD MAYOR (Alderman Joseph Hiley, J.P.)

Chairman : Alderman WINIFRED SHUTT

Alderman ELIZABETH M. LISTER, M.B.E.	Councillor W. M. JONES (Deputy Chairman)
„ Z. P. FERNANDEZ, B.A., M.D., D.P.H.	„ J. T. V. WATSON, LL.B. (from May, 1957)
„ W. FOWLER	„ G. I. ADDLESTONE
Councillor A. KING (to July, 1957)	„ W. O. D. SMART, F.C.I.S.
„ VYVYAN M. CARDNO	„ MARION S. MUSTILL
„ MARGARET COLLINS (to May, 1957)	„ W. MERRITT, S.R.N., R.M.N.
„ L. WALSH, M.B., Ch.B.	„ G. MURRAY (from July, 1957)
„ T. W. KIRKBY (from May, 1957)	„ D. A. WOLSTENHOLME
„ EVELINE COLEMAN, (to May, 1957)	„ EDNA J. WHITEHEAD
„ H. DRAKE, L.D.S., R.C.S., Barrister-at-Law	„ D. W. BRADLEY, LL.B., L.A.M.T.P.I.
	„ ST. JOHN BINNS

EX-OFFICIO MEMBERS.

Representatives of Leeds Medical Committee (National Health Service)
invited to attend in an advisory capacity :—

Dr. J. H. E. Moore and Dr. T. D. Pratt (or a deputy in each case).

SUB-COMMITTEES

SUB-HEALTH (MATERNITY AND CHILD WELFARE) COMMITTEE.

Chairman : Alderman WINIFRED SHUTT

Alderman ELIZABETH M. LISTER, M.B.E.	Councillor J. T. V. WATSON, LL.B. (from May, 1957)
„ Z. P. FERNANDEZ, B.A., M.D., D.P.H.	„ MARION S. MUSTILL (to May, 1957)
„ W. FOWLER	„ T. W. KIRKBY (from May, 1957)
Councillor D. A. WOLSTENHOLME (from May, 1957)	„ W. MERRITT, S.R.N., R.M.N.
„ VYVYAN M. CARDNO	„ EDNA J. WHITEHEAD
„ MARGARET COLLINS (to May, 1957)	„ D. W. BRADLEY, LL.B., L.A.M.T.P.I. (to May, 1957)
„ L. WALSH, M.B., Ch.B.	„ ST. JOHN BINNS

CO-OPTED MEMBERS.

Mrs. H. BEEVERS

Mrs. E. E. BIBBY

SUB-HEALTH (MENTAL HEALTH SERVICES) COMMITTEE.

Chairman : Alderman Z. P. FERNANDEZ, B.A., M.D., D.P.H.

Alderman ELIZABETH M. LISTER, M.B.E.	Councillor EVELINE COLEMAN (to May, 1957)
„ WINIFRED SHUTT	„ H. DRAKE, L.D.S., R.C.S., Barrister-at-Law
„ W. FOWLER	„ W. M. JONES
Councillor MARGARET COLLINS (to May, 1957)	„ MARION S. MUSTILL (from May, 1957)
„ L. WALSH, M.B., Ch.B.	„ D. A. WOLSTENHOLME
„ D. W. BRADLEY, LL.B., L.A.M.T.P.I. (from May, 1957)	„ EDNA J. WHITEHEAD
	„ W. MERRITT, S.R.N., R.M.N.

CO-OPTED MEMBERS.

Mrs. A. R. INCE	Mrs. S. MURRAY
Mrs. J. SLATER	

SUB-HEALTH (SANITATION, FOOD AND DRUGS) COMMITTEE

Chairman : Councillor W. M. JONES.

Alderman WINIFRED SHUTT	Councillor MARION S. MUSTILL
„ W. FOWLER	„ D. A. WOLSTENHOLME (to May, 1957)
Councillor VYVYAN M. CARDNO	„ W. MERRITT, S.R.N., R.M.N.
„ H. DRAKE, L.D.S., R.C.S., Barrister-at-Law	„ A. KING (to July, 1957)
„ T. W. KIRKBY (from May, 1957)	„ D. W. BRADLEY, LL.B., L.A.M.T.P.I.
„ G. I. ADDLESTONE	„ G. MURRAY (from July, 1957)
„ W. O. D. SMART, F.C.I.S.	

PUBLIC HEALTH STAFF

Medical Officer of Health and Principal School Medical Officer.	I. G. DAVIES, Q.H.P., M.D., B.S., F.R.C.P., M.R.C.S., D.P.H.
Deputy Medical Officer of Health and Deputy School Medical Officer	D. B. BRADSHAW, M.A., M.B., B.Ch., B.A.O., D.P.H.

Medical Staff and Nursing Staff

Chief Assistant School Medical Officer	J. G. JAMIESON, M.A., B.M., B.Ch., D.C.H.
Medical Officer for Mental Health Services	J. M. McALPIN, M.B., Ch.B.
Assistant Medical Officer of Health in charge of Immunisation	L. J. MARSHALL, M.B., B.S., L.M.S.S.A. (from 18.2.57)
Honorary Assistant Medical Officer of Health (by arrangement with the University of Leeds)	C. W. DIXON, M.D., D.P.H., D.L.O., D.C.H., Reader in Epidemiology, University of Leeds
Chief Assistant Medical Officer for Maternity and Child Welfare	CATHERINE MARGARET GRAY, M.B., Ch.B., D.P.H.
Assistant Medical Officers for Maternity and Child Welfare	SARAH N. S. BARKER, M.B., Ch.B., L.R.C.P., M.R.C.S. ISOBEL B. ALEXANDER, M.B., Ch.B. EUGENIE C. ILLINGWORTH, B.Sc., M.B., Ch.B., M.R.C.S., L.R.C.P. JESSIE I. ROSIE, M.B., Ch.B., D.P.H. MARGARET C. PULLAN, M.B., Ch.B. ROSABELLE J. B. PURVES, L.R.C.P., L.R.C.S., L.R.F.P.S., L.M.C.C. (from 9.7.57) BARBARA M. BROOKE, M.B., Ch.B. (from 1.1.57) FRANCES E. SMITH, M.B., Ch.B., D.P.H. PHOEBE H. CHANCE, M.B., M.R.C.P., L.R.C.P. (to 30.6.57) YVONNE R. DE SOUZA, M.B., Ch.B.
Superintendent Health Visitor and School Nurse	JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London)
Health Visitor Tutor in Sole Charge	FLORENCE M. MAWSON, S.R.N., S.C.M., D.N. (Leeds), D.P.A.
Supervisor of Midwives	DOROTHY HUMPHREYS, S.R.N., S.C.M.
Superintendent, Part II Midwifery Training School	VERA E. LANGRIDGE, S.R.N., S.C.M., M.T.D.
Superintendent Nurse, Home Nursing Service	EDITH G. MEADOWS, S.R.N., S.C.M.
Superintendent Nurse, Home Nursing Service	JEAN CORCORAN, S.R.N., S.C.M., Q.N. (to 5.9.57)
Superintendent Nurse, Home Nursing Service	ELSIE BOULTON, S.R.N., S.C.M., Q.N.

Chief Public Health Inspector and Deputy

Chief Public Health Inspector	.. J. GOODFELLOW, F.R.S.H., M.I.P.H.E.
Deputy Chief Public Health Inspector	W. F. SAXTON, M.R.S.H., F.A.P.H.I. (to 24.9.57) J. H. WYATT, M.A.P.H.I. (from 25.9.57)

City Analyst and Deputy

City Analyst	 C. H. MANLEY, M.A., F.R.I.C. (to 27.1.57) R. A. DALLEY, F.R.I.C. (from 1.2.57)
Deputy City Analyst	 R. A. DALLEY, F.R.I.C. (to 31.1.57) L. A. PERKIN, B.Sc. F.R.I.C. (from 1.4.57)

Administrative Staff

Chief Administrative Assistant	.. A. BATLEY
Executive Officer, Mental Health Services	J. SQUIRE HOYLE
Accountant	 H. A. CORLETT, A.C.A.
Assistant Administrative Officer	.. W. WILSON, A.C.I.S.

Principal Clerks:—

Statistics	 E. RENSHAW
General Sanitation	 J. R. MOIR
Infectious Diseases	 J. K. BEEVERS
Food and Drugs	 S. TITTERINGTON
Finance	 J. PEACOCK

Disinfestation Officer	 C. W. LAMB, M.R.S.H., F.R.E.S.
Ambulance Officer	 F. E. J. LARGE
Home Help Organiser	 Mrs. DOROTHY W. ALFORD
Convalescent Scheme Organiser	.. JESSIE CHIPPERFIELD

Consultants to the Health Committee

Consultant Adviser in Tuberculosis	.. G. F. EDWARDS, M.B.E., M.B., B.S., M.R.C.P., M.R.C.S.
Consultant Adviser, Infectious Diseases	E. C. BENN, M.B., Ch.B., D.P.H.
Consultant in Child Health	 Professor W. S. CRAIG, B.Sc., M.D., F.R.C.P.E., F.R.S.E., M.R.C.P.
Consultant Psychiatrists	 Professor G. R. HARGREAVES, O.B.E., M.R.C.S., L.R.C.P. A. H. WILSON, M.B., Ch.B., D.P.M.
Consultant Adviser in Venereal Diseases	J. B. BITTNER, M.B., Ch.B.

PUBLIC HEALTH DEPARTMENT

STAFF

<i>Class of Employees</i>	<i>No. employed at 31/12/57</i>
Public Health Inspectors	44
Female Public Health Inspectors	2
Student Probationer Public Health Inspectors	15
Condemned Meat Room Attendant	1
Assistant Analysts	3
Health Visitors	57
Student Health Visitors	10
Midwives	44
Dispensers	15
Physiotherapists	4
Immunisation Nurses	2
Social Workers	4
Day Nurseries	171
District Nurses	76
B.C.G. Nurse	1
Infectious Diseases Visitors	2
Clerical Staff	88
Welfare Foods	6
Wyther Hostel (Mother and Baby Home)	1
The Hollies Preventorium	20
Red Court Hostel (Midwifery Training)	32
Nurses' Home	1
Convalescent Home, Southport	4
Mental Health Services	89
Central Ambulance Station Staff	130
General Disinfection and Disinfestation	25
Personal Disinfection and Disinfestation	5
Flushing Staff	11
Mortuary Service	7
Rodent Operatives	6
Lavatory Attendants	27
Lavatory Cleaner	1
Caretakers and Cleaners	38
Home Helps (including part-time)	245
Convenience Lighting	1

City of Leeds

To the Chairman and Members of the Health Committee.
Ladies and Gentlemen,

I present herewith the Annual Report of the Medical Officer of Health of the City of Leeds for the year 1957.

The population of the city, according to the Registrar General's estimate at the mid-year of 1957 was 510,100 as compared with an estimate for mid-1956 of 508,600. An extension of the city boundary took place during 1957 and for the calculation of the vital statistics for the city for 1957 the Registrar General has advised the use of a population figure of 509,790. **Vital Statistics**

The number of births registered was 8,429 as compared with 8,033 for 1956. The birth-rate for 1957 was 16.5 as compared with 15.8 for 1956 and 15.0 for 1955. There were 207 deaths of infants under one year in 1957 as compared with 216 in 1956, producing infant mortality rates of 25 and 27 respectively. There were 150 deaths of infants under one month in 1957 as compared with 153 in 1956, giving neo-natal mortality rates of 17.8 and 19.0 respectively. Both the infant mortality and the neo-natal mortality rates show an arithmetical improvement in 1957 as compared with 1956. Although these are gratifying lower figures, the arithmetical improvement is within the limits of the play of chance and cannot necessarily be related to any specific improvement in the health of the city. There were 181 stillbirths registered in 1957 as compared with 177 in 1956 and 3 maternal deaths as compared with 5 in 1956.

The principal causes of deaths in infants under one year during 1957 were :—

Congenital malformations	..	..	46	(22.2%)
Post-natal asphyxia and atelectasis	..	..	43	(20.8%)
Prematurity	..	..	41	(19.8%)
Pneumonia	..	..	27	(13.0%)

The causes shown above represent the most intractable and difficult problems remaining to be dealt with in the further reduction

of infant mortality. These deaths are due to causes which lie very deep and difficult questions concerning the health of the parents are involved.

The general death-rate for the city during 1957 was 11·4 as compared with 11·3 in 1956. The death-rates for the principal causes of death were as follows (the figures given in brackets represent the corresponding rates for 1956) :—

Cancer (all sites)	.. .. .	2·10	(1·94)
Cancer of the lung and bronchus	.. .. .	0·47	(0·44)
Coronary disease	.. .. .	1·86	(1·93)
Other forms of heart disease	.. .. .	1·67	(1·52)
Diseases of the blood vessels of the brain and spinal cord	.. .. .	1·62	(1·50)
Bronchitis	.. .. .	0·83	(0·93)
Pneumonia	.. .. .	0·53	(0·69)

Infectious Diseases

For the fourth year in succession there was no case of diphtheria reported in the city. There were 41 cases of poliomyelitis as compared with 23 in 1956 and 60 in 1955. Cases of whooping cough numbered 575 as compared with 1,383 in 1956. Further information is given later in the report by Dr. Bradshaw.

Public Health Laboratory Service

The Department has received the greatest assistance from Dr. Ludlam and Dr. Marmion of the Public Health Laboratory at Seacroft. The advantages of the services of first-class bacteriological and virological laboratories in the city cannot be over-estimated. The Department is greatly indebted to Drs. Ludlam and Marmion for much helpful advice and guidance.

Maternal and Child Welfare

In March a meeting was held between medical representatives of the hospitals, local doctors and medical officers of the Leeds Health Department for the purpose of considering certain recommendations contained in the memorandum of the Standing Maternity and Midwifery Advisory Committee of the Central Health Services Council on the subject of ante-natal care and toxæmia of pregnancy.

A review was made of the services in operation in the city and the co-ordination between them with a view to their extension and further co-ordination.

The Health Committee agreed during the year to take part in a nation-wide survey into peri-natal mortality. This is due to commence in March, 1958. This survey is being carried out in collaboration with hospitals and family doctors.

Peri-natal mortality is defined as stillbirths plus all deaths of infants in the first week of life.

Early in the year the Health Committee considered the future of Wyther Hostel for unmarried mothers and their babies and the possibilities of alternative forms of provision for these cases. Later a meeting was held with representatives of the voluntary social and religious organisations providing similar services in the city. Complete co-operation was obtained from these organisations and as a result the Health Committee decided to close Wyther Hostel in October and make alternative provision through the following voluntary organisations :—

Browning House Mother and Baby Hostel.

Salvation Army Mount Cross Home.

Leeds Diocesan Rescue, Protection and Child Welfare Society.

The new arrangements were in force by the end of the year and were working satisfactorily.

The outstanding event of 1957 was the publication of the Report of the Royal Commission on the law relating to mental illness and mental deficiency. The following is a short summary of the recommendations :—

*Mental
Health*

SHORT SUMMARY OF THE RECOMMENDATIONS

OF THE

ROYAL COMMISSION ON THE LAW RELATING TO

MENTAL ILLNESS AND MENTAL DEFICIENCY

I. It is recommended that the law should be altered so that suitable care may be provided for mentally disordered patients **with no more restriction of liberty or legal formality than is applied to people who need care because of other types of illness, disability or social difficulty. Compulsion should, in future, be used only when it is positively needed for the patient's welfare or for the protection of others.**

The term "mental disorder" is used as a general term for all forms of mental ill-health. The term "care" includes any form of treatment, training, education, supervision, social support, help and advice.

2. The following three groups of patients should be recognised in future for **legal and administrative purposes**. These groups do not necessarily correspond with medical classifications of types of disorder.

- (a) **Mentally ill patients.** This term includes the mental infirmity of old age.
- (b) **Psychopathic patients** or patients with a psychopathic personality, e.g. aggressive or inadequate personalities. The term also includes the present class of feeble-minded persons and moral defectives. The term **feeble-minded psychopath** is used to describe a psychopath whose disorder includes a marked limitation of intelligence but not sufficient to bring him into group (a).
- (c) **Patients of severely subnormal personality.** This term refers to those persons in whom the general personality is so severely subnormal that they are incapable of leading an independent life. This group also includes all persons at present classified as idiots and imbeciles and some of those now classified as feeble-minded.

The terms "idiot," "imbecile" and "mental defective" should not be used in future.

3. **There should be no rigid designation of hospitals for any particular group only.**

4. The law should define the circumstances in which patients in each of these three groups should be liable to compulsory admission and detention in hospital or to legal control while living in the community.

5. Mentally ill persons who wish to do so should be free to enter or leave hospital without any written application for admission or formal notice of intention to leave. Even in cases where a valid positive application cannot be made there should be an assumption

that mentally ill patients (in the same way as those physically ill) are content to enter hospital **unless they positively object**. The same principle should be applied to psychopathic and severely subnormal patients.

6. Compulsory powers should be available to ensure proper care for **severely subnormal patients if it cannot be provided without such powers**. Compulsion should be used only **if necessary for the patient's welfare or for the protection of others**.

7. Psychopathic patients should be liable to compulsion either for admission to hospital or to community guardianship **if this is necessary for their own welfare or the protection of others subject to the following :—**

- (a) They must be under 21 years of age at the time of admission to hospital or community guardianship.
- (b) The compulsory powers should lapse when the patient reaches 25 years of age if he has not already been discharged provided that psychopathic patients of **any age** should be liable to compulsory admission to hospital or guardianship when convicted of a criminal offence if the Court is satisfied that medical or social care is needed.

8. All groups of patients should be liable to compulsory admission to hospital **for medical observation at any age provided that they are not compulsorily detained for longer than 28 days**.

9. The law should allow patients to be placed in the guardianship of local health authorities as well as of private individuals. Local health authorities should have a duty to act as guardian when other forms of community care are not available or cannot be arranged.

10. **The following procedures are recommended when compulsion is used.**

These procedures apply to patients admitted to hospital or to care and guardianship by the Local Health Authority.

(i) **In emergency**

- (a) Application by nearest relative or officer of Local Health Authority. This application should state the reason for the emergency procedure.

- (b) One medical recommendation. A second medical recommendation must be added within 72 hours if the patient is detained longer, otherwise the compulsory power lapses. In the case of community guardianship the second medical recommendation should be added within 28 days.
A judicial order is not required.

(ii) **If no emergency exists**

- (a) Application by nearest relative or officer of Local Health Authority.
- (b) Two medical recommendations, one by a psychiatrist (who may be on the staff of the receiving hospital) and the other by a doctor who knows the patient.
- (c) A medical acceptance, by the medical officer to the hospital, of the patient as suitable for care.
A judicial order is not required.

In the case of admission to local authority guardianship, one of the medical recommendations may be given by a medical officer on the staff of the guardian authority.

The medical recommendation should state :—

- (i) The diagnosis, and the group of mental disorder to which the patient belongs.
- (ii) A firm recommendation for hospital or community care as the case may be, or
- (iii) A recommendation for a period of observation up to 28 days in hospital if this is necessary.
- (iv) The reasons why compulsion is necessary.

In recommendation (i) full reasons must be given for the particular form of care recommended.

II. Where a patient has to be admitted to compulsory care against the wishes of the nearest relative an application to a magistrate's court must be made to override the relative's wishes. This procedure is for those cases in which the nearest relative **unreasonably** opposes the provision of hospital or community care.

12. Mental Health Review Tribunals should be set up to give patients (and relatives in some cases) opportunities to have an independent investigation into the justification for the use of compulsion.

The tribunals should be organised on a regional basis, panels of medical and non-medical members for each region being appointed by the Lord Chancellor and Minister of Health in consultation. There should be a Chairman in each region to select members from the panel to form tribunals for each case. The Chairman of the region and the Chairman of each tribunal should be legally qualified. There should be an appeal from a decision of a tribunal to the High Court on points of law only. The procedure should be by "case stated."

13. Notification to the Local Health Authority should be made when a patient in any of the three groups under the age of 21 is received into the care of a private person, not a near relative, in a house which is not a registered nursing home or a registered home for aged or disabled persons.

14. Hospitals should provide in-patient and out-patient services for patients who need specialist medical treatment or continued nursing care. Once a patient has reached a stage at which he could return home if he had a good home, the Local Health Authority should assume responsibility for him. Local authorities should be responsible for all types of community care for patients. These include the provision of residential hostels and homes, training centres and social centres, general and social advice and guidance to patients of all types.

15. Training centres for severely subnormal children who are unable to profit by education in ordinary or special schools should continue to be provided by Local Health Authorities.

16. The provision of community services for all forms of mentally disordered patients should be made a duty of the Local Health Authority.

17. New arrangements are needed for the diagnosis and periodical assessment of patients who are thought to be severely subnormal or psychopathic. Diagnostic clinics should be organised on much the

same lines as the present Child Guidance clinics, but should deal with adults as well as children. There should be arrangements for regular case conferences between the medical and other staff of the hospitals and of the Health, Education, Children's and Welfare Departments of the Local Authority.

18. There should be close co-operation between the Local Authority's Children's Department and the Health Department over the care of subnormal children who cannot suitably live in their own homes.

19. The central supervision of mental health services should be the function of the Minister of Health. The inspectorial functions of the Board of Control should cease. This involves the abolition of the Board of Control.

20. Local authorities should be responsible for registering and approving homes for mentally disordered patients provided by charitable societies or private persons.

Home Helps

A heavy demand for home helps continued throughout the year. It is not an easy matter to assess the merits of the many applicants for home help nor to decide the length of time for which the home help can be provided. The claims for the aged and handicapped are given due consideration as are those of the mother during her confinement. The family in which there is a long-standing serious illness is often a problem to the Home Help Section. Generally speaking it has been the policy of the Committee to provide the home help services on an emergency and short-term basis. This must inevitably be the case otherwise the service might become static and limited to a fixed number of patients with chronic illness.

The Home Help Section has a working arrangement with the Geriatric Department of St. James's Hospital and with the Welfare Services Department of the Corporation.

In February the Health Committee decided to provide whenever possible home help services for 34 blind persons.

Environ- mental Health

During the year the Health Committee pursued a vigorous policy in the field of general sanitation and particularly in relation to food hygiene and the prevention of atmospheric pollution.

In January the Health Committee decided to make a survey of the City for possible smoke control areas after receiving a report by the Town Clerk on the provisions of the Clean Air Act, 1956. Preliminary survey work continued throughout the year and a number of inspectors were fully engaged on this work. The Committee also gave their full support to the West Riding of Yorkshire Clean Air Advisory Council for the proposed establishment of an advisory panel for the purpose of assisting constituent authorities in connection with the provisions of the Clean Air Act.

In February, 1957, the Committee considered draft byelaws relating to the hygiene of hairdressers' and barbers' premises in accordance with the provisions of the Leeds Corporation Act, 1956.

These proposed byelaws were sent to the Minister of Housing and Local Government for confirmation.

Early in the year Mr. C. H. Manley, City Analyst for 29 years, **Staff** retired. Mr. Manley was a distinguished member of his profession and had contributed much to the newest methods of analysis of foodstuffs. He has been worthily succeeded by Mr. R. A. Dalley, his deputy.

In September Mr. W. F. Saxton, Deputy Chief Public Health Inspector, retired after 42 years' faithful and efficient service. Mr. Saxton was a loyal colleague of sound and wide experience. No junior member of the Department sought his advice in vain. He is remembered with affection and respect. He has been succeeded by Mr. J. H. Wyatt.

Miss J. Corcoran, a Superintendent of the District Nursing Service, retired in September. Miss Corcoran had been for many years a senior nursing officer of the Leeds and District Nursing Association and became an officer of the Corporation in 1956. Miss Corcoran brought with her the best traditions of the District Nursing Service. The Department is grateful to her.

The thanks of the Health Department are due to the officers **Acknowledg-**
of those Departments of the Corporation with which close contact **ments**
and collaboration is necessary, notably the Town Clerk, the City Treasurer, the Chief Education Officer, the City Architect, the City Engineer, the Chief Officer of the Housing Department, the Director

of Works, and the Children's Officer. With all these officers the Department is in close and daily contact, both in and out of the Committee room. Assistance and advice are always readily forthcoming from them.

The staff of the Health Department tender their best thanks to the Chairman, Deputy Chairman and Members of the Health Committee for their friendly and courteous support during the year.

On their behalf I tender this record of the work of the Department during 1957.

I am,

Ladies and Gentlemen,

Your obedient servant,

I. G. DAVIES.

Public Health Department,
Leeds, 1.

July, 1958.

SUMMARY OF VITAL STATISTICS

1957

LATITUDE 53° 48' North.	LONGITUDE 1° 32' West.
AVERAGE HEIGHT ABOVE SEA LEVEL	250 feet.
AREA OF CITY	40,613.5 Acres
HOME POPULATION (Registrar General's Estimate) ..	510,100
HOME POPULATION used for the calculation of vital statistics (allows for extension of boundary at 1st April)	509,790
ESTIMATED NUMBER OF HOUSES	167,725
RATEABLE VALUE	£6,134,017
SUM REPRESENTED BY A PENNY RATE	£24,070

	Average	
	1957.	1947-56
BIRTH RATE (births per 1,000 living)	16.5	16.6
DEATH RATE (deaths per 1,000 living)	11.4	12.2
NATURAL INCREASE OF POPULATION (Excess of births over deaths in the year)	2,608	2,191
INFANT MORTALITY RATE (Deaths under 1 year per 1,000 births)	25	33
DEATH RATE from Pneumonia and Bronchitis ..	1.36	1.21
.. .. . Cancer	2.10	2.01
.. .. . Diarrhoea and Enteritis (under 2 years) per 1,000 births	0.24	3.16

	Cases	Case-rate	Deaths	Death rate
SCARLET FEVER	465	0.91	..	..
DIPHTHERIA	..	..	..	..
TYPHOID FEVER	..	..	..	..
MEASLES	9,968	19.55	3	0.01
WHOOPING COUGH	575	1.13	1	0.00
RESPIRATORY TUBERCULOSIS.. .. .	397	0.78	47	0.09
OTHER FORMS OF TUBERCULOSIS	41	0.08	5	0.01

SUMMARY OF VITAL STATISTICS

The following table shows the number of births, deaths, and marriages registered in the district of ... during the year 1900.

The number of births registered was ... The number of deaths registered was ... The number of marriages registered was ...

The following table shows the number of births, deaths, and marriages registered in the district of ... during the year 1901.

The number of births registered was ... The number of deaths registered was ... The number of marriages registered was ...

Natural and Social Conditions Vital Statistics

NATURAL AND SOCIAL CONDITIONS

Area.—In accordance with the provisions of Section 7 of the Leeds Corporation Act, 1956, the area of the city was enlarged on 1st April, 1957, by the addition of part of the Tadcaster Rural District area. The area of the city is now 40,613·5 acres.

Population.—The Registrar General's estimate of the home population of the city at mid-1957 was 510,100. This estimate relates to the area of the city as constituted at the end of the year but, as mentioned in the previous paragraph, the alteration of the boundary took place on 1st April and the population requires to be adjusted for the purpose of calculating vital statistics. The Registrar General has supplied an adjusted population figure of 509,790 on which have been calculated all vital statistics in this Report.

Dwelling-houses.—The total number of dwelling-houses in the city at December, 1957, was 167,725.

Rateable Value.—The rateable value of the city at 1st April, 1958, was £6,134,017 and the estimated sum represented by a penny rate was £24,070. The corresponding figures at 1st April, 1957, were £6,060,059 and £23,650.

Principal Industries.—Engineering, wholesale clothing, woollen and worsted manufacture, and printing are the city's principal industries. Approximate numbers of persons employed in these industries are as follows:— engineering (including metal manufacture, vehicle manufacture, metal goods and precision instrument making) 50,000, wholesale clothing 44,000, woollen and worsted manufacture 13,000 and printing 10,000. Approximately 36,000 persons are employed in distributive trades. These figures are not strictly related to the population of the city as, of course, they include persons not resident in the city.

The number of persons aged 15 years and over employed in the city numbered 263,590 at July, 1957, and the average level of unemployment during the year was 0·9 per cent.

Meteorology.—The number of hours of bright sunshine recorded during the year was 1,186·75. The sunniest month was June with a daily average of 8·52 hours and the month with the least sunshine was December with a daily average of 0·24 hours. The sunniest day of the year was July 1st with 12·75 hours and the daily average for the whole year was 3·25 hours.

The total rainfall for the year was 26·40 inches. The month with the least rain was April with a total of 0·23 inches ; the month with the most rain was August with 5·16 inches. Taking the four quarters of the year, the rainfall in the first quarter was 6·63 inches ; in the second 2·78 ; in the third 12·21 and in the fourth 4·78 inches.

The month with the highest average temperature was July with 64·59°F and the lowest December with 40·54°F. The average temperature for the whole year was 52·17°F.

VITAL STATISTICS

BIRTHS

The births registered in the city during the year numbered 9,023, comprising 4,574 males and 4,449 females. Of these 404 males and 419 females born to parents not residing in Leeds were transferred to the areas in which the home addresses were situated, whilst 107 males and 122 females, born outside the city to Leeds parents, were transferred in, making a nett total of 8,429 births, comprising 4,277 males and 4,152 females.

The birth-rate was 16·5 per thousand of the home population, as compared with 15·8 for the previous year and an average of 15·4 for the previous five years. The birth-rate for the city was higher than that for England and Wales which was provisionally 16·1 per thousand of the population.

The birth-rate as adjusted by the Area Comparability Factor (Births) is given in the table on page 5.

Excess of Births over Deaths.—The excess of births over deaths or the "natural increase of population" was 2,608 as compared with 2,271 for the previous year and an average of 2,191 for the previous ten years.

Illegitimate Births.—Of the 8,429 (nett) births registered, 525 or 6·2 per cent. were illegitimate as compared with 502 or 6·2 per cent. for the previous year and an average of 504 or 6·5 per cent. for the previous five years.

Stillbirths.—The nett number of stillbirths registered during the year was 181, comprising 92 males and 89 females. The rate per thousand of the population was 0·36 as compared with 0·35 for the previous year. The provisional rate for England and Wales was 0·37. Expressed as a percentage of the total births, the rate was 2·1 as compared with 2·2 in the previous year. Of the 181 (nett) stillbirths, 21 or 11·6 per cent. were illegitimate. The ratio of registered 'still' to registered 'live' births was 1 to 46 as compared with 1 to 45 for 1956.

DEATHS

The gross number of deaths registered in the city was 6,309, comprising 3,217 males and 3,092 females, giving a gross death-rate of 12·4 as compared with 12·3 for the previous year and an average of 12·5 for the previous five years. The inward transferable deaths numbered 207 (105 males and 102 females) and outward transferable deaths 695 (396 males and 299 females) which, after adjustment, leaves a nett total of 5,821 deaths debitable to the city, made up of 2,926 males and 2,895 females.

The corresponding death-rate was 11·4 as compared with 11·3 for the previous year and an average of 11·7 for the previous five years. The provisional death-rate for England and Wales was 11·5.

Area Comparability Factor.—The Registrar General supplies an Area Comparability Factor (A.C.F.) and this, when multiplied by the crude death-rate, gives an adjusted death-rate which is comparable with a similarly adjusted death-rate for any other area. An adjusted death-rate makes allowance for any difference in the population structure of the area, by sex and age, from that of England and Wales as a whole. An A.C.F. is also supplied for the adjustment of the crude birth-rate.

The A.C.F. (Deaths) for Leeds was 1·14 and this, when applied to the crude death-rate of 11·4, gave an adjusted death-rate of 13·0.

The following table gives the crude and adjusted rates of London Administrative County and the twelve principal cities of England and Wales.

	Population	Birth-rate		Death-rate		Death-rate from		Infant Mortality Rate
		Crude	Adjusted	Crude	Adjusted	Resp. Tub.	Other Tub.	
London Admin. County ..	3,253,880	16.2	14.5	11.4	11.3	0.12	0.02	22
Birmingham	1,103,000	17.1	16.1	11.2	12.0	0.12	0.01	25
Liverpool	768,700	20.9	19.4	11.8	14.4	0.16	0.01	26
Manchester	682,000	18.2	17.5	12.4	14.5	0.14	0.02	30
Leeds	509,790	16.5	16.2	11.4	13.0	0.09	0.01	25
Sheffield	498,500	15.1	15.2	11.6	13.1	0.15	0.02	20
Bristol	439,600	15.9	15.9	11.8	10.6	0.07	0.01	18
Nottingham	312,600	17.5	16.6	10.8	12.2	0.12	0.01	23
Hull	300,500	18.3	17.6	10.5	13.0	0.14	0.01	29
Bradford	287,000	17.3	17.3	14.1	13.8	0.08	0.01	29
Leicester	281,200	15.7	15.7	11.3	11.9	0.10	0.01	18
Newcastle-upon-Tyne ..	275,100	18.0	17.2	12.3	14.1	0.12	0.01	24
Stoke-on-Trent	271,800	15.8	14.9	11.5	14.6	0.14	0.00	30

Causes of Death.—The principal causes of death during 1957 are given below (International List numbers in brackets).

Malignant and lymphatic neoplasms (140-205) ..	1,069
Coronary disease (420)	946
Heart disease (410-416, 421-443)	850
Vascular lesions of the central nervous system (330-334)	824
Bronchitis (500-502)	423
Pneumonia (490-493, 763)	270
Other circulatory diseases (444-468)	260

The above group of diseases accounted for 4,642 or 79.7 per cent. of the total deaths as compared with 4,568 or 79.3 per cent. last year.

The table on page 11 sets out the causes of death in accordance with the International Statistical Classification of Diseases, Injuries and Causes of Death.

Deaths in Age Groups.—The table on page 14 sets out the deaths according to age groups. The aggregate number of deaths of children in the age groups-1, 1-2 and 2-5 was 230 or 4.0 per cent. of the total

deaths, as compared with 250 or 4·3 per cent. in the previous year and an average of 256 or 4·3 per cent. for the previous five years. The number of deaths in all the age groups under 45 years was 552 or 9·5 per cent. as compared with 574 or 10·0 per cent. in the previous year. In the remaining age groups over 45 years the deaths numbered 5,269 or 90·5 per cent. as compared with 5,188 or 89·9 per cent. in the previous year.

Cremations.—Out of a total of 5,821 Leeds deaths during the year, the number of bodies disposed of by cremation was 2,525 or 43·4 per cent. as compared with 2,398 or 41·6 per cent. in 1956. Of this number 1,912 were cremated at Lawnswood and the remainder, 613, at Cottingham. The total number of cremations represents an increase of 127 on the figure for the previous year and an increase of 271 on the average number of cremations for the previous five years.

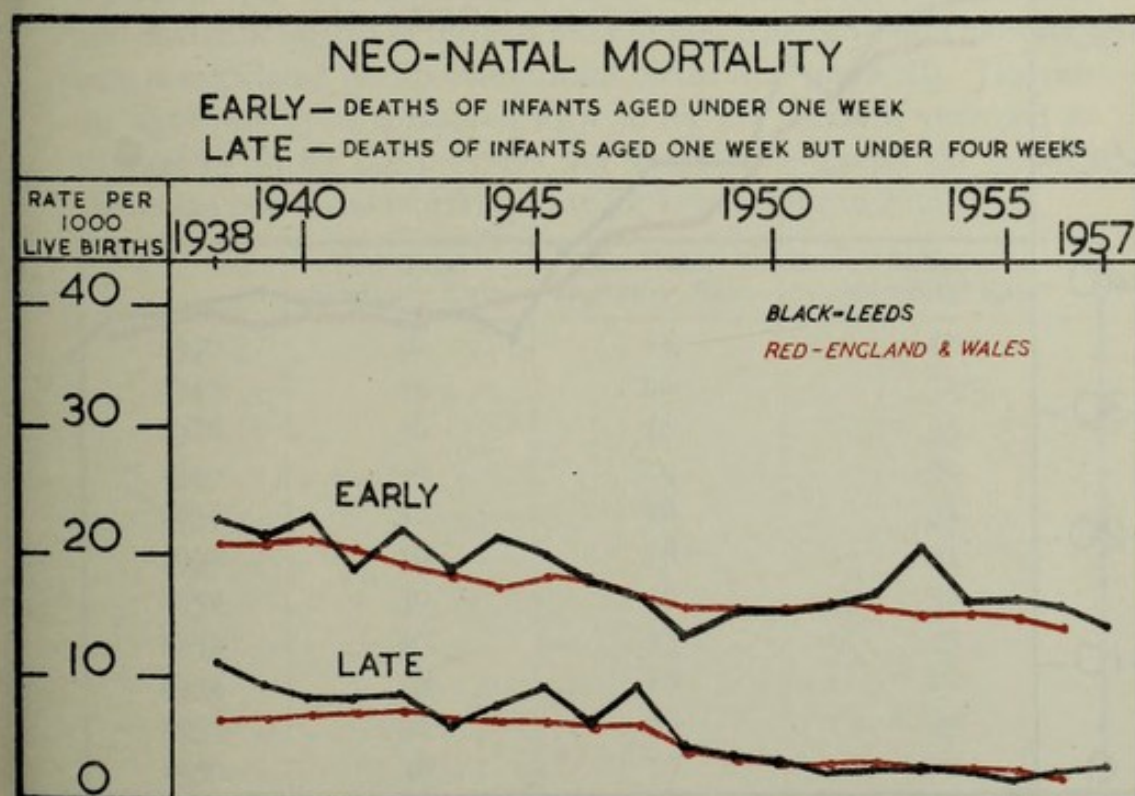
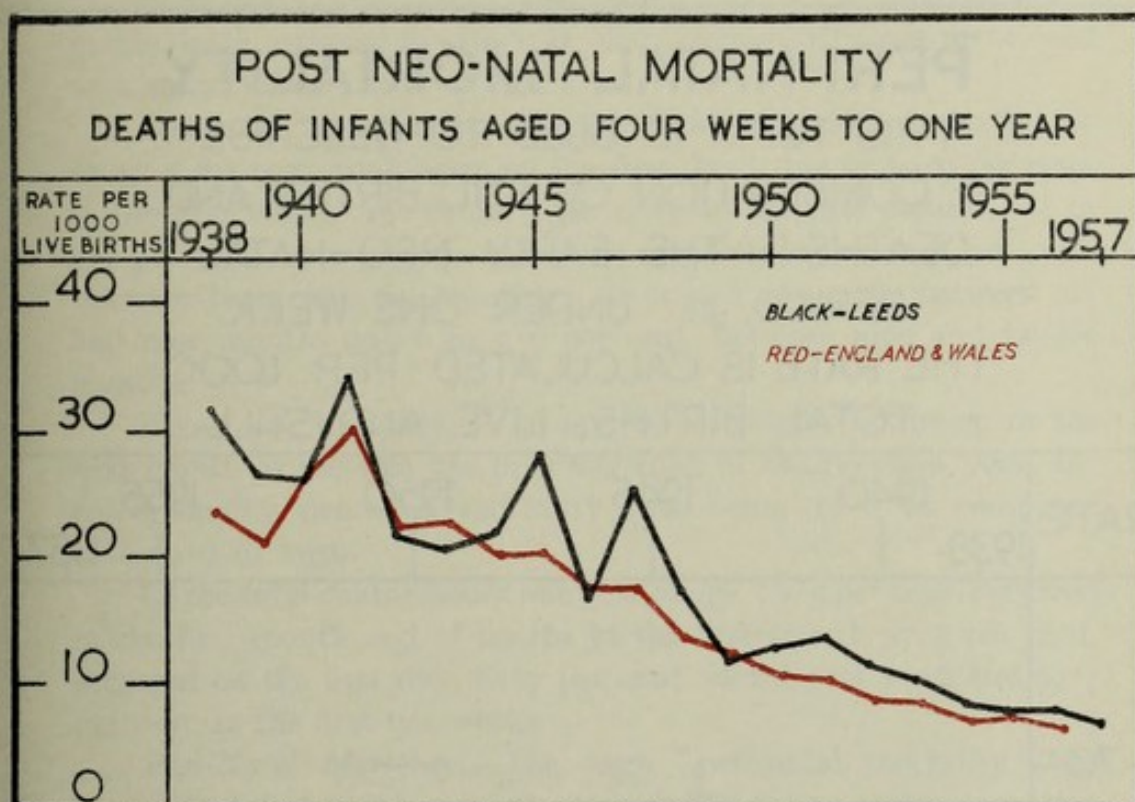
INFANT MORTALITY

The number of deaths of children under one year of age during 1957 was 207 (males 108, females 99) as compared with 216 (males 136, females 80) in 1956. The infant mortality rate was 25 as compared with 27 for the previous year and an average of 28 for the previous five years. The provisional infant mortality rate for England and Wales was 23.

Illegitimate Infant Mortality.—Of the 525 illegitimate births, 14 died before reaching the age of one year, which is equal to an infant mortality rate of 27 as compared with 42 last year.

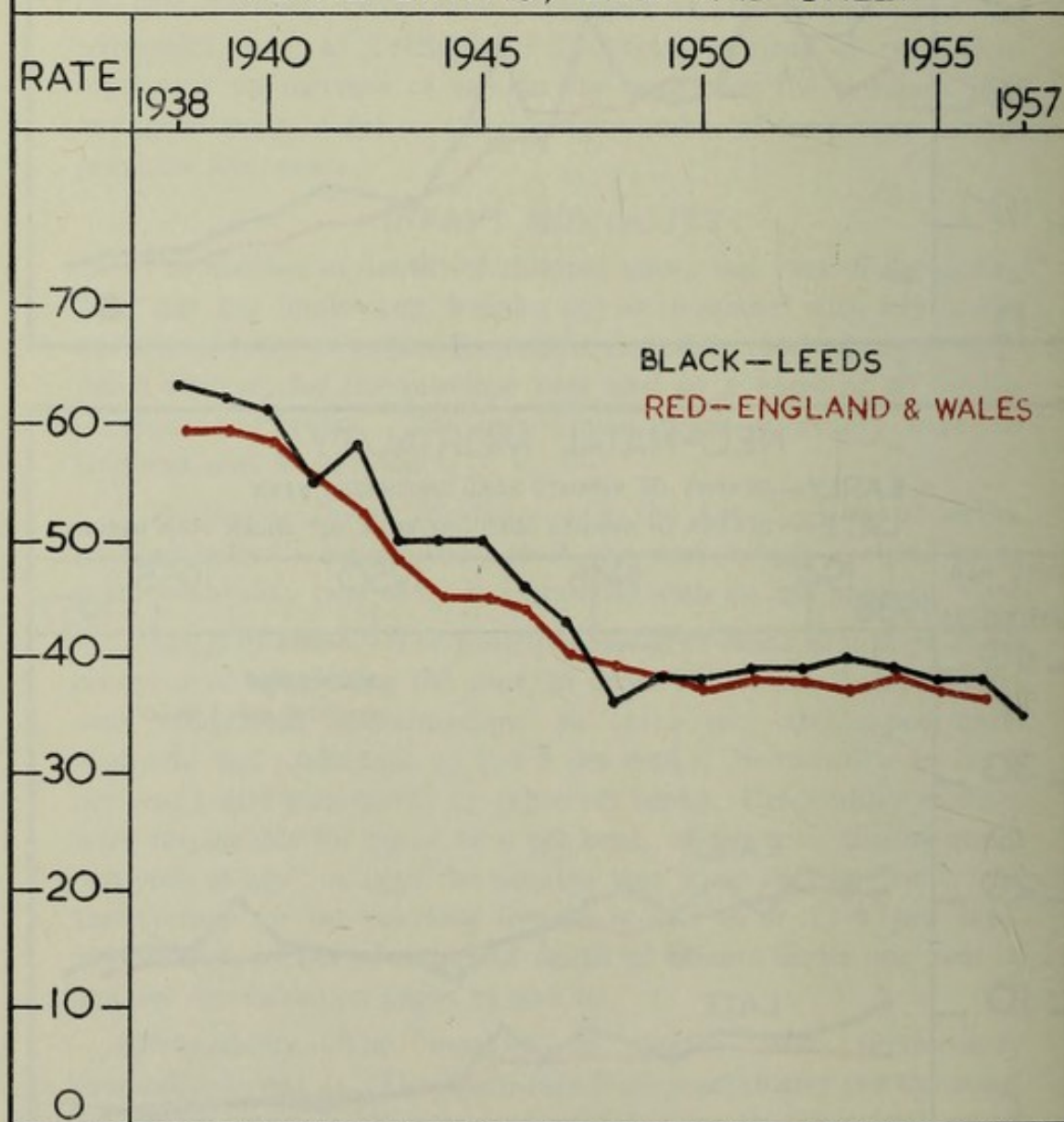
Causes of Death.—The principal causes of death of infants under one year of age during the year, in order of numerical importance, were congenital malformations 46 (22·2 per cent.), post-natal asphyxia and atelectasis 43 (20·8 per cent.), prematurity 41 (19·8 per cent.) and pneumonia 27 (13·0 per cent.). Respiratory diseases were responsible for 29 or 14·0 per cent. of the total deaths under one year of age; in 1956 the number was 39 or 18·1 per cent. and the average for the previous five years was 39 or 17·6 per cent. For further details of causes of death of infants under one year of age, see the tables on pages 15 and 16.

Prematurity.—The number of deaths from prematurity (unqualified) was 41. The death-rate from prematurity per thousand live births was 4·9 as compared with 8·1 for the previous year.



PERI-NATAL MORTALITY

THIS TERM IS USED TO DESCRIBE
A COMBINATION OF STILLBIRTHS AND
DEATHS IN THE EARLY NEO-NATAL
PERIOD, I.E. UNDER ONE WEEK.
THE RATE IS CALCULATED PER 1,000
TOTAL BIRTHS, LIVE AND STILL.



In 21 deaths assigned to post-natal asphyxia and atelectasis and in one death assigned to injury at birth, prematurity was mentioned as a contributory cause of death.

Deaths in Age Groups.—Of the total (207) infant deaths, 86 or 41.5 per cent. took place on the first day; 124 or 59.9 per cent. in the first week; 150 or 72.5 per cent. in the first month; 18 or 8.7 per cent. between one and three months; 23 or 11.1 per cent. between three and six months; 10 or 4.8 per cent. between six and nine months and 6 or 2.9 per cent. between nine and twelve months.

Neo-Natal Mortality.—The number of deaths occurring in the first month of life was 150 or 3 less than in the previous year, the corresponding neo-natal mortality rate being 17.8 as compared with 19.0 in 1956.

Of the total deaths under one year of age, 72.5 per cent. occurred in the first month and of deaths in the first month 57.3 per cent. occurred on the first day, 82.7 per cent. in the first week and 90.7 per cent. in the first two weeks.

Peri-Natal Mortality.—The term 'peri-natal mortality' has been introduced to measure infant mortality due to causes operating before, during and immediately after birth and includes stillbirths and deaths of infants in the first week of life. The peri-natal mortality rate is calculated per thousand total births (live and still). The rate for 1957 was 35 as compared with 38 for the previous year and an average of 39 for the previous five years. The graph on page 8 shows the peri-natal mortality rate for Leeds from 1938 to 1957.

	Peri-Natal Mortality Rate	Neo-Natal Mortality Rate	Infant Mortality Rate
1946 ..	46	24	41
1947 ..	43	26	51
1948 ..	36	18	35
1949 ..	38	19	30
1950 ..	38	18	31
1951 ..	39	18	31
1952 ..	39	19	30
1953 ..	40	23	33
1954 ..	39	18	26
1955 ..	38	18	25
1956 ..	38	19	27
1957 ..	35	18	25

MATERNAL MORTALITY

The number of mothers who lost their lives in childbirth during the year was 3 as compared with 5 in the previous year. The corresponding maternal mortality rate per thousand live births was 0·36 as compared with 0·62 for the previous year and an average of 0·64 for the previous five years. Calculated on the total number of births (live and still) the rate for the year was 0·35 as compared with 0·61 for the previous year and an average of 0·63 for the previous five years.

The causes of death were as follows :—

- (1) 1a. Amniotic embolism b. Pregnancy
- (2) 1a. Myocardial intoxication b. Tracheo-bronchitis and fatty liver. 2. Recent delivery by Caesarian Section.
- (3) 1a. Amniotic embolism.

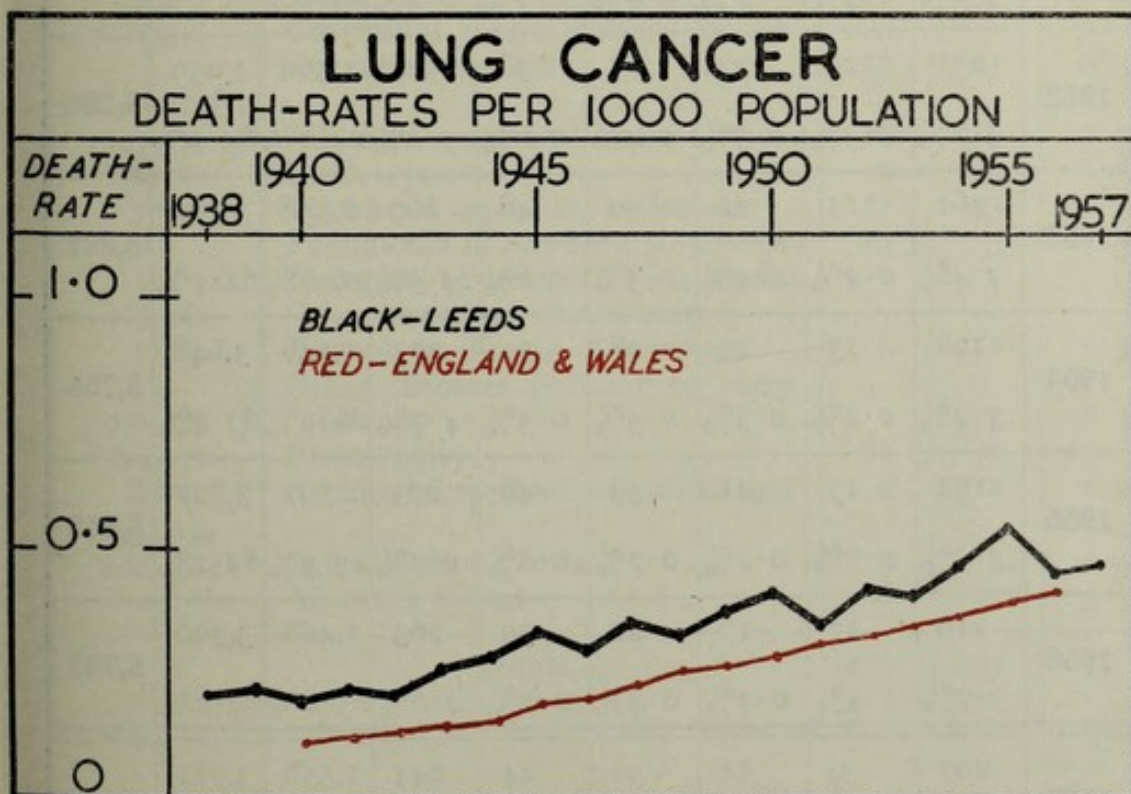
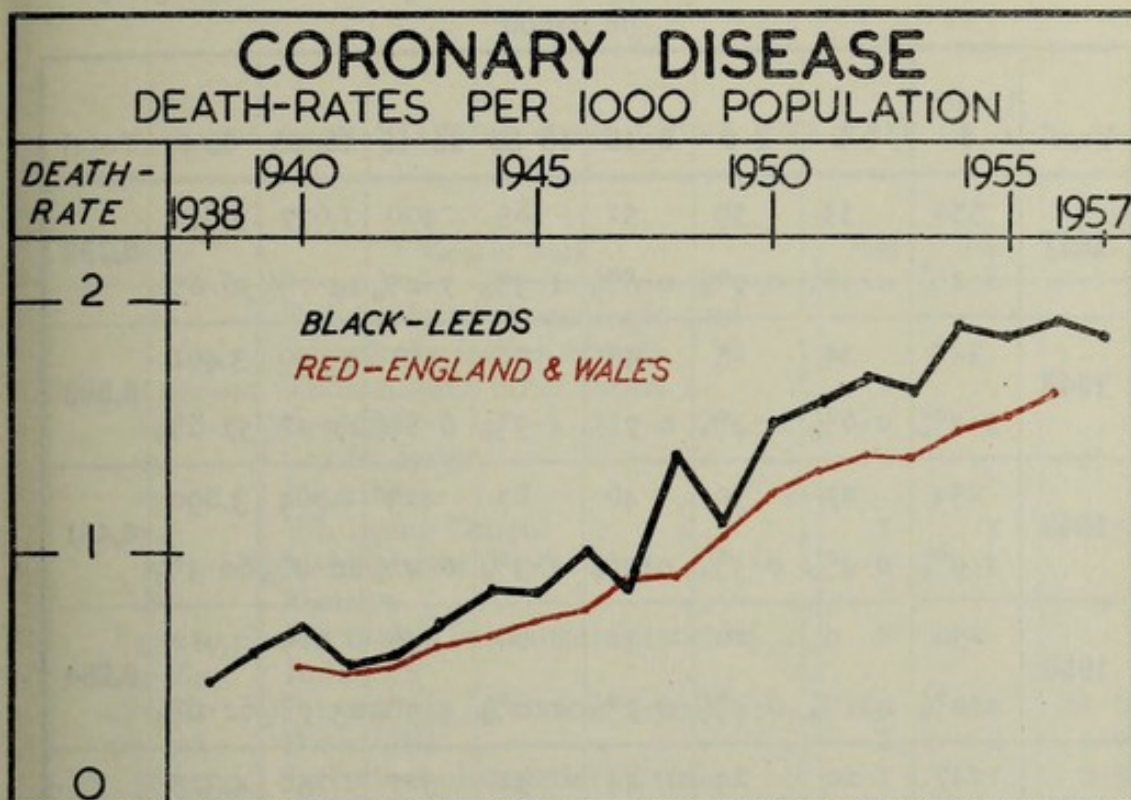
PRINCIPAL CAUSES OF DEATH

International List Nos.	Diseases	No. of deaths in 1957 (nett)	No. of deaths in 1956 (nett)	Death rate 1957
001-008	Tuberculosis, respiratory	47	56	0.09
010-019	Tuberculosis, other forms	5	8	0.01
020-029	Syphilitic disease	27	18	0.05
055	Diphtheria	..	..	..
056	Whooping Cough	1	2	0.00
057	Meningococcal infections	1	2	0.00
080	Acute poliomyelitis	..	..	..
085	Measles	3	..	0.01
Remainder of 001-138	Other infective and parasitic diseases	15	9	0.03
151	Malignant neoplasms : Stomach	143	149	0.28
162, 163	Lung, bronchus	239	226	0.47
170	Breast	85	81	0.17
171-174	Uterus	54	43	0.11
Remainder of 140-203	Other malignant and lymphatic neoplasms	513	474	1.01
205	Leukaemia, aleukaemia	35	13	0.07
204	Diabetes	35	32	0.07
260	Vascular lesions of central nervous system ..	824	765	1.62
330-334	Coronary disease, angina	946	982	1.85
420	Hypertension with heart disease	164	124	0.32
440-443	Other heart disease	686	652	1.34
444-468	Other circulatory disease	260	234	0.51
480-483	Influenza	46	26	0.09
490-493 } 763	Pneumonia	270	353	0.53
500-502 } 470-475 } 510-527 }	Bronchitis	423	472	0.83
	Other diseases of the respiratory system	29	46	0.06
540, 541 } 543, 571 } 572, 764 }	Ulcer of stomach and duodenum	40	44	0.08
	Gastritis, enteritis and diarrhoea	15	33	0.03
590-594	Nephritis and nephrosis	42	55	0.08
610	Hyperplasia of prostate	27	19	0.05
640-689	Pregnancy, childbirth and abortion	3	5	0.01
750-759	Congenital malformations	57	59	0.11
Residual	Other defined and ill-defined diseases	552	538	1.08
E810-E835 } E800-E802 } E840-E862 }	Motor vehicle accidents	63	56	0.12
	All other accidents	97	124	0.19
E963 } E970-E979 }	Suicide	67	56	0.13
E964, E965 } E980-E999 }	Homicide and operations of war	7	6	0.01
	Totals	5,821	5,762	11.41

CAUSES OF AND AGES AT DEATH DURING THE CALENDAR YEAR, 1957.

International List Nos.	Cause of Death	Nett Deaths at the subjoined ages of "Residents" whether occurring within or outside the District.										*Total Hospital Deaths in the District
		All Ages	Under 1 year.	1 & under 2 years.	2 & under 5 years.	5 & under 15 years.	15 & under 25 years.	25 & under 45 years.	45 & under 65 years.	65 & under 75 years.	75 and upwards.	
001-008	Tuberculosis, respiratory ..	47	..	..	..	..	1	14	14	12	6	37
010-019	Tuberculosis, other forms ..	5	..	..	..	..	1	2	..	2	..	6
020-029	Syphilitic disease ..	27	..	..	..	..	..	1	9	12	5	21
055	Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..
056	Whooping Cough ..	1	1	..	..	..	..	..	..	..	..	1
057	Meningococcal infections ..	1	..	1	..	..	..	..	..	..	..	2
080	Acute poliomyelitis ..	..	..	..	..	..	..	..	..	..	..	2
085	Measles ..	3	..	2	..	1	..	..	..	..	..	2
Remainder of 001-138	Other infective and parasitic diseases ..	15	1	..	..	1	1	3	6	..	3	19
151	Malignant neoplasms : Stomach ..	143	..	..	..	..	..	9	59	46	29	76
162, 163	Lung, bronchus ..	239	..	..	..	..	..	7	130	80	22	121
170	Breast ..	85	..	..	..	..	..	8	44	15	18	53
171-174	Uterus ..	54	..	..	..	..	..	3	31	16	4	29
Remainder of 140-203, 205	Other malignant and lymphatic neoplasms ..	513	1	..	..	1	4	26	189	157	135	349
204	Leukaemia, aleukaemia ..	35	..	..	2	5	..	3	8	11	6	29
260	Diabetes ..	35	..	..	..	..	..	2	7	12	14	34
330-334	Vascular lesions of central nervous system ..	824	..	..	1	..	..	11	144	257	411	475
420	Coronary disease, angina ..	946	..	..	..	..	..	22	324	332	268	382
440-443	Hypertension with heart disease ..	164	..	..	..	..	..	..	27	52	85	89
Remainder of 410-443	Other heart disease ..	686	..	1	..	1	5	35	126	140	378	259
444-468	Other circulatory disease ..	260	..	..	..	..	5	5	41	67	142	169
480-483	Influenza ..	46	..	..	..	4	1	4	16	11	10	28
490-493, 763	Pneumonia ..	270	27	2	3	..	1	8	36	45	148	219
500-502	Bronchitis ..	423	2	1	..	2	1	8	132	142	135	220
470-475 } 510-527 }	Other diseases of the respiratory system ..	29	..	..	..	..	..	1	16	9	3	26
540, 541	Ulcer of stomach and duodenum ..	40	..	..	..	..	..	1	16	12	11	43
543, 571 } 572, 764 }	Gastritis, enteritis and diarrhoea ..	15	2	..	1	1	..	..	5	3	3	22
590-594	Nephritis and nephrosis ..	42	..	..	..	1	1	3	16	12	9	36
610	Hyperplasia of prostate ..	27	..	..	..	..	..	..	2	8	17	29
640-689	Pregnancy, childbirth and abortion ..	3	..	..	..	..	..	3	..	..	..	4
750-759	Congenital malformations ..	57	46	..	..	5	1	1	4	..	..	66
Residual	Other defined and ill-defined diseases ..	552	120	..	2	3	5	26	86	88	222	566
E810-E835	Motor vehicle accidents ..	63	..	1	2	5	9	15	19	6	6	59
E800-E802 } E840-E962 }	All other accidents ..	97	6	1	3	4	3	10	14	14	42	78
E963 } E970-E979 }	Suicide ..	67	..	..	..	..	4	13	32	13	5	8
E964, E965 } E980-E999 }	Homicide and operations of War ..	7	1	..	..	..	1	..	5	..	..	4
	Totals ..	5,821	207	9	14	34	44	244	1,558	1,574	2,137	3,563

*Total Deaths whether of "Residents" or "Non-Residents" in Hospitals and Institutions in the District.



DEATHS IN AGE GROUPS (NETT), 1947-1957

Together with the percentage, of the total deaths, represented by each group
(in italics).

Year	Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total
1947	552 <i>8.1%</i>	33 <i>0.5%</i>	59 <i>0.9%</i>	51 <i>0.8%</i>	85 <i>1.3%</i>	490 <i>7.2%</i>	1,677 <i>24.7%</i>	3,846 <i>56.6%</i>	6,793
1948	321 <i>5.4%</i>	34 <i>0.6%</i>	25 <i>0.4%</i>	43 <i>0.7%</i>	78 <i>1.3%</i>	401 <i>6.8%</i>	1,599 <i>27.1%</i>	3,401 <i>57.6%</i>	5,902
1949	254 <i>3.9%</i>	27 <i>0.4%</i>	30 <i>0.5%</i>	46 <i>0.7%</i>	87 <i>1.3%</i>	413 <i>6.4%</i>	1,704 <i>26.4%</i>	3,890 <i>60.3%</i>	6,451
1950	250 <i>4.0%</i>	9 <i>0.1%</i>	26 <i>0.4%</i>	42 <i>0.7%</i>	60 <i>1.0%</i>	346 <i>5.5%</i>	1,609 <i>25.7%</i>	3,912 <i>62.6%</i>	6,254
1951	247 <i>3.6%</i>	20 <i>0.3%</i>	24 <i>0.4%</i>	44 <i>0.6%</i>	52 <i>0.8%</i>	327 <i>4.8%</i>	1,758 <i>25.9%</i>	4,325 <i>63.6%</i>	6,797
1952	231 <i>3.7%</i>	20 <i>0.3%</i>	32 <i>0.5%</i>	25 <i>0.4%</i>	38 <i>0.6%</i>	327 <i>5.2%</i>	1,560 <i>24.8%</i>	4,059 <i>64.5%</i>	6,292
1953	261 <i>4.4%</i>	11 <i>0.2%</i>	22 <i>0.4%</i>	30 <i>0.5%</i>	48 <i>0.8%</i>	267 <i>4.5%</i>	1,558 <i>26.4%</i>	3,700 <i>62.7%</i>	5,897
1954	198 <i>3.4%</i>	13 <i>0.2%</i>	19 <i>0.3%</i>	28 <i>0.5%</i>	30 <i>0.5%</i>	273 <i>4.7%</i>	1,546 <i>26.9%</i>	3,648 <i>63.4%</i>	5,755
1955	194 <i>3.3%</i>	17 <i>0.3%</i>	11 <i>0.2%</i>	39 <i>0.7%</i>	48 <i>0.8%</i>	273 <i>4.7%</i>	1,507 <i>25.9%</i>	3,727 <i>64.1%</i>	5,816
1956	216 <i>3.7%</i>	17 <i>0.3%</i>	17 <i>0.3%</i>	22 <i>0.4%</i>	39 <i>0.7%</i>	263 <i>4.6%</i>	1,488 <i>25.8%</i>	3,700 <i>64.2%</i>	5,762
1957	207 <i>3.6%</i>	9 <i>0.1%</i>	14 <i>0.2%</i>	34 <i>0.6%</i>	44 <i>0.7%</i>	244 <i>4.2%</i>	1,558 <i>26.8%</i>	3,711 <i>63.8%</i>	5,821

DEATHS FROM STATED CAUSES UNDER ONE YEAR OF AGE.

International List Nos.	Cause of Death	1956	1957	% of total deaths under one
010	Tuberculosis of meninges and central nervous system	..	..	..
Rest of 001-019	Tuberculosis, other forms	1	..	..
020	Syphilis	..	..	..
050	Scarlet fever	..	..	..
055	Diphtheria	..	..	..
056	Whooping Cough	1	1	0.5
057	Meningococcal infections	1	..	..
085	Measles	..	..	..
340	Meningitis (non-meningococcal) ..	2	..	..
480-483	Influenza	..	..	..
490-493	Pneumonia (4 weeks—I year) ..	25	24	11.6
500-502	Bronchitis	2	2	1.0
560, 561, 570	Intestinal obstruction, hernia ..	1	1	0.5
571, 572	Gastro-enteritis (4 weeks—I year)	10	2	1.0
751	Spina bifida and meningocele ..	17	17	8.2
754	Congenital malformations of cir- culatory system	13	13	6.3
750, 752, 753 } 755-759 }	All other congenital malformations	16	16	7.7
760-761	Birth injuries	9	12	5.8
762	Post-natal asphyxia, atelectasis ..	27	43	20.8
763	Pneumonia of newborn (—4 weeks)	10	3	1.4
764	Diarrhoea of newborn (—4 weeks)	..	..	..
765-768	Other infections of newborn ..	..	..	..
770	Hæmolytic disease of newborn ..	2	11	5.3
769 } 771-773 }	Other diseases peculiar to early infancy	1	3	1.4
774-776	Prematurity	65	41	19.8
E924	Accidental mechanical suffocation	2	2	1.0
Rem. of E800-999	Other violent causes	3	5	2.4
Residual	All other causes	8	11	5.3
	Totals	216	207	..

INFANT MORTALITY 1957. NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER ONE YEAR OF AGE.

International List Nos.	Cause of Death	-1 day	1 day	2 days	3 days	4 days	5 days	6 days	1-2 weeks	2-3 weeks	3-4 weeks	Total -1 m'ths	1-3 m'ths	3-6 m'ths	6-9 m'ths	9-12 m'ths	Total -1 year
010	Tuberculosis of meninges	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rest of 001-019	Tuberculosis, other forms	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
020	Syphilis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
050	Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
055	Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
056	Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
057	Meningococcal infections	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
085	Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
340	Meningitis (non-meningococcal or tuberculous)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
480-483	Influenza	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
490-493	Pneumonia (4 weeks-I year)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
500-502	Bronchitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
560, 561, 570	Intestinal obstruction, hernia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
571, 572	Gastro-enteritis (4 weeks-I year)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
751	Spina bifida and meningocele	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
754	Congenital malformations of circulatory system	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rest of 750-759	All other congenital malformations	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
760, 761	Birth injuries	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
762	Post-natal asphyxia, atelectasis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
763	Pneumonia of newborn (-4 weeks)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
764	Diarrhoea of newborn (-4 weeks)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
765-768	Other infections of newborn	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
770	Hæmolytic disease of newborn	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
769, 771-773	Other diseases peculiar to early infancy	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
774-776	Prematurity	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
E924	Accidental mechanical suffocation	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rest of E800-999	Other violent causes	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Residual	All other causes	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	..	86	14	10	6	4	..	4	12	6	8	150	18	23	10	6	207

INFANT MORTALITY DURING THE FOURTEEN YEARS 1944-1957 AT DIFFERENT PERIODS OF
THE FIRST YEAR OF LIFE.

Year.	Births in year.	Under one week.		Under one month.		One and under three months.		Three and under six months.		Six and under nine months.		Nine and under twelve months.		Under one year.	
		Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
1944	8,518	177	20.8	242	28.4	75	8.8	55	6.5	42	4.9	15	1.8	429	50
1945	7,760	151	19.5	222	28.6	93	12.0	65	8.4	34	4.4	24	3.1	438	56
1946	9,886	174	17.6	235	23.8	79	8.0	41	4.1	25	2.5	21	2.1	401	41
1947	10,875	178	16.4	278	25.6	125	11.5	87	8.0	41	3.8	21	1.9	552	51
1948	9,234	122	13.2	162	17.5	70	7.6	49	5.3	22	2.4	18	1.9	321	35
1949	8,447	125	14.8	156	18.5	36	4.3	29	3.4	21	2.5	12	1.4	254	30
1950	8,113	122	15.0	148	18.2	43	5.3	35	4.3	16	2.0	8	1.0	250	31
1951	8,044	125	15.5	141	17.5	36	4.5	40	5.0	19	2.4	11	1.4	247	31
1952	7,740	126	16.3	144	18.6	28	3.6	37	4.8	11	1.4	11	1.4	231	30
1953	7,932	160	20.2	182	22.9	31	3.9	21	2.6	16	2.0	11	1.4	261	33
1954	7,584	118	15.6	135	17.8	24	3.2	21	2.8	12	1.6	6	0.8	198	26
1955	7,630	123	16.1	136	17.8	19	2.5	26	3.4	7	0.9	6	0.8	194	25
1956	8,033	131	16.3	153	19.0	28	3.5	21	2.6	9	1.1	5	0.6	216	27
1957	8,429	124	14.7	150	17.8	18	2.1	23	2.7	10	1.2	6	0.7	207	25

MINISTRY OF HEALTH TABLES.

TABLE I.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1957 AND PREVIOUS YEARS.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
		Un-corrected Number.	Nett.		Number.	Rate.	Of Non-residents registered in the District.	Of Residents not registered in the District.	Under 1 Year of Age.		At all Ages.	
			Number.	Rate.					Number.	Rate per 1,000 Nett Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1938	494,000	8,159	7,614	15.4	6,592	13.3	597	260	490	64	6,255	12.7
1939	(a) 497,000 (b) 488,000	7,434	7,079	14.2	6,821	14.0	619	333	401	57	6,535	13.4
1940	465,700	7,459	6,946	14.9	7,178	15.4	638	378	395	57	6,918	14.9
1941	471,930	7,027	6,667	14.1	6,610	14.0	655	501	407	61	6,456	13.7
1942	462,400	7,355	7,204	15.6	6,256	13.5	589	423	369	51	6,090	13.2
1943	453,900	7,830	7,547	16.6	6,532	14.4	595	421	356	47	6,358	14.0
1944	451,100	8,611	8,518	18.9	6,314	14.0	601	411	429	50	6,124	13.6
1945	451,670	8,258	7,760	17.2	6,580	14.6	595	425	438	56	6,410	14.2
1946	481,570	10,267	9,886	20.5	6,795	14.1	570	389	401	41	6,614	13.7
1947	492,140	11,394	10,875	22.1	6,982	14.2	567	378	552	51	6,793	13.8
1948	501,900	9,938	9,234	18.4	6,106	12.2	600	396	321	35	5,902	11.8
1949	504,900	9,146	8,447	16.3	6,757	13.4	630	324	254	30	6,451	12.8
1950	509,700	8,857	8,113	15.9	6,437	12.6	579	396	250	31	6,254	12.3
1951	503,030	8,700	8,044	16.0	6,983	13.9	595	409	247	31	6,797	13.5
1952	504,800	8,250	7,740	15.3	6,446	12.8	597	443	231	30	6,292	12.5
1953	505,500	8,465	7,932	15.7	6,354	12.6	643	186	261	33	5,897	11.7
1954	507,200	8,185	7,584	15.0	6,224	12.3	649	180	198	26	5,755	11.3
1955	507,400	8,259	7,630	15.0	6,295	12.4	647	168	194	25	5,816	11.5
1956	508,600	8,640	8,033	15.8	6,270	12.3	693	185	216	27	5,762	11.3
1957	509,790* 510,100†	9,023	8,429	16.5	6,309	12.4	695	207	207	25	5,821	11.4

Total population at all ages at the 1951 Census 505,219

Area of District in acres (land and inland water) } 40,613.5

TABLE II. CASES OF INFECTIOUS DISEASES ORIGINALLY NOTIFIED BEFORE ALTERATION OF DIAGNOSIS DURING THE CALENDAR YEAR 1957.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.																Total Cases removed to Hospital.
	At all Ages.				At Ages—Years.												
	Under 1.		1 and under 5 years.		5 and under 15 years.		15 and under 25 years.		25 and under 45 years.		45 and under 65 years.		65 and upwards.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
Diphtheria	3	2	1	..	1	..	1	1	..	1	..	..	..	..	3	2	
Dysentery	620	589	266	163	173	128	18	68	64	120	44	46	11	24	39	27	
Encephalitis, acute { Infective	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Post-infectious	1	..	..	..	1	..	..	..	..	8	15	9	5	9	4	3	
Erysipelas	32	29	..	..	2	..	1	1	9	8	15	9	5	9	4	3	
Food poisoning	206	225	..	..	49	43	9	24	48	60	16	17	..	5	6	6	
Malaria	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	
Measles	5,035	4,930	163	193	2,712	2,598	16	18	11	12	2	2	..	1	113	85	
Meningococcal infections	2	..	1	..	..	..	..	..	1	..	..	..	..	..	1	..	
Ophthalmia neonatorum	8	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Paratyphoid fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Pneumonia (acute primary)	203	160	21	9	24	23	12	8	38	32	64	24	25	45	56	43	
(acute influenza)	75	48	2	..	2	4	5	4	13	9	38	17	13	14	4	2	
Poliomyelitis	45	33	14	7	19	10	6	7	4	5	..	1	..	..	44	32	
Puerperal pyrexia	..	152	..	..	..	..	..	68	..	83	..	1	..	..	..	..	
Scarlet fever	234	236	90	81	138	149	3	4	2	2	1	..	..	..	28	33	
Typhoid fever	2	..	..	..	1	..	1	..	..	..	..	..	..	..	2	..	
Whooping cough	281	307	41	141	93	111	2	1	..	1	1	..	..	1	28	30	
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Non-notifiable diseases	220	175	66	38	45	30	22	21	14	13	8	9	3	8	220	175	
Totals	6,968	6,891	364	347	2,674	2,600	96	225	205	346	189	126	57	107	550	438	
Respiratory tuberculosis	249(38)	148(25)	..	2	11(1)	15	30(10)	34(8)	87(19)	65(13)	88(8)	27(4)	26	3	132	64	
Other forms of tuberculosis	24	17(2)	..	..	8	4(1)	2	2	7	6(1)	3	2	1	2	18	12	

The figures shown in brackets are "Transfer in" Cases and are included in totals.

TABLE IIA. ACCEPTED CASES OF INFECTIOUS DISEASES (AFTER CORRECTION OF DIAGNOSIS) DURING THE CALENDAR YEAR 1957.

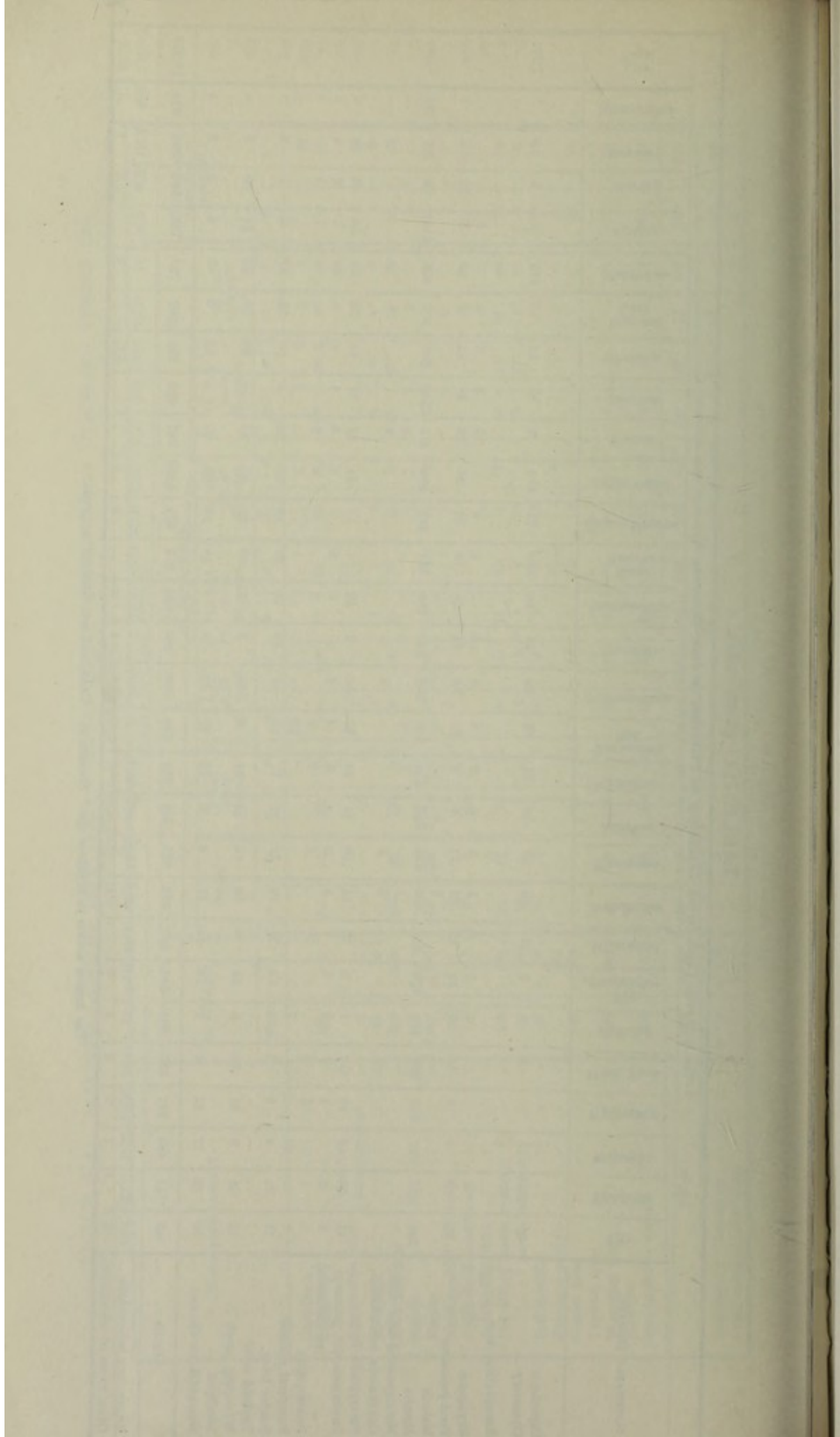
NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.																Total Cases removed to Hospital.	
	At all Ages.				At Ages—Years.													
	Under 1		1 and under 5 years.		5 and under 15 years.		15 and under 25 years.		25 and under 45 years.		45 and under 65 years.		65 and upwards.					
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.				
Diphtheria	532	510	35	34	221	125	154	118	15	62	60	113	38	39	9	19	16	..
Dysentery	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Encephalitis, acute { Infective	2	1	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
.. { Post-infectious	31	29	..	..	..	2	2	..	1	1	9	8	15	9	4	9	3	3
Erysipelas	309	323	26	31	120	103	69	56	14	28	54	67	23	27	3	11	44	36
Food poisoning	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..
Malaria	1	..	163	194	2,714	2,597	2,131	2,107	16	18	11	12	2	2	..	1	115	86
Measles	5,037	4,931	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..
Meningococcal infections	9	..	1	..	5	..	1	..	..	..	1	..	..	..	1	..	..	..
Ophthalmia neonatorum	8	5	8	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paratyphoid fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia (acute primary)	235	172	32	14	34	24	27	20	13	10	41	33	65	25	23	46	90	55
" (acute influenza)	75	48	2	..	2	..	2	4	5	4	13	9	38	17	13	14	4	2
Poliomyelitis	25	16	2	1	6	2	10	3	5	8	2	2	..	..	..	..	24	15
Puerperal pyrexia	..	152	..	..	..	..	..	..	..	68	..	83	..	1	..	..	..	..
Scarlet fever	230	235	..	..	89	80	136	149	2	4	2	2	1	..	..	..	24	32
Typhoid fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough	273	302	40	39	137	149	93	111	2	1	..	1	1	..	..	1	18	25
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Non-notifiable diseases	201	167	55	29	54	58	48	31	23	21	11	16	6	6	4	6	201	167
Totals	6,968	6,891	364	347	3,383	3,140	2,674	2,600	96	225	205	346	189	126	57	107	550	438
Respiratory tuberculosis	249(38)	148(25)	..	2	7	2	11(1)	15	30(10)	34(8)	87(19)	65(13)	88(8)	27(4)	26	3	132	64
Other forms of tuberculosis	24	17(2)	..	..	3	1	8	4(1)	2	2	7	6(1)	3	2	1	2	18	12

The figures shown in brackets are "Transfer in" Cases and are included in totals.

TABLE IIA. (continued).

TOTAL ACCEPTED CASES (AFTER CORRECTION OF DIAGNOSIS) IN EACH MUNICIPAL WARD OF THE DISTRICT.																														
NOTIFIABLE DISEASE.	City	Blenheim	Westfield	Wellington	Hyde Park	Kirkstall	Far Headingley	Meanwood	Woodhouse	Moortown	Allerton	Roundhay	Richmond Hill	Potternewton	Harehills	Burmantofts	East Hunslet	Osmondthorpe	Cross Gates	Halton	Beeston	Holbeck	Hunslet Carr	Middleton	Armley	Wortley	Bramley	Stanningley	City Total	
		.. 94	.. 13	.. 7	.. 2	.. 6	.. 3	.. 28	.. 68	.. 50	.. 23	.. 15	.. 13	.. 60	.. 43	.. 18	.. 168	.. 11	.. 110	.. 5	.. 13	.. 18	.. 73	.. 113	.. 8	.. 1	.. 5	.. 7	.. 1,042	
Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Dysentery ..	67	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Encephalitis, ac. { Inf. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
P. inf. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Erysipelas ..	3	4	..	2	4	1	3	2	1	4	3	3	6	2	..	3	4	1	3	3	3	2	3	..	3	..	..	..	..	
Food poisoning ..	42	33	4	11	23	18	12	22	11	8	9	21	14	14	24	73	32	35	25	25	39	23	57	49	6	12	6	5	632	
Malaria ..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Measles ..	301	522	327	259	426	470	324	409	619	346	426	215	351	200	256	357	361	894	275	359	399	377	408	141	98	227	332	9,908		
Meningococcal infections ..	1	..	..	..	..	..	..	1	..	..	1	1	..	1	..	..	..	1	2	1	..	1	1	..	..	..	..	..	9	
Ophthalmia neonatorum ..	..	..	..	1	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13	
Paratyphoid fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Pneumonia (ac. primary)	15	13	16	13	7	5	12	14	10	17	10	18	16	7	10	21	19	54	17	11	11	11	12	22	14	12	14	4	407	
" (ac. influenza)	2	2	..	1	3	6	1	5	2	4	6	3	3	3	..	7	5	7	8	5	4	8	4	29	1	2	2	2	123	
Poliomyelitis ..	3	1	..	1	1	..	10	..	1	..	2	4	..	..	..	2	..	..	4	2	..	3	3	3	1	2	1	1	41	
Puerperal pyrexia ..	1	..	50	..	1	..	..	..	..	..	..	70	..	..	..	1	..	..	2	..	1	3	1	1	..	..	21	..	152	
Scarlet fever ..	17	22	4	6	5	18	13	21	19	17	21	17	19	17	12	16	20	33	61	20	5	10	13	37	4	1	8	9	465	
Typhoid fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Whooping cough ..	52	31	8	35	24	3	14	6	26	14	14	24	5	19	3	17	13	28	35	14	19	38	33	62	14	10	5	9	575	
Smallpox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Non-notifiable diseases ..	39	19	17	11	6	7	15	24	17	8	8	12	17	19	8	9	13	16	43	17	5	13	6	3	4	4	3	5	368	
Totals ..	543	741	439	337	357	501	540	441	586	735	445	525	389	506	289	359	674	511	1,251	387	460	528	581	728	196	142	294	374	13,859	
Respiratory tuberculosis ..	13(1)	23(4)	17(2)	25(6)	16(6)	13	10(1)	13(4)	12(2)	11(2)	5(1)	18(4)	7	24(6)	7	15(2)	19(2)	20(1)	27(1)	6(1)	9(3)	15(5)	17(1)	16	9(2)	9(1)	12(3)	9(2)	397(63)	
Other forms of tuberculosis	1	..	1	2	3	1	2	..	4(1)	1	..	1	2	1	4	2	..	2	3	1	..	4(1)	..	3	..	1	1	1	1	41(2)

The figures shown in brackets are "Transfer in" Cases and are included in totals.



CITY OF LEEDS
VITAL STATISTICS 1920 - 1957

Year	Population	Births	Birth-Rate	Deaths	Death-Rate	Infant Mortality			Still-Births			Maternal Mortality			Diarrhoea and Enteritis			Typhoid Fever			Deaths from Respiratory Diseases (Not Influenza, Not Excl. Tub.)	Diphtheria			Scarlet Fever			Typhus Fever			Measles			Whooping Cough		
						Deaths under 1 year	Rate per 1,000 live births	Non-Natal Mortality Rate	No.	Rate per 1,000 population	Deaths from Septic	Deaths from other causes	Total Deaths	Rate per 1,000 live births	Deaths under 5 years	Death Rate per 1,000 births	Deaths	Death Rate	Cases	Deaths		No. of persons immunized	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths		
1920	448,913	11,229	25.0	6,501	14.7	1,332	110	46.3	...	...	29	28	57	5.07	140	12.5	668	1.36	491	1.10	1,513	885	64	1.363	17	29	4	5,459	148	...	...	...	...	...	...	
1	452,500	10,144	22.4	6,285	13.9	997	98	41.3	...	...	8	30	38	3.75	184	18.1	641	1.37	554	1.19	1,390	665	38	1.526	14	24	8	3,095	5	...	...	...	...	...	...	
2	456,700	9,453	20.9	6,479	13.9	935	101	43.3	...	...	14	18	32	3.46	94	9.9	653	1.40	595	1.27	1,357	470	28	4,722	33	14	7	9,932	152	...	...	...	...	...	...	
3	459,900	8,684	18.9	5,986	12.7	773	89	41.8	...	...	10	35	45	5.18	118	13.6	637	1.36	574	1.22	1,139	368	20	2,134	31	9	1	4,583	50	...	...	...	...	...	...	
4	471,800	8,528	18.1	6,747	14.3	911	108	38.7	...	...	9	24	33	3.86	103	12.0	687	1.40	536	1.35	1,277	289	17	1,256	20	25	6	6,654	49	...	...	...	...	...	...	
5	472,900	8,186	17.3	6,037	12.8	748	78	37.8	...	...	24	21	45	5.30	149	18.2	599	1.27	606	1.28	1,262	422	39	1,166	15	9	3	5,100	39	...	...	...	...	...	...	
6	473,400	8,065	17.0	6,062	12.8	748	93	38.7	...	...	14	27	41	5.08	147	18.2	585	1.24	657	1.39	1,099	374	26	756	5	9	1	7,070	19	...	...	...	...	...	...	
7	472,600	7,790	16.3	6,198	13.0	620	81	35.2	...	...	14	24	38	4.88	88	11.3	558	1.17	649	1.36	1,070	439	28	773	6	14	2	8,569	117	...	...	...	...	...	...	
8	474,800	7,665	16.1	6,133	12.9	606	70	37.3	...	...	14	22	36	4.70	105	13.7	542	1.14	668	1.47	976	634	21	94	3,515	18	6	1	3,538	21	...	...	...	...	...	
9	478,500	7,446	15.5	7,868	16.5	724	97	44.5	1999	0.77	10	23	33	24.23	86	11.6	611	1.30	684	1.43	2,037	530	26	107	3,453	29	14	3	9,486	162	...	...	...	...	...	
1930	478,500	7,568	15.8	5,939	12.4	512	68	38.5	332	0.69	10	22	32	4.05	34	4.5	533	1.11	728	1.52	798	994	54	179	2,383	23	4	2	913	2	...	...	...	...	...	...
1	486,400	7,219	14.8	6,506	13.4	552	76	34.3	397	0.75	17	22	39	5.14	68	9.4	527	1.08	740	1.52	1,047	995	86	318	1,467	12	10	2	10,555	50	...	...	...	...	...	...
2	484,900	7,004	14.4	6,469	13.3	617	88	36.4	354	0.69	8	13	21	2.86	106	13.1	493	1.02	760	1.57	966	889	48	1,514	931	8	9	...	3,349	52	...	...	...	...	...	
3	485,000	6,843	13.7	6,574	13.5	537	81	36.6	333	0.69	15	12	27	3.87	104	15.7	499	1.03	706	1.46	1,148	1,057	88	740	1,006	9	10	1	3,973	22	...	...	...	...	...	...
4	486,450	7,199	14.8	6,891	12.9	515	71	35.0	350	0.66	15	14	29	3.86	76	10.6	460	0.95	861	1.65	711	2,231	156	2,442	2,711	16	8	1	10,570	90	...	...	...	...	...	...
5	487,800	7,211	14.8	6,432	13.2	465	64	33.1	334	0.66	8	16	24	3.18	62	8.6	435	0.90	803	1.65	722	1,335	60	30,662	1,082	5	...	...	1,341	4	...	...	...	...	...	
6	489,800	7,340	15.0	6,666	13.6	470	65	36.0	380	0.65	10	14	24	3.13	71	9.7	408	0.85	843	1.72	803	799	30	1,937	1,868	12	4	...	8,744	49	...	...	...	...	...	
7	491,800	7,279	14.8	6,573	13.4	491	67	33.2	313	0.64	6	13	17	2.24	65	8.0	406	0.85	777	1.58	950	941	44	1,135	2,234	5	16	3	2,373	9	...	...	...	...	...	
8	494,000	7,614	15.4	6,255	12.7	491	64	33.1	399	0.67	2	12	14	1.76	94	12.3	397	0.80	879	1.78	615	948	33	11,172	1,717	8	3	...	6,797	18	...	...	...	...	...	
9	497,000	7,079	14.2	6,535	13.1	491	57	30.2	397	0.62	6	13	19	2.60	54	7.7	413	0.85	847	1.74	662	447	20	894	960	2	12	1	1,973	2	132	18	...	...	...	...
1940	495,700	6,946	14.0	6,918	14.0	395	37	30.8	282	0.61	2	13	15	2.09	44	6.4	407	1.00	778	1.67	990	301	11	1,167	643	...	35	1	4,364	8	128	2	...	...	...	...
1	477,930	6,667	14.1	6,456	13.7	497	61	26.7	259	0.55	7	9	16	2.32	40	6.0	408	0.86	849	1.80	740	576	22	13,268	887	3	12	1	7,006	21	1,105	25	...	...	...	...
2	484,499	7,204	14.9	6,690	13.8	359	31	29.7	278	0.60	6	13	19	2.54	32	4.4	357	0.77	888	1.92	580	707	25	15,101	1,376	1	8	...	7,810	10	1,554	32	...	...	...	...
3	485,999	7,547	15.6	6,338	14.0	356	47	23.7	289	0.55	4	15	19	2.44	40	5.3	378	0.85	926	2.00	868	334	11	10,415	1,098	3	2	...	2,426	14	1,184	14	...	...	...	...
4	481,079	7,790	16.2	6,124	12.6	429	50	28.4	402	0.58	...	12	12	1.37	76	8.9	316	0.70	915	2.03	608	544	9	7,481	1,011	3	5	1	6,978	...	1,213	6	...	...	...	...
5	481,579	7,886	16.4	6,014	12.5	401	41	25.8	248	0.55	4	10	14	1.75	88	11.3	318	0.70	969	2.13	749	149	6	8,822	964	...	4	...	595	1	1,635	13	...	...	...	...
6	481,579	7,886	16.4	6,014	12.5	401	41	25.8	248	0.55	4	10	14	1.75	88	11.3	318	0.70	969	2.13	749	149	6	8,822	964	...	4	...	595	1	1,635	13	...	...	...	...
7	481,579	7,886	16.4	6,014	12.5	401	41	25.8	248	0.55	4	10	14	1.75	88	11.3	318	0.70	969	2.13	749	149	6	8,822	964	...	4	...	595	1	1,635	13	...	...	...	...
8	481,579	7,886	16.4	6,014	12.5	401	41	25.8	248	0.55	4	10	14	1.75	88	11.3	318	0.70	969	2.13	749	149	6	8,822	964	...	4	...	595	1	1,635	13	...	...	...	...
9	481,579	7,886	16.4	6,014	12.5	401	41	25.8	248	0.55	4	10	14	1.75	88	11.3	318	0.70	969	2.13	749	149	6	8,822	964	...	4	...	595	1	1,635	13	...	...	...	...
1950	509,700	8,113	15.9	6,354	12.5	250	31	18.2	189	0.37	1	4	5	0.60	13	1.6	193	0.38	1,062	2.08	763	20	1	7,464	956	...	...	...	5,663	2	2,499	6	...	...	...	...
1	503,030	8,044	16.0	6,797	13.5	247	31	17.5	194	0.39	1	4	5	0.61	7	0.9	182	0.36	1,021	2.00	1,272	2	...	8,154	544	...	...	...	7,666	3	1,625	4	...	...	...	...
2	504,800	7,740	15.3	6,692	13.3	231	30	18.6	182	0.36	1	5	6	0.70	7	0.9	123	0.24	1,071	2.11	1,006	2	...	7,459	794	...	...	...	4,945	3	1,657	...	...	...	...	
3	505,500	7,931	15.7	6,797	13.7	261	33	22.9	192	0.33	2	3	5	0.62	13	1.6	120	0.24	991	1.96	1,021	1	...	6,510	599	...	...	...	6,515	4	1,750	1	...	...	...	...
4	507,400	7,581	15.0	6,755	13.3	198	26	17.8	188	0.37	1	4	5	0.64	8	1.1	87	0.17	1,030	2.03	808	...	...	6,857	622	1	...	...	701	...	812	...	...	...	...	
5	507,400	7,581	15.0	6,755	13.3	194	25	17.8	173	0.34	...	4	4	0.51	9	1.2	79	0.14	1,072	2.11	786	...	...	6,189	603	...	...	...	11,243	3	593	...	...	...	...	
6	508,600	7,513	14.8	6,752	13.3	216	27	19.0	177	0.35	...	5	5	0.61	11	1.4	94	0.13	976	1.94	867	...	...	6,666	426	...	...	...	973	...	1,583	2	...	...	...	...
7	510,100	8,429	16.5	6,821	13.4	207	25	17.8	181	0.36	...	3	3	0.33	2	0.2	57	0.10	1,069	2.10	768	...	...	5,994	465	...	...	...	9,068	3	575	1	...	...	...	...

* For calculation of birth-rate
(b) for calculation of death-rate
(c) for calculation of vital statistics.

† Registration of Still-Births
in force 1939

1920 and onwards per 1,000
total births (live and still)

(Whooping Cough made notifiable by Measles
and Whooping Cough Regulations, 1939
(in force 1940 October 1939.)

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Date of Birth			Age		Sex		Race	
Month	Day	Year	Years	Months	Male	Female	White	Colored
1	1	1901	1	0				
1	2	1901	1	1				
1	3	1901	1	2				
1	4	1901	1	3				
1	5	1901	1	4				
1	6	1901	1	5				
1	7	1901	1	6				
1	8	1901	1	7				
1	9	1901	1	8				
1	10	1901	1	9				
1	11	1901	1	10				
1	12	1901	1	11				
1	13	1901	1	12				
1	14	1901	1	13				
1	15	1901	1	14				
1	16	1901	1	15				
1	17	1901	1	16				
1	18	1901	1	17				
1	19	1901	1	18				
1	20	1901	1	19				
1	21	1901	1	20				
1	22	1901	1	21				
1	23	1901	1	22				
1	24	1901	1	23				
1	25	1901	1	24				
1	26	1901	1	25				
1	27	1901	1	26				
1	28	1901	1	27				
1	29	1901	1	28				
1	30	1901	1	29				
1	31	1901	1	30				
2	1	1902	2	0				
2	2	1902	2	1				
2	3	1902	2	2				
2	4	1902	2	3				
2	5	1902	2	4				
2	6	1902	2	5				
2	7	1902	2	6				
2	8	1902	2	7				
2	9	1902	2	8				
2	10	1902	2	9				
2	11	1902	2	10				
2	12	1902	2	11				
2	13	1902	2	12				
2	14	1902	2	13				
2	15	1902	2	14				
2	16	1902	2	15				
2	17	1902	2	16				
2	18	1902	2	17				
2	19	1902	2	18				
2	20	1902	2	19				
2	21	1902	2	20				
2	22	1902	2	21				
2	23	1902	2	22				
2	24	1902	2	23				
2	25	1902	2	24				
2	26	1902	2	25				
2	27	1902	2	26				
2	28	1902	2	27				
2	29	1902	2	28				
2	30	1902	2	29				
2	31	1902	2	30				
3	1	1903	3	0				
3	2	1903	3	1				
3	3	1903	3	2				
3	4	1903	3	3				
3	5	1903	3	4				
3	6	1903	3	5				
3	7	1903	3	6				
3	8	1903	3	7				
3	9	1903	3	8				
3	10	1903	3	9				
3	11	1903	3	10				
3	12	1903	3	11				
3	13	1903	3	12				
3	14	1903	3	13				
3	15	1903	3	14				
3	16	1903	3	15				
3	17	1903	3	16				
3	18	1903	3	17				
3	19	1903	3	18				
3	20	1903	3	19				
3	21	1903	3	20				
3	22	1903	3	21				
3	23	1903	3	22				
3	24	1903	3	23				
3	25	1903	3	24				
3	26	1903	3	25				
3	27	1903	3	26				
3	28	1903	3	27				
3	29	1903	3	28				
3	30	1903	3	29				
3	31	1903	3	30				

Infectious and other Diseases

INFECTIOUS AND OTHER DISEASES

BY

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For the fourth successive year we have had no case of diphtheria. The number of cases of poliomyelitis still remained small though rather more numerous than in the previous year. For the first time for a number of years, notifications of dysentery fell but food poisoning, mainly due to *Salmonella typhi-murium*, was prevalent. Whooping cough, which had increased sharply during the previous year, fell very considerably.

Once again it is a pleasure to record much help and advice from Dr. G. B. Ludlam and his staff at the Public Health Laboratory. In particular, we owe a debt to Dr. B. P. Marmion for his virological investigations.

Diphtheria.—No case of diphtheria occurred during the year. This is the fourth successive year in which the city has been free from the disease.

Scarlet Fever.—The number of accepted cases of this disease during the year was 465 as compared with 426 last year and 603 in 1955. Of the 465 cases, 56 (12.0 per cent.) were treated in Seacroft Hospital. The case-rate was 0.91 as compared with 0.84 for the previous year. The disease continues to be mild. There were no deaths.

Smallpox, Typhoid and Paratyphoid Fever, Typhus, Plague and Cholera.—No case of smallpox, typhoid fever, paratyphoid fever, typhus, plague or cholera occurred during the year. Two typhoid fever contacts were kept under observation as were four chronic typhoid carriers. During the year three doubtful cases of smallpox were referred to the Department for a second opinion; all three were diagnosed as chickenpox. In addition, seven "other" cases were visited at the request of medical practitioners and these were diagnosed as follows:— scabies (2), streptococcal throat (3), german measles (1) and psoriasis following tonsillitis (1).

Measles.—This disease has a tendency to recur in epidemic form in alternate years. The last epidemic was in 1955 and another was therefore due in 1957. Notifications began to increase during the first week of December, 1956, and reached their maximum in the last week of March, 1957. The total number of accepted cases during the year was 9,968 as compared with 983 last year and 11,243 in 1955. Of the total cases, 201 were treated in Seacroft Hospital. There were 3 deaths.

Whooping Cough.—It is gratifying to record a fall in the incidence of whooping cough during 1957. Accepted cases numbered 575 as compared with 1,383 last year and 563 in 1955. Of the total cases, 43 (7·5 per cent.) were treated in Seacroft Hospital. There was one death.

Puerperal Pyrexia.—There was an increase in the number of accepted cases of this disease during the year, 152 as compared with 113 last year and 168 in 1955. Of the total, 139 (91·4 per cent.) occurred in hospitals and institutions and 13 (8·6 per cent.) in the practices of general medical practitioners and midwives. There were no deaths.

Ophthalmia Neonatorum.—The number of accepted cases of ophthalmia neonatorum was 13 as compared with 11 in 1956 and 10 in 1955. No case required treatment in Seacroft Hospital; all recovered.

Erysipelas.—Accepted cases of this disease numbered 60 as compared with 72 last year. Of these, 6 (10·0 per cent.) were treated in Seacroft Hospital. There were no deaths.

Malaria.—One case of malaria was notified during the year and received treatment in Seacroft Hospital. The infection was contracted abroad.

Dysentery.—Although there was a decrease in the number of accepted cases of this disease during the year, 1,042 as compared with 1,484 last year and 1,150 in 1955, the incidence was still high. The disease was again mainly of the *Sonne* type. Of the 1,042 cases, 968 occurred at home, 21 in hospitals and institutions and 53 in day nurseries. The number treated in Seacroft Hospital was 32 or 3·1 per cent. of the total. Of the cases, 407 were *Sonne* and 18 *Flexner* whilst the remaining 617 were not typed.

During the year, outbreaks of the *Sonne* type occurred in two day nurseries accounting for 43 cases (36 children and 7 staff). One child was removed to Seacroft Hospital. Sporadic cases also occurred during the year at five other day nurseries. All the cases were bacteriologically confirmed and recovered.

In January, February and March, 14 cases of *Sonne* dysentery occurred among the patients in one of the wards of a mental hospital in the city. One case was removed to Seacroft Hospital. On routine faecal testing, 33 patients were found to be symptomless carriers. In May and June, 3 further cases occurred, two of which were removed to Seacroft Hospital. All the cases recovered.

Acute Poliomyelitis (including Polioencephalitis).— There was an increase in the number of accepted cases of this disease during the year, 41 as compared with 23 last year. Cases over the country as a whole were also higher than in 1956. Of the 41 cases, 39 (95·1 per cent.) were treated in Seacroft Hospital and 2 (4·9 per cent.) at home. There was one death assigned to the late effects of acute poliomyelitis.

The corresponding figures for the past five years are as follows :—

		Cases		Deaths
1956	..	23	..	..
1955	..	60	..	2
1954	..	25	..	..
1953	..	18	..	2
1952	..	79	..	7

The highest monthly incidence was in September when there were 17 cases. The following tables show the monthly distribution of cases and the age groups affected :—

MONTHLY DISTRIBUTION

January	..	..	..	1
May	..	..	..	1
June	..	..	..	3
July	..	..	..	2
August	..	..	..	13
September	..	..	..	17
October	..	..	..	1
December	..	..	..	3
Total				41

AGE GROUPS

	0-5	5-10	10-15	15-25	25-35	35-45	Totals
Males	8	3	7	5	2	..	25
Females	3	2	1	8	2	..	16
Totals	11	5	8	13	4	..	41

Of the total, 30 had paralysis and 11 had no paralysis. At the end of the year 25 cases had recovered and 13 were still under treatment with the following results :—

- (a) slight paralysis or weakness .. 10
- (b) severe paralysis or weakness .. 3

Three cases left the city and the results of treatment are not known. Of the 28 wards in the city, 16 contributed to the number of cases. Those with three or more cases were :— City (3), Meanwood (10), Richmond Hill (4), Crossgates (4), Holbeck (3) and Middleton (3).

Three children were admitted to Seacroft Hospital with a diagnosis of poliomyelitis shortly after having received poliomyelitis vaccine. Two of these cases were considered on clinical grounds to be non-paralytic poliomyelitis but in neither case was poliomyelitis virus isolated from the faeces. The third case was admitted to hospital five days after her second inoculation of poliomyelitis vaccine with a diagnosis of paralytic poliomyelitis. On enquiry it transpired that the date of onset was 4 to 5 days prior to the inoculation of poliomyelitis vaccine. In this case also the faeces yielded neither poliomyelitis virus nor other cytopathogenic agents. The serum 35 days after onset contained complement-fixing antibody to mumps V and S antigens at titres of 1:64 and 1:8 respectively. In the opinion of the virologist (Dr. Marmion) the serological findings suggested a recent rather than a current infection with mumps virus but in the absence of an acute-phase sample of serum it was not possible to be certain on this point. Thus, in all three cases, the laboratory findings failed to confirm the clinical diagnosis, but negative laboratory findings are not conclusive. Accepting the clinical diagnosis of poliomyelitis in these three cases, there is no evidence that the poliomyelitis vaccine provoked the disease and no evidence of failure of the vaccine to protect against paralytic poliomyelitis.

In August and September an outbreak of poliomyelitis occurred in a residential nursery. The outbreak was carefully investigated. This is perhaps the first time in this country that an institutional outbreak of poliomyelitis has been adequately investigated virologically. Dr. C. M. Gray and Dr. B. P. Marmion, who together handled the outbreak, have written the following report.

An outbreak of Poliomyelitis in a residential nursery, August, 1957.—*General course of the outbreak.*—The nursery can take up to 30 children and at the time of the outbreak 26 were present—10 under two years and 16 between 2 and 5½ years. There were 11 resident staff, 5 non-resident domestics and one non-resident handyman.

The first patient with poliomyelitis was a child of nineteen months. He took ill on August 25th with fever and, on the next day, tonsillitis. Meningeal symptoms developed on August 29th when he was removed to Seacroft Infectious Diseases Hospital but at that time there was no firm diagnosis of poliomyelitis. A second child, aged 18 months and in the same nursery, also became ill with fever and tonsillitis on August 27th, two days after the first child. His symptoms were not acute and did not suggest poliomyelitis but in view of the suspicion attaching to the first child the second was also sent to the Infectious Diseases Hospital on August 31st. The same day—some 4 to 6 days after the onsets of illness—the hospital staff were able to make a firm diagnosis of poliomyelitis for both patients ("index" cases) and to notify the Medical Officer of Health. Subsequently specimens of faeces from both children were sent by the hospital to the Virus Laboratory (Dr. B. P. Marmion) at the Public Health Laboratory, Leeds, and poliovirus serological type 3, was isolated.

As soon as there was a clinical diagnosis of poliomyelitis and, in fact, before the laboratory confirmation for the two "index" cases was available, arrangements were made by the Health Department to investigate all the remaining children and staff in the nursery for carriage of poliovirus in the faeces. Specimens were collected for this purpose and dispatched to the Virus Laboratory on September 1st and 2nd.

The stool specimens were examined in tissue culture (HeLa cells) and, as the initial intention was to try and control the outbreak by identifying and removing poliovirus carriers with all possible

speed, a preliminary positive report was issued by the Virus Laboratory as soon as any suspicious cytopathogenic changes were observed in the cultures and before the virus had been fully identified by typing. The limitations of these reports were well understood by all concerned although in fact most of the preliminary reports were subsequently confirmed as isolations of poliovirus type 3 and only a few false positive reports—due either to toxic effect of stools or the presence of adenoviruses—were given.

On September 4th such preliminary positive results were notified for 4 children aged 7 months, 9 months, 12 months and 15 months and one nursery assistant, aged 20 years. Three of these children had been in the same nursery as the two "index" cases but the fourth child had been isolated since it was admitted to the nursery on August 22nd and had no direct contact with the other children. Neither the four children nor the nurse had any symptoms but all were removed to the Infectious Diseases Hospital on that day.

On September 5th another child aged 3½ years was reported positive and removed to hospital. This was the first indication that the infection involved older children in the nursery who were not in direct contact with the younger children among whom the "index" cases had occurred. Another child was also sent to hospital on this day, primarily because of an inadvertent examination and isolation of *Salmonella heidelberg* from the stool. Poliovirus was, however, isolated from the child later on.

From September 6th to 10th, five more children without symptoms were found to be excreting poliovirus and were admitted to hospital. A child with diarrhoea was found to have *Salmonella heidelberg* but no poliovirus in the stool. During the same period five members of the staff were also removed to hospital either because poliovirus was found in their stool specimens or because of symptoms suggesting poliomyelitis.

After September 10th, sixteen days from the onset of illness of the first child, no further virological reports were issued relating to the specimens collected on September 1st and 2nd. In all, 13 children—7 under two years and 6 between two and five years—and 6 nursery staff had been admitted to hospital. The clinical and the final virological findings are shown in the table on page 33.

The three paralytic cases among the children were the two children first diagnosed as poliomyelitis and a third child reported virologically suspicious and sent to hospital on 4th September. This child and the first child have some residual paralysis, the latter being the most severe. The two non-paralytic cases among the children developed slight symptoms in hospital but these were transient. The four children considered to be cases of abortive poliomyelitis had slight pyrexia and no symptoms, but, as can be seen from the table, poliovirus was isolated from the stools. The five inapparent cases in children or staff were diagnosed solely on the positive findings of poliovirus in the stools.

It will be noted from the table that two members of the staff were diagnosed clinically as having, respectively, paralytic and non-paralytic poliomyelitis but virus isolations were not made from their stools. Examination of these patients' blood did not reveal complement-fixing antibody to poliovirus type 3 although low titres of neutralising antibody were present. There is some doubt therefore about the infection of these cases with poliovirus type 3 during the outbreak. Another finding of interest concerned a child diagnosed as non-paralytic poliomyelitis. At first an adenovirus was isolated from the stool and only subsequently, after passage in tissue culture, was poliovirus type 3 obtained. (Adenoviruses were evidently circulating in the nursery without producing illness judging by the chance finding of adenovirus in one other child and the occurrence of complement-fixing antibody in the sera of a number of children).

During the period in which these investigations were proceeding certain general measures (described below) were taken to try and control the spread of infection in the nursery. It was also decided to attempt to find out how effective the removal of faecal carriers had been in protecting those who had stayed behind. Accordingly on September 27th, before the return of the cases from the Infectious Diseases Hospital, stool specimens were collected from all children and staff remaining in the nursery and samples of blood were also taken to be tested for neutralising antibody to the poliovirus (type 3) isolated in the outbreak.

The results of these stool examinations revealed two new symptomless excretors of poliovirus type 3 among the children. Both of these children had been negative in the first stool examination

on September 1st. Their original specimens (stored meanwhile at -20°C) were then retested and one proved to be positive—evidently the tissue culture method was not sensitive enough to detect the virus every time.

Tests for neutralising antibody showed that 18 out of 20 children or staff sampled had neutralising antibody which signified infection with type 3 virus either in the past or at the time of the outbreak.

General Control Measures.—Measures were taken to try to limit the spread, if possible, within the nursery and to prevent infection being taken outside. No new children were admitted and only one child was discharged on 3rd September at the special request of his parents. He had a negative stool report. The nursery staff were restricted in where they might go when off duty. The domestic staff who were non-resident could not be restricted in the same way but none of them had any illness except one case of influenza and all reports on stool examinations were negative.

Disinfection of the isolation room, baby nursery and bathroom and of bedding was carried out after the first two children went to hospital. A week later, after further cases of children and staff had gone to hospital, the whole of the downstairs nurseries and bathroom and the upstairs nurseries along with staff rooms and all bedding were disinfected. All children were bathed and changed into clean clothing before being moved into the "clean" nurseries. The disinfection of the rooms was carried out with 33 per cent. formalin spray. All clothes and bedding were steam sterilized in the autoclave.

The general hygiene of the nursery is good but details were checked. Babies' feeding bottles are boiled, children's crockery is washed separately from that of the staff and Deosan hypochlorite solution is used. Spoons and forks were boiled in addition. Children have individual face cloths and towels. Face cloths are boiled daily, hand towels changed twice weekly and boiled. Babies have individual "potties." These were being steeped in disinfectant but this was changed to boiling daily. Napkins were boiled. Staff were again impressed with the importance of thorough hand-washing after going to the toilet and toileting the children. All laundry which was sent to an outside laundry was steam sterilised before being sent. Children's noses were wiped with paper tissues rather than handkerchiefs.

Comment.—The original source of the infection was not determined. There was no history of any recent illness in either staff or children before the outbreak. The two "index" cases were children who had been in the nursery for more than a year and had not been out of the nursery or had visitors. There had been no admission of children at a relevant time before the onset of illness of the "index" cases. Three members of the nursery staff had, however, started work in the nursery between July 26th and August 3rd. Of these, one had a negative stool culture and the other two were found to be excreting poliovirus type 3. One of the latter subsequently became ill but the other remained well and it is just possible that she introduced the virus into the nursery. However, there is no proof of this and as poliovirus serotype 3 is not uncommon in the Leeds area—having been isolated from healthy children and cases of poliomyelitis outside the nursery—it may easily have been introduced by some other route.

A consideration of the general pattern of distribution of virus and antibody in the nursery population suggests that virus was widely distributed among the susceptible children and staff by the time the nature of the illness in the "index" cases had been recognised. This is well recognised to be so in the family contacts of poliomyelitis cases (see Brown, G. C., Robson, A. S. and Schieble, J. H. (1954), *J. Immunol.*, **73**, 54, for a useful summary of 28 such investigations) although there is a suggestion that the whole family may be infected simultaneously rather than from one to another. The extent to which virus usually spreads in communities larger than the family is uncertain. It is, therefore, of interest to find such widespread distribution of virus in a much larger unit than the family.

Two of the cases of poliomyelitis and several of those with abortive illness were found to be excreting the virus in the stool several days before the onset of symptoms and this precocious excretion may facilitate the spread of virus through the environment.

It seems, in this outbreak at least, that the removal of the excretors from the nursery probably had little effect on the course of the outbreak because, firstly, not all excretors were detected in the first examination on September 1st and secondly, only two persons among those remaining in the nursery (and tested) had no evidence of infection or previous immunity as judged by the serological tests for neutralising antibody to the epidemic strain.

THE CLINICAL AND VIROLOGICAL FINDINGS IN 19 CHILDREN OR MEMBERS OF THE STAFF WHO WERE ADMITTED TO THE INFECTIOUS DISEASES HOSPITAL.

	Clinical category :			In- apparent infection	Total
	Poliomyelitis				
	Paralytic	Non- paralytic	Abortive		
Children ..	3(3)†	2(2)*	4(4)	4(4)	13
Staff ..	3(2)	1(-)	1(1)	1(1)	6
Total ..	6(5)	3(2)	5(5)	5(5)	19

† The figures in brackets indicate the number of persons from whom poliovirus type 3 was isolated.

* Poliovirus type 3 and an adenovirus was isolated from the stool specimen of one child.

Acute Encephalitis.—No case of this disease was notified during the year. Three cases of post-infectious encephalitis were notified ; all were diagnosed in Seacroft Hospital. There was one death from acute encephalitis.

Meningococcal Infection.—The number of accepted cases of meningococcal infection during the year was 9, the same as last year ; 8 cases were treated in Seacroft Hospital. There was one death.

Food Poisoning.—During the year 632 cases of food poisoning or suspected food poisoning came to the notice of the Department. Of these, 508 proved to be *Salmonella* infections ; of the 508, 80 were admitted to hospital. There were 5 deaths in this group, 4 being attributed to *Salmonella typhi-murium* and one to *Salmonella enteritidis*. The *Salmonella* organisms isolated were as follows :—

<i>Salmonella typhi-murium</i>	..	..	444
„ heidelberg	..	..	43
„ enteritidis	..	..	11
„ reading	..	..	3
„ montevideo	..	..	2
„ chester	..	..	1
„ dublin..	..	..	1
„ stanley	..	..	1
„ stanleyville	..	..	1
„ thompson	..	..	1

508

The 43 cases of *Salmonella heidelberg* occurred between August and November. This organism is an unusual one in Yorkshire and was probably an importation, but despite exhaustive enquiries the initial source of the infection could not be determined.

The *Salmonella typhi-murium* cases began to increase in March and kept at a high level until the end of April. During this period approximately 150 to 200 cases occurred in about 100 households. Although several districts contributed to these cases, those chiefly affected were in the southern area of the city. After careful investigations, a source of infection was found in a large wholesale and retail firm of pork butchers in the city, the vehicle of infection being sausage sold as beef sausage. Examination of the sausage exposed for sale and, thereafter, of sausage meat taken from the chopping and grinding machines at the factory revealed the presence of *Salmonella typhi-murium* phage type 2B. This was the same phage type organism as isolated from the majority of the patients. Faeces specimens were obtained from the proprietor and employees of the firm and all were negative with the exception of the proprietor who gave a positive result (*Salmonella typhi-murium*, phage type 2B). After treatment, three consecutive negative specimens were obtained. A thorough steam disinfection of all the machinery and utensils used in the manufacture of the sausage was carried out by this Department and final bacteriological examination of these was negative. Cases decreased during May and June but began to rise again in July and then decreased again towards the end of August. This upward and downward trend continued during the remainder of the year. Certain other articles of food came under suspicion and *Salmonella typhi-murium* was again isolated in sausage (pork). This was manufactured by a different firm from the one referred to above. Samples of varying meat products were taken for examination from the firm in question and *Salmonella typhi-murium*, phage type 2B, was isolated in chitterlings. Precautions were taken at the factory and the equipment was thoroughly sterilised. Faeces specimens taken from all the staff were negative. Investigations were subsequently made at the slaughterhouse where the pigs had been slaughtered and samples of pooled liver, spleen and glands were taken from pigs from various markets and also from one of five pigs from a private individual. In the latter specimen, *Salmonella typhi-murium* was isolated (untyped). Two samples

(one faeces) from a food-trough were both found positive for *Salmonella typhi-murium*, phage type 2B. Samples from faeces, sawdust, etc. in the lairs, together with certain other samples and swabs, were also taken but these all gave negative results. A second batch of samples was taken one week later and these were all negative.

The food investigations are referred to in more detail on page 179. Although no firm conclusion is possible, it seems probable that the machinery and equipment in at least two factories became infected. The source of infection was probably an apparently healthy pig.

Included in the total cases of actual or suspected food poisoning were 124 cases which occurred in different households and which were bacteriologically negative. None of these cases required admission to hospital and none died.

Malignant and Lymphatic Neoplasms.—The appended table gives details of deaths assigned to malignant and lymphatic neoplasms. The total of 1,069 deaths in this group of diseases is 83 more than last years' total.

1957 Cause of Death*	Age Groups																		All Ages		Grand Total		
	-1		1-		2-		5-		15-		25-		45-		65-		75		M	F			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F					
Malignant Neoplasms:																							
Buccal cavity and pharynx (140-148)	..	..	..	..	..	..	..	..	..	1	..	1	..	11	1	3	..	4	3	20	4	24	
Oesophagus (150)	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	2	4	3	7	8	15		
Stomach (151)	..	..	..	..	..	..	..	..	..	..	..	5	4	42	17	23	23	18	11	88	55	143	
Other digestive organs (152-159) Trachea, lung and bronchus (162-163)	..	..	..	..	..	..	..	..	..	1	..	5	5	47	36	39	35	26	36	118	112	230	
Other respiratory organs (160, 161, 164, 165)	..	..	..	..	..	..	..	..	..	..	..	..	..	7	1	2	2	2	..	11	3	14	
Breast (170)	..	..	..	..	..	..	..	..	..	..	..	..	8	1	43	1	14	..	18	2	83	85	
Cervix uteri (171)	..	..	..	..	..	..	..	..	..	..	..	..	1	..	21	..	9	..	3	..	34	34	
Other parts of uterus (172-174) Male genital organs (177-179)	..	..	..	..	..	..	..	..	..	..	..	..	2	..	10	..	7	..	1	..	20	20	
Skin (190-191)	..	..	..	..	..	..	..	..	..	1	..	..	..	8	..	17	..	18	..	44	..	44	
Bone and connective tissue (196-197)	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	1	1	1	3	3	6	
All other sites (Rem. of 140-199)	..	..	1	..	..	..	..	..	1	..	..	..	2	7	22	38	20	30	7	24	53	99	152
Neoplasms of lymphatic tissues (200-203)	..	..	..	..	..	..	..	..	..	..	..	..	3	1	6	5	2	..	..	3	11	9	20
Leukæmia and aleukæmia (204) Mycosis fungoides (205)	..	..	..	..	1	1	4	1	..	..	..	1	2	5	3	7	4	2	4	20	15	35	
Total	1	..	..	..	1	1	5	1	4	..	24	32	263	198	185	140	101	113	584	485	1,069		

*International List Numbers are shown in brackets.

Influenza.—There were 46 deaths from influenza during the year as compared with 26 in 1956. The death-rates per thousand population were 0.09 and 0.05 respectively.

Pneumonia.—Accepted cases during the year numbered 530, of which 407 (76.8 per cent.) were primary and 123 (23.2 per cent.) influenzal. The corresponding figures for 1956 were 493, of which 437 (88.6 per cent.) were primary and 56 (11.4 per cent.) influenzal. There were 270 deaths from all forms of pneumonia (including 3 deaths from pneumonia of the newborn) as compared with 353 last year. The mortality rates were 0.53 and 0.69 respectively.

Bronchitis.—There were 423 deaths assigned to this disease as compared with 472 in the previous year. The death-rates were 0.83 and 0.93 respectively.

Diarrhoea and Enteritis.—The number of deaths of children under two years of age from diarrhoea and enteritis during 1957 was 2 as compared with 11 last year. The death-rates per thousand births were 0.24 and 1.37 respectively.

Incidence of Blindness.—I am indebted to Mr. R. A. Kellett, Blind Welfare Officer, for the following statistical information regarding the admission of persons to the Register of the Blind or Partially Sighted during the year.

A. FOLLOW-UP OF REGISTERED BLIND AND PARTIALLY SIGHTED PERSONS.

(i) Number of cases registered during the year in respect of which para. 7(c) of Forms B.D.8 recommends :— (a) No treatment (b) Treatment (medical, surgical or optical) ..	CAUSE OF DISABILITY			
	Cataract	Glaucoma	Retrolental Fibroplasia	Others
(a) No treatment	22	10	1	69
(b) Treatment (medical, surgical or optical) ..	51	26	..	49
(ii) Number of cases at (i)(b) above which on follow-up action have received treatment	12	17	..	22

B. OPHTHALMIA NEONATORUM.

(i) Total number of cases notified during the year	13
(ii) Number of cases in which :—	
(a) Vision lost	..
(b) Vision impaired	..
(c) Treatment continuing at end of year	..

Venereal Diseases.—The number of deaths assigned as due to venereal diseases was 27 which is equal to a death-rate of 0·05 per thousand of the population. The corresponding figures for 1956 were 18 and 0·04 respectively. For details of the work of the treatment centre at Leeds General Infirmary, see page 125.

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Tuberculosis

TUBERCULOSIS STATISTICS

The number of cases on the register at the end of 1957 was 3,740 as compared with 3,840 at the end of 1956, a decrease of 100.

Notifications.—During the year 397 cases of respiratory tuberculosis (of which 63 were transfers from other areas) and 41 non-respiratory (of which 2 were transfers from other areas) were notified, making a total of 438 cases of which 65 were transfers. Compared with the previous year there was a decrease of 87 in the respiratory notifications and a decrease of 21 in the non-respiratory notifications. Compared with the average of the previous five years there was a decrease of 71 in the respiratory notifications and a decrease of 42 in the non-respiratory notifications.

The case-rate of respiratory tuberculosis was 0.78, of non-respiratory 0.08 and of all forms of the disease 0.86 as compared with 0.95, 0.12 and 1.07 respectively for the previous year.

Of the total cases of respiratory tuberculosis, 9.3 per cent. were children under 15 years, 16.1 per cent. persons between 15 and 25 and 74.6 per cent. were in the remaining age-groups. The corresponding figures for the previous year were 9.5 per cent., 20.0 per cent. and 70.5 per cent. respectively.

With regard to the non-respiratory type of disease, 39.0 per cent. were children under 15 years and 61.0 per cent. were persons over 15 years. The corresponding figures for the previous year were 29.0 per cent. and 71.0 per cent. respectively.

Of the total cases, 281 were notified by the Chest Physician, 28 were by general medical practitioners, 64 came from hospitals and 65 were by transfer from other areas.

The number of cases of respiratory tuberculosis not heard of until time of death was 17 (including 4 posthumous notifications) and the number of non-respiratory 3, making a total of 20, a decrease of two on the figure for the previous year.

Out of a total of 52 deaths from tuberculosis of all forms, 2 or 3.8 per cent. died within 7 days of notification and 3 or 5.8 per cent. died between 7 and 28 days after notification.

The following tables give details of notifications of tuberculosis received during the year :—

RESPIRATORY.

Ages	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males..	..	7	11 (1)	30 (10)	39 (12)	48 (7)	45 (8)	43	26	249 (38)
Females	2	2	15	34 (8)	45 (11)	20 (2)	16 (3)	11 (1)	3	148 (25)
Totals	2	9	26 (1)	64 (18)	84 (23)	68 (9)	61 (11)	54 (1)	29 —	397 (63)

NON-RESPIRATORY.

Ages	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males..	..	3	8	2	5	2	2	1	1	24
Females	..	1	4 (1)	2	3	3 (1)	1	1	2	17 (2)
Totals..	..	4	12 (1)	4	8	5 (1)	3	2	3	41 (2)

Figures in brackets are 'Transfer In' cases and are included in the totals.

Site	Males	Females	Total
Central nervous system	6	..	6
Abdominal	..	..	..
Spine	2	2	4
Bones and joints	4	2	6
Skin	1	1	2
Lymphatic system	6	9	15
Genito-urinary system.. ..	5	3	8
Other sites	..	..	..
Totals	24	17	41

Deaths.—Deaths from all forms of tuberculosis during the year numbered 52 of which 34 were males and 18 females. In the previous year the total was 64 of which 39 were males and 25 females. Of the total, respiratory tuberculosis accounted for 47 or 90·4 per cent. and non-respiratory 5 or 9·6 per cent. The death-rate from respiratory tuberculosis was 0·09, from non-respiratory 0·01 and from all forms of the disease 0·10 as compared with 0·11, 0·02 and 0·13 respectively for the previous year.

Set against the average rates for the previous five years, the figures represent a decrease of 0.08 in the respiratory rate, no change in the non-respiratory rate (0.01) and in the rate for all forms of the disease a decrease of 0.08.

The following tables give details of deaths from tuberculosis during the year :—

**RESPIRATORY TUBERCULOSIS.
AGES AT DEATH.**

1957	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males ..	..	..	..	..	..	9	4	8	12	33
Females	..	..	..	1	2	3	2	..	6	14
Totals ..	..	..	..	1	2	12	6	8	18	47
Average 10 years 1947-1956	..	1	..	12	27	29	36	29	23	157

NON-RESPIRATORY TUBERCULOSIS. DEATHS.

1957	Tubercular meningitis	Abdomin- al	Bones and Joints	Other tuber- culosis	Total
Males ..	..	..	..	1	1
Females ..	1	..	2	1	4
Totals ..	1	..	2	2	5

AGES AT DEATH.

1957	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males ..	..	..	..	..	1	..	..	..	..	1
Females	..	..	..	1	..	1	..	..	2	4
Totals ..	..	..	..	1	1	1	..	..	2	5
Average 10 years 1947-1956	..	4	2	2	1	2	1	2	2	16

The following table gives details of notifications of and deaths from tuberculosis during the years 1936-1957 :—

TUBERCULOSIS.

YEAR.	DEATHS.						NOTIFICATIONS.					
	Respiratory tuberculosis.		Non-respiratory tuberculosis.		All forms tuberculosis.		Respiratory tuberculosis.		Non-respiratory tuberculosis.		All forms tuberculosis.	
	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Cases.	Case-rate.	Cases.	Case-rate.	Cases.	Case-rate.
1936	346	0.71	62	0.13	408	0.83	531	1.08	163	0.33	694	1.42
1937	354	0.72	52	0.11	406	0.83	548	1.11	214	0.44	762	1.55
1938	336	0.68	61	0.12	397	0.80	511	1.03	176	0.36	687	1.39
1939	353	0.72	60	0.12	413	0.85	555	1.14	137	0.28	692	1.42
1940	416	0.89	51	0.11	467	1.00	557	1.20	110	0.24	667	1.43
1941	362	0.77	46	0.10	408	0.86	598	1.27	162	0.34	760	1.61
1942	310	0.67	47	0.10	357	0.77	638	1.38	170	0.37	808	1.75
1943	325	0.72	53	0.12	378	0.83	595	1.31	151	0.33	746	1.64
1944	277	0.61	39	0.09	316	0.70	631	1.40	157	0.35	788	1.75
1945	286	0.63	32	0.07	318	0.70	579	1.28	156	0.35	735	1.63
1946	261	0.54	27	0.06	288	0.60	519	1.08	178	0.37	697	1.45
1947	305	0.62	37	0.08	342	0.70	518	1.05	133	0.27	651	1.32
1948	245	0.49	28	0.06	273	0.55	497	0.99	132	0.26	629	1.25
1949	244	0.48	30	0.06	274	0.54	480	0.95	108	0.21	588	1.16
1950	178	0.35	15	0.03	193	0.38	521	1.02	98	0.19	619	1.21
1951	166	0.33	16	0.03	182	0.36	476	0.95	104	0.21	580	1.15
1952	113	0.22	10	0.02	123	0.24	476	0.94	97	0.19	573	1.14
1953	111	0.22	9	0.02	120	0.24	420	0.83	91	0.18	511	1.01
1954	83	0.16	4	0.01	87	0.17	470	0.93	80	0.16	550	1.08
1955	67	0.13	3	0.01	70	0.14	488	0.96	85	0.17	573	1.13
1956	56	0.11	8	0.02	64	0.13	484	0.95	62	0.12	546	1.07
1957	47	0.09	5	0.01	52	0.10	397	0.78	41	0.08	438	0.86

REPORT ON THE WORK OF THE TUBERCULOSIS DEPARTMENT OF THE LEEDS CHEST CLINIC

BY

GORDON F. EDWARDS, M.B.E., M.B., B.S., M.R.C.P.

Senior Chest Physician

Epidemiology.—The epidemiological features of tuberculosis in Leeds noted in previous years have persisted throughout 1957. Undoubtedly the most important feature is the fall in the notification rate, the first significant reduction during the last ten years. The notification rate in Leeds is now beginning to assume the rate of fall recently observed in the South of England and elsewhere. During the year the notification rate has been reduced by about 20 per cent. as against a reduction of about 35 per cent. in the last ten years and of 50 per cent. in thirteen years. These figures for Leeds have added significance when it is realised that some minimal and apparently inactive tuberculous pulmonary lesions have cleared following chemotherapy and then have been notified retrospectively. These late or retrospective notifications have been a more common feature of tuberculosis notification in the last few years, when drug therapy has been used to establish the diagnosis or, more commonly, to establish the degree of activity in a tuberculous lesion, by assessing its response to treatment. This therapeutic test of the diagnosis is likely to become more frequent in the future and hence the retrospective notifications are also likely to increase relatively. The fall in the death-rate continues at a rate similar to that observed during the last decade.

The number of Leeds residents on the Tuberculosis Register has also shown a reduction, albeit a small one of about 3 per cent. (see Table 1).

Thus, for the first time on record there has been a reduction of about 25 per cent. in the death-rate, of about 20 per cent. in the notification rate and of about 3 per cent. in the total morbidity rate. The relationship of these three factors is shown in Table 2.

	Respiratory			Non-Respiratory			Total
	M.	F.	Total	M.	F.	Total	M. & F.
ON REGISTER AT 31.12.56 ..	1,876	1,419	3,295	258	287	545	3,840
ADDED TO REGISTER :							
Cases notified in 1957 ..	211	123	334	24	15	39	373
Transfer-in cases	38	25	63	..	2	2	65
Cases returned	14	10	24	2	..	2	26
Totals	263	158	421	26	17	43	464
TAKEN OFF REGISTER :							
Diagnosis not confirmed ..	6	10	16	1	2	3	19
Re-diagnosed N.R. to R. ..	..	..	..	1	..	1	1
Recovered	138	140	278	19	31	50	328
Transferred-out	72	40	112	3	5	8	120
Lost sight of	16	5	21	2	1	3	24
Deaths from other causes ..	26	4	30	2	3	5	35
Deaths from tuberculosis ..	28	8	36	..	2	2	38
Totals	286	207	493	28	44	72	565
Cases on register at 31.12.56 plus cases added in 1957 ..	2,139	1,577	3,716	284	304	588	4,304
Minus cases taken off	286	207	493	28	44	72	565
Plus N.R. to R.	1	..	1	..	..	..	1
CASES ON REGISTER AT 31.12.57	1,854	1,370	3,224	256	260	516	3,740

(Table 1)

	Nos. of Leeds Resi- dents	Rate per 1,000 popn.	Variation on previous year	"Trans- fers in "	Total	Rate per 1,000 popn.
No. of persons on Clinic Register	3,675	7.21	—90	65	3,740	7.34
New notifications :						
All forms of tuberculosis ..	373	0.73	—98	65	438	0.86
Respiratory tuberculosis ..	334	0.65	—79	63	397	0.78
Non-respiratory tuberculosis	39	0.08	—19	2	41	0.08
Deaths :						
All forms of tuberculosis ..	52	0.10	—12	..	..	0.10
Respiratory tuberculosis ..	47	0.09	—9	..	..	0.09
Non-respiratory tuberculosis	5	0.01	—3	..	..	0.01

(Table 2)

Incidence of Primary Tuberculosis.—Primary tuberculous lesions accounted for 10 per cent. of the 334 new cases of respiratory tuberculosis among Leeds residents notified during the year.

Type of Tuberculosis	1954	1955	1956	1957
Respiratory (Total)	417	399	413	334
Primary pulmonary tuberculosis ..	24	30	28	34
Primary pul. tub. as % of total ..	5·8	7·5	6·8	10·2

(Table 3)

There appears to be considerable evidence that the essential lesion in tuberculosis is the primary infection and that all such primary lesions and possibly also all recent tuberculin-convertors should be intensively treated with the anti-tuberculosis drugs. It is therefore important that primary lesions should be brought under control as soon as possible. Individuals who are suffering from the effects of primary tuberculous disease and are put under active treatment should, of course, be notified but symptomless Mantoux convertors are not notifiable. Certainly these procedures and the reasons which prompt them only have added significance and merit if the greater proportion of so-called adult-type re-infection tuberculous lesions are of endogenous origin.

Mortality of Tuberculosis.—The number of deaths from tuberculosis continues to decrease year by year, due almost entirely to effective therapy with the anti-tuberculosis drugs, combined with a reduction in the apparent virulence of the disease, and to the natural defervescence of the prolonged epidemic. However, it is disturbing that 20 tuberculosis cases were not heard of until time of death and of these 4 were posthumous notifications (14 cases were assigned to tuberculosis as the cause of death and 6 to causes other than tuberculosis); of the known cases of tuberculosis on the Register (3,740), only 38 died during the year. The 20 cases of tuberculosis not heard of until the time of death were, therefore, deaths in the unknown infector pool which is of indeterminate size. This pool is therefore either extremely large, amounting to something of the size of the number of known cases on the Register, or, if appreciably smaller than this, consists of individuals in whom the tuberculosis mortality rate is very high and who are presumably

highly infective in the months before death. In general it would seem that this unknown infector pool is the greatest single factor in the spread of tuberculosis. No effort to find these cases can therefore be too great.

Another factor of considerable importance is that of the total deaths, 6 occurred in patients notified during 1957; of these 5 died within 28 days of notification and were therefore moribund at the time of notification. The relationship of these deaths to notifications is seen more clearly in the following table.

No. of tuberculosis cases not heard of until time of death	{ Posthumous notifications 4 Registrars' Returns .. 16 }		.. 20
No. of deaths within 28 days of notification	..	..	5
.. .. deaths in other patients notified in 1957	..	..	1
.. .. deaths in patients notified before 1957	..	..	32

(Table 4)

Of the 47 deaths from respiratory tuberculosis, 33 were males all aged over 35 years. There were 14 female deaths, all over the age of 15 years. In both sexes the peak death-rate occurred in the over-65 years age group. The relative mortality figures of the principal thoracic causes of death are shown in the following table.

PRINCIPAL THORACIC CAUSES OF DEATH

	1953	1955	1957	
			All deaths	Men 45+
Pulmonary tuberculosis ..	111	67	47	24
Cancer of lung	203	270	239	197
Bronchitis	481	463	423	278
Coronary artery disease ..	830	933	946	558
Pneumonia	434	255	270	91
Totals	2,059	1,988	1,925	1,148
All accidents (for comparison)	184	163	160	42

(Table 5)

Case-Finding Methods.—Reference has already been made in this report, as in previous years, to the importance of finding new cases of tuberculosis, especially the infective case from which new

cases of primary tuberculosis arise following exogenous infection. In planning any campaign for the prevention of tuberculosis, one of the essential methods is that of case-finding so that the infective case can be rendered non-infective if possible. If this cannot be achieved, then the individual, together with his susceptible contacts, must be kept under constant observation. The relative efficiency of the various methods of case-finding employed in 1957, which has a considerable bearing on this problem, is shown in the table which follows. In addition to these 206 cases of tuberculosis, the balance of 191 cases were notified elsewhere.

Method	No. of new patients so investigated	No. of new cases of pulmonary tuberculosis found	Ratio per 1,000 examinations	
			1957	1956
G.P. letters	1,731	78	45	76
Exclusion X-Ray Service	5,264	66	13	21
Routine X-Ray for other purposes	176	5	28	20
Contact examination ..	3,395	26	8	12
M.M.R.	27,061	31	1.1	1.5
Total	37,627	206	5.5	7.8

(Table 6)

From this it will be seen that the most effective method of case-finding is reference by general practitioners of patients with symptoms for investigation. The next most effective method is that of radiography alone, using a 5" × 4" camera unit miniature film for patients usually referred by general practitioners who wish for a chest X-ray only but do not particularly require a physical examination. From the table below it will be seen that this service has been increasingly used year by year since its installation in 1953. The films have been usually read by the same physician throughout the years so that the factor of observer error has been practically eliminated, so it is possible that the reduced pick-up rate of new cases of tuberculosis may indicate that there is a steady fall in the development of new tuberculous disease in the population being examined, as was seen in the case of general practitioner referrals detailed in Table 6.

EXCLUSION X-RAY SERVICE DISCOVERY RATE

	1957	1955	1953
Total attendances ..	5,264	3,523	3,000
New cases of pulmonary tuberculosis	66	70	73
Ratio per 1,000 examinations	13	20	24

(Table 7)

Mass Miniature Radiography.—Although the discovery rate of pulmonary tuberculosis and other chest abnormalities by Mass Miniature Radiography techniques does not appear to be particularly high, the great value of the procedure rests on the fact that large numbers of people can be easily and rapidly X-Rayed. The second factor of importance is that once an adult has been found to have a normal chest X-Ray the chances of him developing an active tuberculous focus in the future are so small that it becomes no longer economically sound to re-X-Ray that individual. It is therefore important that as many people as possible should be X-Rayed and this is preferably carried out by the M.M.R. Unit or by some similar mass X-Ray method.

The results of the Mass Miniature Radiography surveys of Leeds residents carried out during 1957 are shown in the following table.

	Nos. examined		Nos. with presumed inactive pulmonary tub.		Nos. with presumed active pulmonary tub.	
	M.	F.	M.	F.	M.	F.
Age-Groups						
0-14.. .. .	↓	↓	4	..	1	..
15-24.. .. .			14	16	5	3
25-34.. .. .			12	29	6	11
35-44.. .. .			20	17	4	3
45-59.. .. .			29	19	3	1
60+	↓	↓	11	8	1	..
Total by sexes	13,314	13,747	90	89	20	18
Grand total	27,061		179		38	

(Table 8)

The *proven* cases of active tuberculosis found by this method numbered 31 which represents a ratio of 1·1 per 1,000 which is again a reduction on the incidence for 1956 (see table 6).

B.C.G. Vaccination and Tuberculin Surveys.—(i) *Contact Examinations.*—The work of the Contact Department continues to expand year by year and a summary of the investigations carried out during the year is shown in the following table.

	1956	1957
1. Nos. of contacts examined :	2,189	3,395
(a) No. of new contacts seen	1,501	1,421
(b) No. of old contacts seen	688	1,974
2. Nos. of tuberculin positive contacts :	2,450	3,626
(a) followed-up in Chest Clinic	1,554	2,567
(b) followed-up by M.M.R. Unit	896	1,059
3. Nos. of tuberculin negative contacts :	687	840
(a) No. given B.C.G. vaccination	676	828
(b) No. refused B.C.G. vaccination	11	12
4. Nos. of cases of pulmonary tuberculosis discovered :	26	26
(a) among new contacts seen for first time	19	23
(b) among old contacts under review	7	3
5. Ratio per 1,000 of new cases of pulmonary tuberculosis discovered :	5	5
(a) among new contacts	17	18
(b) among total contacts under review	12	8

(Table 9)

This also shows a reduction of incidence of tuberculous disease as compared with the previous year.

(ii) *School-Leavers.*—The tuberculin-testing programme of 13 year old school-leavers has continued again this year. Full details are published in the Report of the School Medical Officer to whom I am indebted for the figures from which the following table has been prepared.

Type of School	No. on roll	No. examined	No. defaulted	No. tuberculin positive	No. tuberculin negative
Secondary Grammar and Technical	1,147	791	17	215 (27·2%)	559 (72·8%)
Secondary Modern	3,291	1,628	56	377 (23·2%)	1,195 (76·8%)
Primary	1,655	856	23	188 (22·0%)	645 (78·0%)
Total	6,093	3,275	96	780 (23·8%)	2,399 (76·2%)

(Table 10)

It will be seen that the incidence of Mantoux-positive children in this age group indicative of tuberculous infection, though not necessarily tuberculous disease, has fallen compared with last year when the overall rate was 31 per cent. It is also noted, however, that the relatively higher incidence of tuberculin positivity in the Secondary Grammar or Technical School children previously noted still persists, though not at so high a level. This reduction of the incidence of the tuberculin positive rate may, therefore, be another indication of the falling incidence of tuberculosis in Leeds. In the whole series examined no children were found to have pulmonary tuberculosis.

(iii) *University Undergraduates and Staff.*—One trend already noted in earlier paragraphs of this report concerning the epidemiological changes in tuberculosis is again seen in the results of the annual Tuberculin Survey for 1957 carried out by Dr. R. J. Still and his staff of the University Department of Student Health.

TUBERCULIN SENSITIVITY OF MEMBERS OF THE UNIVERSITY OF LEEDS (With acknowledgments to Dr. R. J. Still).

	1957			1956 Total	1955 Total
	Males	Females	Total		
No. tested	762	251	1,013	1,591	3,555
No. completed testing	595	183	778	1,365	2,496
No. tuberculin positive (previous B.C.G. vaccin.)	..	..	..	251	..
No. tuberculin positive (no previous B.C.G. vaccin.)	319	107	426	744	1,744
No. tuberculin negative	276	76	352	370	752
No. vaccinated with B.C.G. ..	252	65	317	345	701

(Table 11)

The incidence of tuberculin positivity in members of the University of Leeds also shows a reduction in October, 1957, compared with October, 1956.

Section 28 Activities.—During the year under review, as in recent years, Section 28 services have been needed less often, partly because of the fall in notifications but mainly because chronic disabled cases of tuberculosis have become less frequent.

“The Hollies” Preventorium.—“The Hollies” has been consistently used throughout the year and has been a valuable adjunct in the management of tuberculosis in a household. It has, however,

been impossible to keep it filled with children from tuberculous households. The spare places have, in the last part of the year, been used by the School Medical Officer.

Health Visitors and Almoners.—The work of the health visitors and almoners is often taken for granted. Yet it is important that the appreciation of the Senior Consultant Chest Physician and the Chest Clinic staff for their untiring and unlimited efforts at all times of the day and every day of the week, should be placed on record. Their work is arduous, tiring and never ending. It calls for punctiliousness of a high order, considerable attention to detail and a sense of devotion and self-sacrifice, few of which qualities are appreciated by many, save those with whom they work.

For details of the social work of the Tuberculosis Department of the Chest Clinic, see page 53.

During the year under review, various research projects were undertaken in which several health visitors took part. These projects have mainly been concerned with investigations into the value of the newer anti-tuberculosis drugs, into the assessment of various techniques for determining tuberculin sensitivity and various other surveys not connected with tuberculosis.

TUBERCULOSIS—SOCIAL WORK

BY

BARBARA M. R. NORTHROP, M.A.

Senior Tuberculosis Almoner

There was no change in the range of the services available for tuberculous patients and their families during 1957.

Help given by Health Committee.—The Almoners interviewed 2,226 patients and their relatives at the Clinic during the year and 834 applications were made to the Special Services Committee on their behalf. On the recommendation of the Chest Physician, 203 patients received milk free of charge and one patient was supplied with eggs. 12 patients who were advised to sleep alone were provided with beds complete with bedding. Mattresses, bedding or bedsteads were loaned to 41 patients.

Clothing was granted to 181 patients or their immediate relatives—less than half last year's total.

Requests for nursing requisites continued to diminish and loans were made to only 13 patients.

Co-operation with other Departments.—Once again thanks are due to many departments for their co-operation and help.

Home help was provided for 25 patients of whom 4 were new patients. A total of 16 tuberculous patients were recommended for convalescence, 14 of them to the Convalescence Section and 2 to the Leeds Workpeople's Hospital Fund; of these patients, 4 men and one woman went to Shoreston Hall. During the last few years it has become much easier to arrange convalescence for tuberculous patients and even sputum positive patients are now accepted.

The Care of Children Department provided accommodation for the children of 6 women patients who were unable to look after them at home. Five of these mothers were admitted urgently to sanatorium and the other had come home from sanatorium not yet well enough to care for an energetic toddler.

One child, admitted to the Hollies when his mother went into sanatorium, was found to be unsuitable; the Children's Officer accepted him in a children's home.

The Chief Education Officer was asked to help in clothing the brothers and sisters of two small patients whose needs had been met by the Special Services Committee. To ease the strain on a housewife with a family of school children, a request was made for the children to have meals at school. An application for school meals free of charge was made on behalf of a widowed patient in financial difficulty. The Chief Education Officer was asked to admit to school twins before their fifth birthday.

The Housing Department helped two patients who were being rehoused under slum clearance but could not afford the cost of removal.

The Welfare Services Department helped many patients. For example, visits were arranged for two elderly patients living alone; furniture was provided for 4 patients who were rehoused from furnished rooms; an elderly patient in hospital was advised to give up his home as he was no longer fit to live alone and the Welfare Services Department kindly arranged the sale of his furniture.

The Blind Welfare Department was asked to provide accommodation for two patients on the Blind Register. One is on the waiting list for admission to a hostel; the other could not be accommodated and an application for a vacancy was made to a Group Captain Cheshire Home.

One patient was admitted to Roffey Park Rehabilitation Centre which takes patients suffering from emotional instability and personality disorders. Clothing and a suitcase for this patient were provided from statutory and voluntary sources. This patient is still at Roffey Park.

Four applications for invalid chairs were made to the Ministry of Pensions and claims were made for patients who were eligible for increased allowances on medical grounds.

During the year 129 patients were referred to the Ministry of Labour for help in finding employment. 18 patients were recommended for courses at the Industrial Rehabilitation Unit and 5 for a Government Training Course. It has become the usual practice

to send patients to an Industrial Rehabilitation Unit for assessment before a specific training course is decided on and few patients are now sent direct to a training course. Two patients already in employment were advised to place their names on the Disabled Person's Register and one, employed at the Remploy Factory, became fit for work in open industry and was referred to the Ministry of Labour for assistance in finding suitable work.

The special Remploy Factory started a new line of production early this year and took on new employees for the first time since 1953. Of 27 names submitted, 10 were accepted and 12 are on the waiting list. Of the remainder, one withdrew his application, two were found fit for open industry, one found other work and one was considered permanently unsuitable for Remploy.

The National Assistance Board provided help in cash and kind for numerous patients. Thanks are due to the Board's officers for the sympathetic consideration and help that they have given to tuberculous patients. During the year 183 applications for allowances were made, 6 of them on behalf of patients in sanatoria. Of the remaining 177, 60 were newly notified patients, 9 were patients who had been notified earlier but had not at first been in financial need, 12 were patients who had relapsed and 55 were newly discharged from sanatoria. Three patients were referred for extra nourishment, 5 for the ordinary scale of allowance and 33 for a variety of other reasons. Included in this last group were married women whose husbands were temporarily unemployed; patients not fit for full-time work and eligible for supplementation of a part-time wage; patients required to work a fortnight before drawing their first wage and patients awaiting admission to a training course.

During the year, 24 applications were made to the Board for grants outside the ordinary weekly allowance. These were for beds and bedding, clothing, coal, rent, removal expenses, home help, dentures and a fireguard.

Voluntary Organisations.—Thanks are due to the Leeds Association for the Care of Consumptives which helped many patients during the year.

295 applications were made to the Case Committee, mainly for grocery orders of which 213 were granted or renewed. Help was also given in meeting the cost of fares to visit patients in sanatorium,

bills for heat and light and wireless licences and repairs which are a heavy item in a small budget but which bring bed-fast or house-bound patients much pleasure. Rehousing entails expense and the Association helped many patients by paying for removal, providing curtains and floor covering and supplying other necessities such as gas cookers and garden tools. Other grants covered rate arrears, clothing, bills for food, house repairs, convalescence and holidays.

The Women's Voluntary Service helped throughout the year to clothe necessitous patients and their families. St. George's Crypt helped with clothing for one patient and 11 applications were made to six Service Funds and two charitable organisations for help with debts, occupational therapy, removal costs and a loan for starting-up in business.

Non-Tuberculous Patients.—The number of non-tuberculous patients referred for social help is increasing. The special help provided for the tuberculous patient by statutory bodies and after-care associations is not available for sufferers from other chest conditions but such assistance as can be obtained is sought by the Almoner on their behalf. For example, application was made to the National Society for Cancer Relief for help for a young man in his thirties with a wife and family. A weekly grant for extra nourishment was promptly made. During the year 9 non-tuberculous patients were referred to the National Assistance Board, one for an allowance and four for supplementation of allowance to provide extra nourishment. One patient in sanatorium was referred for a pocket money allowance and another for a family allowance; one patient was recommended for a clothing grant and one for extra fuel.

During the year 17 patients were admitted to convalescent homes through the Convalescent Section. One child was admitted to a day nursery.

The Welfare Services Department was asked to provide hostel accommodation for three elderly patients.

During the year 11 patients were referred to the Ministry of Labour and one to the Youth Employment Bureau for help with employment problems. One patient was recommended for a course at the Industrial Rehabilitation Unit, one for the ordinary Remploy Factory and the others for immediate work.

The Ministry of National Insurance was asked to assist three patients to claim pneumoconiosis pensions and one to claim retirement pension.

Voluntary bodies were approached several times for help in meeting pressing needs. Regimental Funds paid an outstanding electricity bill and rent arrears and made a grant to provide extra nourishment during the winter months. A charitable organisation met an electricity bill and paid for a supply of coal. Hire purchase payments were reduced after an approach to the firms concerned and patients were helped with clothing for themselves and their families by the Women's Voluntary Service, and out of second-hand stocks at the Clinic.

Work in Sanatoria.—The Senior Almoner paid 17 visits to Middleton Sanatorium and 8 to Scotton Banks Sanatorium. Both these sanatoria now admit non-tuberculous patients who do not usually stay as long as the tuberculous and do not require as much assistance. On behalf of both tuberculous and non-tuberculous patients in both sanatoria, help was obtained with clothing from the Hospital Management Committee, allowances from the National Assistance Board for the patient or his family and grants for fares and pocket money from the Leeds Association for the Care of Consumptives. Advice was given on housing, maternity benefit and various personal problems. One elderly patient was helped to sell his home, with the co-operation of the Welfare Services Department, and a younger patient to make a new one when she was ready for discharge.

General.—The Senior Almoner gave the usual lectures to health visitor students during the year and also spoke to groups of student nurses from Killingbeck Hospital on the social work of the Chest Clinic. Visits were received from a Japanese doctor studying tuberculosis services, a Siamese student and a student from the Social Studies Department of Leeds University. The Senior Almoner was invited to attend a meeting of the Working Party on Social Work under Local Authorities when this visited Leeds under the chairmanship of Miss Younghusband.

At Christmas, the Leeds Association for the Care of Consumptives made their usual generous gift of 50 loads of coal bricks, which were distributed to elderly and infirm patients. A bequest from a former patient provided Christmas cakes for 12 elderly couples or patients living alone. The gifts from the "Yorkshire Evening Post", "Yorkshire Evening News" and the Leeds Workpeople's Hospital Fund were particularly generous and enabled toys and books to be given to the record number of 300 children from 120 families. It was good to end the year with the knowledge that so many patients had been helped to share in the joys of Christmas by the kind thoughts of their more fortunate fellow citizens.

Disinfestation and Disinfection

DISINFESTATION AND DISINFECTION

BY

C. W. LAMB, M.R.S.H., F.R.E.S.,

Disinfestation Officer

Personal Disinfestation.—Treatment for all types of verminous conditions of the human body is available at the specially designed Disinfestation Clinic at the Stanley Road Centre.

This building, adapted in 1954, has at one end of it a clinic for the treatment of *pediculus capitis*. Three patients can be treated at the same time: an insecticidal hair lotion is first applied to the hair followed by shampooing. Whilst still wet, the *capitis* eggs are removed by a thorough combing and discriminate snipping of the hair, the latter is then dried under an industrial type of hair dryer and finally given a dressing of insecticidal brilliantine, which remains toxic for several days and safeguards against re-infestation from eggs that may have been overlooked during treatment.

A total of 1,409 persons, mainly school children and contacts were given 1,417 treatments during the year, in close collaboration with the School Medical Service. In connection with these cases, 923 homes were visited, advice given and arrangements made for treatment by the two visitors, both of whom are qualified nurses.

The other end of the building has been adapted for the treatment of *pediculus corporis*, *phthirus pubis* and scabies. Patients enter the "infested" or "dirty" side to be treated according to their condition, and leave the centre on the "clean" side. *Corporis* cases, after undressing, step under a hot shower to remove lice from the body surface, then into a hot disinfectant bath to complete the treatment. After undressing, the patient's clothing is taken by the attendant and placed into a small Thresh gas-fired disinfestor. After steam disinfestation, the clothing is returned from the clean side of the disinfestor through a serving hatch into the bathroom. Similar treatment is given to persons infested with pubic lice, with the exception that the pubic hair is shaved thereby ensuring a complete removal of the eggs.

Scabies cases are only given hot baths if the infestation is severe and long standing or if the body is dirty. Benzyl benzoate emulsion is applied to the body, paying special attention to the infested areas of the skin. All direct contacts of the patient should attend for treatment, otherwise re-infections are likely to occur within a short time.

The treatment for all these conditions is supervised by a State Registered Nurse who is assisted by one male and two female attendants.

Cases of *pediculus corporis* infestation numbered 265 and by far the greater proportion of these were vagrants. An increasing number of persons, coming within the definition of the National Assistance Act, 1948, Section 47, in need of care and attention and usually in a dirty and verminous condition were cleansed and disinfested before their admission to hospital or to South Lodge, under the care of the Welfare Services Committee. For this purpose, the bathroom has been specially adapted to deal with chronic and orthopaedic cases which are conveyed to the Centre by ambulance. In all cases the homes, 74 in number, and common lodging houses were visited, contacts treated and personal and bedclothing subjected to steam disinfestation.

During the year, 92 persons were treated for scabies, 62 homes were visited and 77 contacts received prophylactic treatment. There were 6 cases of *phthirus pubis*.

The Clinic building also contains a lecture room which can accommodate thirty students. Instruction is given by the Disinfestation Officer to trainees from the Department of Preventive Medicine of Leeds University and to student trainees taking courses in connection with the Institute of Housing, the Royal Society of Health and the Yorkshire Training College of Housecraft. Lectures and visits to the Centre are also arranged with various associations, church organisations and others.

General Disinfestation.—Disinfestation by insecticidal spray treatment of verminous slum dwellings and their contents and the prophylactic spray treatment of the Corporation houses about to be tenanted by families from clearance areas has now been in operation since 1952. In relation to bed bug infestation spray treatment has been found far superior to the dangerous and expensive

HCN removal method as a means of preventing the extension of verminous conditions from the slum house to the new Corporation house. On previous occasions this report has stressed the fact that the HCN fumigation process, whereas most effective in dealing with verminous furniture, does not impart to the articles so fumigated the slightest degree of lasting toxicity as is the case with the modern synthetic insecticidal sprays. The HCN process is twice as expensive as the spray treatment, which when applied to structure and furniture is entirely successful and gives immunity against re-infestation for a period of at least six months. More important still, the use of the HCN fumigation process in connection with upholstered furniture can only be safely carried out under the most stringent conditions; special attention must be paid to aeration and to the final chemical testing of the upholstery for residual HCN gas before returning the furniture for use by the tenant.

The HCN plant, however, is still in use. It has been reduced to half of its original capacity, leaving four container vans housed in the upper half of the existing HCN shed. The lower half is converted into an excellent garage for disinfestation vehicles and it is hoped, in the near future, to add a stores over the garage for general storage purposes. The plant specialises in the treatment of woodworm infested furniture and timber and in the disinfestation of moth-infested textiles and carpets. It is now policy, when investigating verminous conditions in slum houses prior to the transfer of the slum tenant to the Corporation house, to pay equal attention to woodworm infestations as to those of the bed bug. Where woodworm is found in the furniture of such tenants, the HCN procedure is used; the container gas van collects from the slum house and after treatment delivers at the Corporation house. Subsequent inspections have proved that the woodworm condition has been eradicated and the danger of an extension to the structural timber of the Corporation house removed.

All other works of disinfestation are carried out by the use of synthetic insecticides. Benzene hexachloride solutions are prepared in bulk at the Disinfestation Centre. The original mixing plant has been replaced by a special commercial type of mixer, using a flame-proof electrical unit. The mixer has reduced the mixing time considerably, the process is not complicated and effects a saving of nearly 50 per cent. in the cost of the ready mixed proprietary

brands of insecticides. DDT in kerosene or in the form of a 10 per cent. dust is also extensively used. The type and form of insecticide employed naturally depends on the type and degree of infestation and solvent sprays are preferred to water emulsions when conditions allow.

A major programme of disinfestation is carried out on behalf of the Housing Department in the rehousing of slum dwellers in Corporation houses. In this connection 1,654 dwellings were subjected to spray treatment, half of which number were bug-infested slum dwellings with their contents and the other half Corporation houses waiting to receive the slum dwellers. In addition, 56 slum dwellings were found to contain woodworm-infested furniture and the HCN removal process was applied in each case.

The scheme as in the previous year worked well. The speeding up of the transfer of tenants from the verminous slum houses to the Corporation houses considerably reduced the time the latter stood empty, avoiding the loss of rent to the Housing Department. This speeding-up was only possible with the co-operation of the Resident Housing Managers of the widely separated estates in the city and the direct contact made with the in-going tenants. All of these were visited, the houses inspected for verminous conditions and arrangements made for the disinfestation of the dwelling and its contents and the prophylactic spray treatment of the Corporation house which was to receive them. In this connection alone 1,602 visits were made.

The cost of the scheme is £4 10s. for each bug-infested case rehoused, which includes the spraying of both the slum and Corporation houses together with the contents of the slum house and the disinfestation by steam of bedding. Woodworm-infested cases cost £6, which sum includes the fumigation process and the removal of the furniture.

The scheme has been most successful. No re-infestations of the Corporation houses sprayed during the year to receive verminous tenants have occurred, but 34 Corporation houses, not so sprayed during the previous twelve months became infested or re-infested by bed bug mainly because of the introduction into the house of some second-hand article of furniture or bedding which had been

purchased in a verminous condition privately or from some second-hand dealer. In all 221 Corporation houses had to be disinfested: in addition to the 34 bed bug infestations already mentioned, there were 48 cases of cockroaches, 12 of fleas, 124 treatments for woodworm (all in various stages of a three-year programme of control) and 3 cases of clover mite.

Disinfestation by steam is carried out by using two Thresh Low Pressure Current Disinfestors which are eminently suitable for the destruction of vermin and their eggs without unduly harming the bedding or clothing which harbour them. During the year, in connection with rehousing, 13,726 articles, mostly bedding, were disinfested, whereas in connection with re-infestations 440 articles were treated.

Apart from this specialised work of disinfestation in relation to the re-housing process, insect pest control of Corporation dwellings has been maintained. Working in close collaboration with the Clerks of Works of the Housing and Works Departments and the Resident Housing Managers of the various estates, infestations by woodworm, cockroaches, steam-fly, red spider, etc., have been controlled and in most instances wiped out completely. Requests for woodworm disinfestation have continued to increase steadily; the first signs of a commencing infestation are usually reported promptly. The latter occur usually on estates which have trees left growing on them or which are bounded by woods and plantations. Dead timber in a plantation soon becomes infested and a favourable wind can very easily send an emerging swarm to the adjoining estate of houses, where they enter by open windows, air grates or under the eaves. The advice of the Department is sought regarding the type and extent of infestations and the control measures to arrest and prevent further extensions. Subsequently when works of maintenance are commenced by the Works Department, spray treatments are carried out at the same time and appropriate arrangements made for subsequent applications of insecticide twice yearly for a period of not less than three years.

Other Corporation Departments have taken advantage of the facilities offered by the Disinfestation Section. Woodworm control of properties owned by the Waterworks Committee in the Washburn Valley and at Kirby Malzeard has continued. The infestation by death watch beetle and powder-post beetle at Swinsty Hall appears

to be under control, no further signs of the powder-post beetle having been seen. There are, however, still sporadic outbreaks by the death watch beetle in the extensive roof space of the Hall and two applications of insecticide have been given during May and August to maintain control over this beetle, the life cycle of which can extend over a period of five years.

Outbreaks of woodworm in school furniture at various schools and precautions at the furniture store have been dealt with on instructions from the Education Committee.

Close collaboration with the Welfare Services Department in connection with the bug, flea or lice infested dwellings occupied by aged persons after their removal to hospital has been maintained. The dwelling and its contents are subjected to spray treatment, bedding disinfested by steam and articles of no commercial value destroyed. In a large number of cases, where the aged person becomes a permanent inmate of an institution, the verminous contents of the dwelling are removed for HCN treatment at Stanley Road and from there, on the instructions of the Welfare Officer, to the salerooms for disposal by auction. The verminous dwelling is cleared and spray treatment applied before the keys are returned to the owner or his agent.

In addition to contract work for various Hospital Management Committees for cockroach, steam-fly or ant control, quite a large amount of work has continued for the R.A.F., the Ministry of Supply, for private firms, property owners and the general public. These works include the disinfestation of verminous bedding, woodworm-infested furniture and structures, bug-infested dwellings, cockroach and steam-fly infested hotel and restaurant kitchens, and control of and precautions against infestations by clothes moths.

Insect pest control is essentially a public health service. Most insects either transmit disease or interfere with the personal comfort of the individual; the house fly is known to transmit such diseases as dysentery, typhoid fever, summer diarrhoea, tuberculosis and possibly many others. Cockroaches and steam-fly contaminate food stuffs and make them unfit for human consumption, and bed bugs, lice and scabies cause sleeplessness, give rise to skin infections and generally lower the resistance of the human being.

Disinfection.—Routine disinfection following the more common infectious diseases was discontinued some years ago but is still available on request. By far the greater number of disinfections carried out has been for cases of tuberculosis, either where a patient has gone to a sanatorium or where he and his family have been rehoused or a death from the disease has occurred. Including these and all other cases, during the year 389 houses were visited, 389 rooms were disinfected by formaldehyde, 2,393 beds and 17,808 articles were disinfected by steam. Additional visits were made at the request of the Chest Clinic in connection with the loan of bedding including blankets, sheets, pillow-cases, etc., or for the distribution of bedsteads and mattresses to tuberculosis patients. For these purposes 107 houses were visited and 403 articles which had been on loan were disinfected before return to store for further use. As in previous years, a small amount of disinfection was carried out for other local authorities ; packing straw, jute mats and bristles were sterilised for export purposes as specified by the Board of Trade and the import regulations of the countries of destination.

Steam disinfection is confined to one high pressure steam disinfector and is used for bacteriological disinfection in connection with infectious diseases. The two low pressure current steam disinfectors are mainly used for disinfestation of verminous bedding.

Formalin is the main chemical disinfectant used. Generated in aerosol form by special machines, producing 4 micron size aerosols, the formalin (in appropriate dilutions) behaves as a vapour with considerable powers of penetration. The process is eminently suitable for space and surface disinfection and, when used in an airtight chamber, with a favourable relative humidity of 60 per cent., complete disinfection of articles, not suitable for submitting to steam disinfection, is achieved. This method of disinfection is still very much in its infancy, but rapid strides have been made in its application in Switzerland : one of the aerosol machines was designed in that country and experiments in its use are continuing with the collaboration of the Public Health Laboratory Service.

Transport.—The scheme for the distribution of food supplements (cod liver oil, orange juice and National Dried Milk) and stores to infant welfare centres and day nurseries was continued during the year ; one stores van was maintained for this purpose and completed 8,586 miles.

Under the Medical Requisites Loan Scheme, the Section undertook the collection and delivery of invalid chairs, spinal carriages, mattresses, etc., which are stored at the Centre. During the year 277 visits were made and each chair and carriage was thoroughly cleansed and disinfected, inspected and repaired where necessary before distribution.

During the year the Disinfestation Section undertook the removal of furniture and equipment from those day nurseries and district nurses' homes which were closed to Rutland Lodge and Stanley Road pending the construction of a new store at the Centre when conditions are favourable.

Public Conveniences.—The Disinfestation Section is responsible for the general maintenance and cleanliness of the city's conveniences. There are, in all 75 unattended conveniences for males and females situated in 55 locations throughout the city; 30 of these locations are within a mile and a half radius from the city centre, 13 are between one and a half and two miles and 12 are over two miles. The locations of the unattended conveniences comprise 34 for males only, one for females only and 20 for males and females. There are 54 conveniences for males and 21 for females.

There are 5 attended conveniences in the centre of the city, three for males and females, one for males only and one for females only. There is also a convenience for both sexes at Crossgates which is attended for certain hours of the day only.

Cleanliness of the unattended public conveniences is controlled by daily visits made by three squads, each consisting of two men equipped with a motor vehicle carrying suitable flushing and cleansing appliances. During the year the three squads totalled 23,466 visits to the conveniences, both male and female. About 75 per cent. are cleansed each weekday and, in addition, those situated in the centre of the city are cleansed on Sundays; the remainder are visited on alternate days.

Maintenance work at unattended public conveniences is facilitated by these daily visits of the flushing squads, who report defects and structural damage to the Charge Officer concerned. These reports are checked and the necessary repair work is ordered from the Works Department, a scheme which avoids unnecessary delay in getting repair work executed, an important factor in the

satisfactory maintenance of public conveniences. The 5 attended public conveniences are visited by the Charge Officer regularly and the same procedure adopted.

A special squad of two men, equipped with a motor vehicle and both trained by the Street Lighting Department in the maintenance of automatic electrical switchgear and emergency repairs, inspects daily and maintains when necessary the lighting at all public conveniences. This service prevents accidents when lighting fails, especially important when a public convenience is below ground level and can only be reached by a flight of steps. Thus during 17,677 visits paid, 270 lighting repairs and 423 emergency repairs, in connection with defective cisterns and dangerous fittings, were effected.

The cost of repair work in attended public conveniences caused by fair wear and tear increased to £37 13s. 10d. (£9 1s. 2d. in 1956) and no wilful damage was reported.

In unattended public conveniences the cost of repair work by fair wear and tear amounted to £62 4s. 2d. (£79 4s. 11d. in 1956), and the cost of wilful damage repairs increased to £83 9s. (£43 0s. 11d. in 1956). This wanton destruction in unattended conveniences is mainly confined to water closets and their fittings such as pedestal basins, cisterns, lead piping and seats. Electric light fittings, especially globular covers, appear to be the target for small boys and the amount of pilfering of electric lamps is alarming. To counter this damage to globes and lamps, the fitting of armour-plated bulwark fittings has continued to give excellent results, especially where substituted at conveniences where the incidence of hooliganism is known to be high.

The fitting of lock boxes of the penny-in-the-slot type has proved to be an excellent deterrent against wilful damage which can be attributed to a large extent to children, and it may be policy to extend this precaution especially in those areas where in the past damage has been particularly heavy.

Public Sewer Flushing.—Owing to the heavy demand made upon this service ever since its inauguration in 1950, the Health Committee agreed to supplement the service by a second squad of two men. These two squads of drainage flushers are equipped with motor vehicles and necessary appliances, such as flushing hose, drain

rods, drain plugs, smoke machine and a Mono Sludge Pump mounted on a trailer. These squads work under the direction of public health inspectors in connection with (i) the cleansing of public sewers under the Public Health Act, 1936, Section 23, (ii) the testing of drains in the investigation of unsatisfactory drainage conditions of a building as required under the Public Health Act, 1936, Section 39, (iii) the removal of stoppages from drains and (iv) the pumping-out of flooded cellars, inspection chambers, etc.

The facilities of this service were extended to other Corporation Departments, especially to the Housing Department, the City Engineer's Department, the Markets Committee, the Parks and Cemeteries Department, to private contractors and property owners. Contract work for the regular cleansing of drainage systems of private schools, including the Leeds Girls' High School, several banks and some of the larger firms has been undertaken. Whereas the cost of cleansing of public sewers is a charge upon the Health Committee, the cost of all other works of cleansing, investigation and pumping has been recovered from the ordering bodies.

The demand for this specialised work is continually increasing ; indeed there are some days when the time-tables of the squads are completely booked several days ahead. Because of its nature, some of the work can only be carried out on Sunday mornings or after business hours, therefore some overtime is unavoidable. During the year 852 public sewers were cleansed (783 in 1956) and the number of private drains tested and/or cleansed amounted to 28,063 (17,162 in 1956).

By the establishment of this service the Health and Housing Committees have effected a tremendous saving in the cost of public sewer cleansing and other drainage investigations ; more important still, there has also been tremendous saving in time, stoppages having been cleared in most instances the same day that they have been brought to the Section's notice.

(Report of Work on following page)

DISINFESTATION CENTRE—REPORT OF WORK, 1957.

1. DISINFESTATION.

A. Work carried out at the request of the Housing Department :

(a) Rehousing :—

No. of dwellings (and contents) disinfested by insecticide	1,710
No. of articles disinfested by steam ..	13,726
No. of Visits	1,602

(b) Re-infestations :—

No. of dwellings (and contents) disinfested by insecticide	221
No. of articles disinfested by steam ..	440

B. Work carried out for other sources :

No. of premises (and contents) disinfested by insecticide	816
No. of articles disinfested by steam ..	2,590
No. of articles disinfested by H.C.N. ..	2,614

2. DISINFECTION.

	City	Outside Authorities
No. of houses visited	389	2
No. of rooms disinfected	389	—
No. of beds disinfected	2,393	102
No. of articles disinfected	17,808	22
No. of bales of straw disinfected	..	168
No. of schools or parts of schools disinfected against influenza	..	64

3. TRANSPORT.

(a) Medical Loan Scheme :—

Visits made for collection and delivery of invalid chairs, spinal carriages, etc.	277
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(b) Chest Clinic :—

No. of houses visited	107
No. of bedsteads, beds, etc., delivered ..	403

(c) Delivery Service :—

Miles run for Babies' Welcomes and Day Nurseries in connection with deliveries of stores..	8,586
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DISINFESTATION CENTRE—REPORT OF WORK, 1957 *Continued.*

4. PUBLIC CONVENIENCES.

	No. of visits	No. of flushings :—	
		Drains	W.C.'s
Visits paid for cleansing purposes	23,466	34,996	25,993
	Total	Lighting	Repairs
Visits paid for inspection of lighting and emergency repairs	17,677	270	423

5. PUBLIC SEWERS.

No. of public sewers cleansed	852
No. of private drains tested and cleansed	28,063

6. TREATMENT OF VERMINOUS PERSONS.

(a) *Pediculus Corporis* :—

No. of cases visited	74
No. of baths provided	265

(b) *Pediculus Capitis* :—

No. of cases visited	923
No. of persons treated	1,409
No. of treatments involved	1,417

(c) *Scabies* :—

No. of cases visited	62
No. of persons treated	92
No. of contacts treated	77
No. of re-infections	18

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National Health Service Act 1946

- Section 22 CARE OF MOTHERS AND YOUNG CHILDREN
 - Section 23 MIDWIFERY
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 - Section 28 PREVENTION, CARE AND AFTER-CARE
 - Section 29 DOMESTIC HELP
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SECTION 22

CARE OF MOTHERS AND YOUNG CHILDREN

BY

CATHERINE M. GRAY, M.B., Ch.B., D.P.H.,

Assistant Medical Officer of Health for Maternity and Child Welfare

Maternity and Child Welfare Centres.—It is again satisfactory to be able to record that the number of expectant mothers attending the ante-natal clinics, and the number of children under 2 years attending the infant clinics, has increased during 1957. There has also been an increase in the total number of attendances. However, the number of children between 2 and 5 years attending the clinics continues to decrease in spite of special "toddlers" sessions still being held at several clinics.

The fact that the Leeds Health Authority continues to act as the central booking agency for maternity hospitals in the city is largely responsible for the attendances at the ante-natal clinics being maintained.

Welfare Foods.—National dried milk for infants, and vitamin preparations for expectant and nursing mothers and children under five years were still supplied at the clinics.

Educational Work.—Progress has been made in health education in the clinics with additional demonstration material and visual aids prepared by the health visitors. Dental hygienists have continued to visit the clinics in rotation to advise mothers in the proper care of their own and their children's teeth. Through the co-operation of the Yorkshire Electricity Board, cookery demonstrations have been held at a number of clinics and these have been much appreciated by mothers attending the clinics.

With the permission of the Chief Constable, members of the Women Police visited the clinics in connection with a campaign on road safety with special reference to the care of the toddler.

Leeds Babies' Welcome Association.—Members have continued to give their regular and valuable help in the clinics as voluntary workers; assisting with routine clerical work; in some clinics

undertaking the weighing of the children, and organising play corners for toddlers ; being responsible for the sale of knitting wool, baby clothes and fireguards ; and at all times helping to maintain a friendly atmosphere in the clinics.

Ante-Natal Clinics.—By 31st December, 1957, there were 204 ante-natal sessions held per month at 25 clinics. The number of expectant mothers attending the clinics during the year was 9,585, an increase of 151 ; of this total 6,569 were new cases. The total number of attendances at all clinics was 36,283, an increase of 2,721. In addition to the ante-natal sessions at which the clinic doctor was in attendance, there were 103 sessions per month attended by municipal midwives.

Post-Natal Clinics.—There have been 21 post-natal sessions per month held at 9 clinics. The number of mothers who attended was 1,053 with a total number of attendances of 1,179. The majority of mothers now attend the hospital or their private doctor for post-natal examination.

Infant Clinics.—There were 29 clinics in operation at the end of the year at which 243 sessions were held per month. The number of infants under one year attending the clinics for the first time was 6,054, an increase of 447. During the year 3,676 children between one and two years attended and 3,713 children between two and five years, an increase of 169 and a decrease of 202 respectively, making the total number of children attending 13,443 with 91,040 attendances made, an increase of 4,334 in the total attendances. The number of children on the register at all clinics on 31st December, 1956, was 14,934 ; with 6,779 new children registered 6,905 names removed of children who were 5 years old, had defaulted, died or left the district, the number on 31st December, 1957, was 14,808, a decrease of 126 on the previous year.

Consultative Infant Clinics.—The arrangements with the University Department of Paediatrics and Child Health continued, and consultative infant clinics were held each month at three infant welfare centres. The total number of attendances of children under five years was 181.

Physiotherapy.—The number of children referred during the year for examination by the Orthopaedic Consultant was 124, a decrease of 17 on the number referred in 1956. Five cases were referred to hospital.

Artificial Sunlight.—This was given to 409 children during the year and the total number of attendances at the six infant welfare centres was 7,464. These figures show a decrease of 115 in the number of children attending compared with those for 1956. This would seem to indicate that the number of children attending the infant clinics who required to be referred for sunlight therapy is still decreasing.

Remedial Exercises.—A total of 356 children attended for exercises with 3,544 attendances, a decrease of 18 in the number of children compared with 1956.

Ante-Natal and Post-Natal Classes.—These exercise classes for expectant and nursing mothers were held at 14 welfare centres. The value of these classes and of the explanatory talks given by the physiotherapist is much appreciated by the mothers who attend. There were 489 mothers who attended ante-natal classes and 14 attended for post-natal exercises. The total number of attendances was 2,291 and 50 respectively.

Eye Defects.—*Children classified as blind or partially blind.*—There were 4 children under five years on the register on 31st December, 1956. There were 6 children notified as blind or partially sighted during 1957; 2 children reached the age of 5 years, leaving 8 names on the register on 31st December, 1957. Of these, 1 child remained in a Sunshine Home and 2 children found also to be mentally retarded remained under the care of the Mental Health Department.

The arrangement has continued for any child under 5 years attending the infant welfare clinics who is found to have a squint or other eye defect, to be referred to the ophthalmic consultant at the school clinic, thus providing continuity of supervision and treatment for such cases. During 1957 the number of children seen by the consultant for the first time was 156; in addition, 394 children re-attended for further consultation, making a total of 550 children examined. This is a decrease of 176 on the number seen in 1956.

Care of Premature Infants.—Between 1st January, 1957, and 31st December, 1957, there were 667 live births notified of infants weighing $5\frac{1}{2}$ lbs. or less at birth. Of these, 546 were born in hospital or nursing home in the city, and 121 were born at home. The number of those born at home who were removed to hospital was 17 and the remaining 104 were nursed at home.

The number of infants who died within 24 hours of birth was 53 ; of these, 6 were born at home and 47 in hospital or nursing home.

Of the 104 infants nursed at home 43 received special nursing care by the premature baby nurses.

As well as nursing those infants born at home, the special nurses undertook the after-care of 428 infants requiring further nursing care following discharge from the Leeds Maternity Hospital, St. James's and St. Mary's Hospitals. The total number of home visits to these cases was 6,456.

Wyther Hostel (*Mother and Baby Home*).—On 31st December, 1956, there were 3 mothers and 4 infants in the home. During the first 9 months of the year 32 mothers and 44 infants were admitted ; of these, 7 mothers were admitted for ante-natal care and 18 infants were admitted for a period of segregation after B.C.G. vaccination. These infants were admitted without the mother. The figures for 12 months in 1956 were 28 mothers and 32 infants.

Those discharged during 1957 were 35 mothers and 48 infants. Of these, 19 mothers were able to keep their babies, 7 babies were placed with a view to adoption through the Care of Children Department, 4 babies were admitted to residential nurseries, and 18 B.C.G. cases discharged home. There were 9 mothers discharged home or to hospital before the birth of the baby who were not re-admitted. By decision of the Health Committee this home was closed on 12th October, 1957.

All cases of girls expecting illegitimate babies attending the ante-natal clinics are referred to the social worker for investigation and, since the closure of the Local Health Authority home, those requiring admission to a mother and baby home have been referred to one of the three voluntary homes in the city. After-care is also carried out in cases where this is possible.

Convalescence.—During 1957, 81 mothers and 85 children under five years were referred from the Maternity and Child Welfare Clinics and sent for a period of convalescence.

Day Nurseries.—There was still considerable demand for the admission of children to the day nurseries, and there was a waiting list of children for admission to 7 nurseries. Owing to the lessening of demand for admission of children to East Street, the nursery was

closed on 31st May, 1957. Priority was still given to children according to social or economic circumstances necessitating the mother going to work, or, in a small number of cases, where the mother was dead or had deserted the family. A few special cases were admitted on medical grounds. Except in the special cases mentioned above, no child attended a nursery unless the mother was in regular full-time employment.

The following table gives details of the accommodation and attendances at the day nurseries during the year :—

Nursery	No. of places	Attendance per 5 day week		Total Number of Attendances
		1st Jan. to 31st May	1st June to 31st Dec.	
East Street	35	*18.4	..	1,984
Sheepscar	35	26.0	29.6	7,261
Quarry Hill	50	38.8	42.8	10,641
Blenheim Lodge ..	50	45.9	45.4	11,991
Harehills	50	43.9	40.2	10,841
Hunslet Hall	50	36.0	40.2	9,924
Armley	55	42.8	47.0	11,584
Low Road	55	43.1	39.0	10,696
Meanwood	55	43.4	37.2	10,221
York Road	70	50.4	44.6	11,944
Burley Park	75	56.4	48.4	13,306
1st Jan. to 31st May ..	580	445.1	414.4	110,393
1st June to 31st Dec. ..	545	76.7%	76%	

* East Street closed 31st May, 1957

Adoption Act, 1950.—The liaison between the Care of Children Department and the Health Department has been maintained. Notice is received of all children under five years placed with a view to adoption through the Children's Officer and the health visitor visits the child in the home of the prospective adopter each month. A report is sent to the Children's Officer on the care and progress of the child.

Medical examination of the children is carried out at the infant welfare clinics and blood tests are taken prior to the child being placed for adoption.

In this connection 48 mothers and 77 children had blood tests carried out at the Central Clinic. The comparative figures for 1956 were 55 and 73 respectively.

Nurseries and Child Minders Act, 1948.—Under this Act applications were received during the year from 3 persons for registration as child minders, and 2 additional day nurseries were registered.

The following table shows the number of registered daily minders, the number of registered nurseries and the permitted number of children minded :—

	Child Minders	Nurseries
No. on register at 31st December, 1956	26	5
Permitted No. of children at 31st December, 1956	152	160
No. registered during the year ..	3	2
No. of applications refused	1	..
No. of registrations cancelled	9	..
No. on register at 31st December, 1957 ..	20	7
Permitted No. of children at 31st December, 1957	130	205

Registered Nursing Homes.—The following table gives particulars of registered nursing homes in the city :—

REGISTERED NURSING HOMES.

	Maternity		Maternity and General			General		Total		
	No. of Homes	No. of Beds	No. of Homes	No. of Beds		No. of Homes	No. of Beds	No. of Homes	No. of Beds	
				Mat'y	Gen.				Mat'y	Gen.
Existing at 31st Dec., 1956 ..	4	66	1	2	32	7	79	12	68	111
Registration approved during 1957	..	..	..	..	..	..	..	..	..	..
Registration cancelled or surrendered during 1957 ..	*1	4	..	..	..	..	..	1	4	..
Existing at 31st Dec., 1957 ..	3	62	1	2	32	7	79	11	64	111

* Nursing Home closed—4 maternity beds.

Nurses Act, 1943—Part II.—*Agencies for the supply of Nurses.*—Under this Act only one nursing agency applied for registration in 1957 and a licence was issued.

Children Neglected or Ill-treated in their Homes.—Since 1950 a Committee comprised of representatives of the Public Health, Education, Housing, Welfare Services, Probation, Police, Mental Health and Care of Children Departments and inspectors of the N.S.P.C.C. has met regularly each month to consider significant cases of child neglect or ill-treatment. In each case the needs of the family as a whole are considered and agreement reached as to how local services, both statutory and voluntary, can best be applied to meet these needs.

During 1957, 35 new cases involving 118 children were considered and each case referred to the statutory or voluntary body best fitted to deal with the problems. In addition, 26 cases previously notified were re-considered.

The following table shows the number of cases notified and the notifying agencies :—

Notified by	Number of cases						
	1951	1952	1953	1954	1955	1956	1957
Department :							
Probation	2	..	1	2	2	2	..
N.S.P.C.C.	44	21	6	10	4	3	3
Police	24	5	8	2	6	7	1
Health	11	12	4	6	..	6	21
Housing	7	5	2	2	2	2	2
Care of Children	1	5	5	11	1	10	2
Education	7	3	4	4	3	2	1
Welfare Services	1	..	..	..	1	..	1
Miscellaneous	7	1	2	1	..	..	4
Totals	104	52	32	38	19	32	*35

* Plus 26 cases reconsidered

The following table shows some of the contributory factors affecting the cases considered and emphasises the complexity of the problems confronting the case workers.

Case	Broken homes	Incomplete homes	Cohabiting	Low intelligence	Selfish and Indifferent	Shiftless and feckless	Household mis-management	Housing problems	Dirty homes	Abandoned	Ill-treatment	Unwanted child	Ill health (M = Mental)	Total
1	..	..	..	1	..	1	1	..	..	..	..	..	M	4
2	..	..	..	..	..	..	..	..	..	..	1	..	M	2
3	..	..	..	..	..	..	1	1	..	..	..	..	..	2
4	..	..	1	1	..	..	1	..	1	..	..	..	..	4
5	..	..	..	..	..	..	1	1	1	..	..	..	..	3
6	..	..	..	1	..	1	1	..	1	..	..	..	..	4
7	..	..	..	1	..	1	..	1	..	..	..	..	..	3
8	..	1	..	..	1	1	..	..	..	..	..	..	..	3
9	..	..	..	..	..	..	1	..	..	..	..	..	M	2
10	..	..	..	..	1	1	..	1	..	..	..	..	..	2
11	..	..	..	..	..	..	1	1	..	..	..	..	1	3
12	..	..	..	1	..	..	1	..	1	..	..	..	..	3
13	..	..	1	..	1	1	1	..	..	..	..	..	..	4
14	..	..	..	1	..	1	1	..	..	..	..	..	1	4
15	..	1	..	..	..	..	..	1	..	..	..	..	1	3
16	..	..	..	..	..	1	1	..	1	..	..	..	..	3
17	..	..	..	..	..	1	1	..	1	..	..	..	M	4
18	..	1	..	1	..	..	..	..	..	..	1	..	..	3
19	..	..	1	..	..	..	..	1	..	..	..	..	..	2
20	..	..	1	..	..	..	..	..	..	..	..	..	M	2
21	..	1	..	1	..	..	..	..	..	..	..	..	..	2
22	..	..	1	..	..	1	1	..	..	1	..	..	..	4
23	..	1	..	1	..	..	..	..	..	..	..	..	..	2
24	..	1	..	1	1	1	..	..	..	..	..	..	..	4
25	..	..	..	..	..	1	1	..	1	..	..	..	..	3
26	..	..	..	..	..	..	1	1	..	..	..	..	..	2
27	..	..	1	..	1	1	1	..	..	..	..	..	..	4
28	..	..	..	..	1	..	1	..	..	..	..	..	..	2
29	..	1	..	..	..	..	..	1	1	..	..	..	..	3
30	..	..	..	..	1	1	1	..	..	..	..	..	..	3
31	..	1	..	..	1	..	..	..	..	..	..	..	..	2
32	..	..	..	..	1	1	..	1	..	..	..	..	..	3
33	..	..	..	1	1	..	1	1	..	..	..	..	..	4
34	..	1	..	1	..	..	..	..	..	..	..	..	1	3
35	..	1	..	..	1	1	..	..	..	..	..	..	..	3
Totals ..	9	1	9	9	11	16	19	10	8	1	2	..	9	104

Dental Care of Mothers and Young Children (Report of Mr. D. E. Taylor, L.D.S., Senior Dental Officer).— During the year the number of sessions devoted to mothers and pre-school children was equivalent to 1.05 dental officers.

The investigation into the dental condition of three-year old children was continued. The examinations and treatment were done, as previously, at the Central School Clinic by the Senior Officer.

The following is a summary of the findings, the figures in brackets are those of last year.

Number examined	..	..	..	228	(280)
Number free from caries	..	..	..	144	(162)
Number treated by filling	..	..	..	18	(31)
Number treated by extraction	..	..	..	8	(14)
Number defective but not treated	..	..	..	58	(68)

The following types of malocclusion were noted :—

Distortion of arches by thumb and finger sucking	32	(32)
Distortion of arches by dummy sucking	.. 14	(10)
Hereditary malocclusions :—		

Superior protrusion (4 slight)	.. 14	(4)
Overcrowding	 2	(1)
(these cases of overcrowding were due to deep overbite and imbrication was confined to the lower fronts).		

Malocclusions where no cause could be found :—

Open bite	.. .. .	— (3)
Cross bite	.. .. .	— (2)
General overcrowding	..	1 (1)

In one case of superior protrusion, all the lower teeth were lingual to the upper teeth ; in another, the upper arch was Gothic in shape and the lower arch Norman (a fairly frequent abnormality).

Treatment for filling was only offered to children whose parents were keen and the condition of the teeth was such that successful conservation was probable.

The problem met with in treating the pre-school child is the same as in the school child. Treatment must be limited to the amount the child will tolerate and still be willing to return for more. In most children tolerance to treatment diminishes if the visits are too frequent ; refusal is serious if it leads to neglect of the second dentition.

At present, the incidence of caries in the majority of children is such that treatment at three-monthly intervals would be necessary to keep dental decay of the temporary teeth in check. It is questionable if such a policy with a mounting rate of refusals would give

better results at school leaving age than limiting the conservation of the temporary teeth to a small percentage of selected cases and treating the rest by extraction of painful and grossly carious temporary teeth.

Thanks are due to Professor T. Talmage Read who continued to give advice on the diagnosis and treatment of difficult cases.

WORK OF DENTAL OFFICERS

	Expectant Mothers	Nursing Mothers
No. of inspection invitations	6,035	..
No. of inspection attendances	1,196	..
No. found dentally fit	245	..
No. accepted treatment	819	..
No. refused treatment	132	..
Total No. of teeth filled	362	186
Type of filling given :—		
Synthetic porcelain	95	55
Cement	1	..
Amalgam	..	..
Lined Amalgam	281	135
Total fillings given	377	190
Total No. of teeth extracted	1,537	689
" " " persons fitted with dentures	174	..
" " " other treatments	26	13
" " " local anæsthetics	614	360
" " " general anæsthetics	114	40
" " " treatment sessions	408	..
" " " inspection sessions	62½	..
" " " attendances for treatment ..	950	1,286
" " " persons made dentally fit ..	238	258

WORK OF ORAL HYGIENISTS

	Expectant Mothers	Nursing Mothers
No. of attendances	296	5
" " scalings	296	5
" " treatment sessions	64¾	
" " hygiene lecture sessions	192½	
" " individuals treated	169	3
" " made dentally fit	169	3

NUMBERS PROVIDED WITH DENTAL CARE

	Number examined	Number found to need treatment	Number treated	Number made dentally fit
Expectant and Nursing Mothers	1,196	951	819	596
Children under 5 years ..	424	258	228	161

FORMS OF DENTAL TREATMENT PROVIDED

	Expectant and Nursing Mothers	Children under 5 years
Extractions	2,226	244
Anæsthetics :—		
Local	974	..
General	154	130
Fillings	567	92
Scalings or scaling and Gum Treatment ..	301	..
Radiographs	7	..
Dentures provided :—		
Complete	231	..
Partial	71	..

SECTION 23**MIDWIFERY**

BY

CATHERINE M. GRAY, M.B., Ch.B., D.P.H.,

Assistant Medical Officer of Health for Maternity and Child Welfare

AND

DOROTHY HUMPHREYS, S.R.N., S.C.M.,

Supervisor of Midwives

The demand for hospital accommodation for confinement seems to increase. Indeed there is a growing tendency for young mothers to consider that their National Insurance payment entitles them to a maternity bed in hospital.

The number of maternity beds is insufficient to meet this demand and it has been necessary for the hospitals to refuse a considerable number of applications made through the maternity and child welfare clinics. No mother is refused a hospital bed if there is any medical, obstetric or social reason necessitating a hospital confinement. Home circumstances are always investigated before any mother is asked to arrange a home confinement.

In the domiciliary service there is good co-operation between the private doctor and the midwife. The scheme whereby the midwife ensures that the patient has booked a doctor for maternity medical services continues to work satisfactorily. This arrangement prevents the doctor being called in to an emergency knowing nothing of the patient, and such cases are now a comparatively rare occurrence. Even when the doctor is himself responsible for the ante-natal supervision of the patient, use is being made of the local health authority clinics, patients being referred for blood tests to be carried out and to take advantage of other facilities, such as ante-natal exercise classes, available at the clinics.

Midwifery Training—Part II.—The training school at Redcourt Hostel is becoming increasingly well known, as is shown by the number of applicants from Part I training schools in different parts of the country. The fact that the whole of the six months' training

is taken in district work is found by the pupil midwives to give them greater experience in normal midwifery and a wider knowledge of social conditions. This is particularly valuable to the midwife who intends to practise district midwifery.

The training course is under the supervision of the midwifery tutor who is superintendent of the training school. There were 26 domiciliary midwives who were approved by the Central Midwives' Board as teachers of pupil midwives; 2 of these were approved during the year. The teacher midwives work in close liaison with the midwifery tutor. They instruct the pupils in their practical work, each midwife being responsible for training one or two pupil midwives.

During the year 41 pupil midwives completed their training. Of these, all passed the Part II examination of the Central Midwives' Board at the first attempt. In addition, 2 midwives were seconded from York for three months' training on the district.

On 31st December, 1957, there were 24 pupil midwives in training.

Notified Births.—The total number of births of Leeds cases notified in the city during the year was 8,706. Of these, 5,985 or 68·7 per cent. took place in hospitals or nursing homes, and 2,721 or 31·3 per cent. were domiciliary cases. The comparative figures for 1956 were:—hospital cases 70·1 per cent. and home confinements 29·9 per cent.

The number of domiciliary births notified by midwives acting as midwives was 2,333 + 2 private or 85·7 per cent. of the total domiciliary births.

Notification of Intention to Practise.—The number of midwives who notified their intention to practise as midwives during the year was 168, of whom 8 left the district and one ceased to practise in order to take the health visitors' training course, leaving 159 midwives practising in the city on 31st December, 1957. Of these, 102 were employed in hospitals, 14 in private nursing homes, 2 as private midwives, and 41 were employed by the local authority.

Only 6 midwives notified their intention to practise as maternity nurses during the year.

Domiciliary Midwifery Service.—The average number of midwives employed by the local health authority in domiciliary work throughout the year was 41. During the year 5 midwives resigned

and 2 new appointments were made. On 31st December, 1957, there were 40 domiciliary midwives, including the four midwives undertaking the nursing care of premature babies. Owing to staff shortage, 4 additional midwives were employed part-time. The number of domiciliary births attended by municipal midwives during the year was 2,699 or 31.0 per cent. of the total births notified in the city. The comparative figures for 1956 were 2,488 or 29.7 per cent.

The following table gives comparative figures for the work done by the domiciliary midwives during 1956 and 1957 :—

	1956	1957
Ante-natal visits	18,885	21,832
Attendance at birth { As midwife ..	2,163	2,333
As maternity nurse ..	325	366
Post-natal visits	63,308	59,717
Bookings { As midwife	1,934	2,012
As maternity nurse	704	883
Attendances by patients at midwife's clinics	26,585	30,120
No. of patients who had gas/air or Trilene analgesia	2,319	2,527
	=93.2%	=93.6%

Of the 59,717 post-natal visits paid by the midwives in 1957, 673 were to patients discharged home from hospital before the 7th day of the puerperium.

Analgesia.—All municipal midwives are qualified to administer gas/air and Trilene analgesia; gas/air apparatus and Trilene apparatus are available for their use. Every expectant mother who books the services of a municipal midwife is given the opportunity of having analgesia at her confinement unless her doctor certifies her as medically unfit. Of the 2,699 patients attended at home by municipal midwives 2,527 or 93.6 per cent. were given either gas/air or Trilene analgesia. Trilene has very largely taken the place of gas/air analgesia.

Maternity Outfits.—A sterilised and sealed packet containing all dressings required at the confinement, as specified by the Ministry of Health, is provided by the local health authority for every case

attended by a municipal midwife. Outfits are also available for domiciliary confinements attended by private midwives or maternity nurses and may be obtained at the maternity and child welfare clinics. During 1957, 329 outfits were supplied in this way.

Medical Assistance.—During the year 1,018 notifications were received of having called in medical assistance for domiciliary midwifery cases where a doctor was booked for maternity medical services. There were 11 notifications for emergencies under Section 14 of the Midwives Act, 1951, compared with 24 for the previous year, and only 3 claims for payment for attendance were received from medical practitioners.

Supervision of Midwives.—The domiciliary municipal midwives were interviewed each week at the Health Department by the lay supervisor. The supervisor made 274 visits of inspection to the midwives in their homes and at their cases, and in addition paid 251 special visits.

SECTION 24

HEALTH VISITING

BY

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Assistant Medical Officer of Health for Maternity and Child Welfare

AND

JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London),

Superintendent Health Visitor

Mothers and young children have been visited by the health visitors as in previous years. Selectivity in visiting, and concentration on those families which most need supervision, is reflected in the continued decrease in the total number of visits paid during the year. Children placed for adoption and those in the care of registered daily minders have also been supervised, and health visitors have continued to take part in the practical training of medical, health visitor and other students.

The following table gives comparable figures of the work done in 1956 and 1957 :—

	1956	1957
Notified births, and children under 5 years	106,422	103,489
Children over 5 years	Not Specified	298
Stillbirths	153	137
Deaths of children under 5 years ..	200	177
Ophthalmia Neonatorum	*36	*59
Expectant Mothers	2,755	3,026
Adoption visits	*282	*306
Child Minders	*253	*228
Day Nursery admissions and absentees	*137	* 95
Tuberculous households	6,678	6,387
Housing reports	116	396
Research Enquiries and adults not classified	7,285	5,641
Home Help investigations	35	13
Ineffectual visits	16,103	15,983
Total visits for the year ..	139,747	135,547

* included in visits to children under 5 years.

The provision of an increasing supply of visual aids and demonstration materials has attracted the interest of mothers at the clinics and whenever possible health visitors have undertaken group teaching during clinic sessions.

Further information regarding the work of the health visitors is given in this Report in the sections relating to Health Education and Care and After-care.

THREE CASE HISTORIES OF PROBLEM FAMILIES

FAMILY "A"

by

BARBARA J. BOLLON

Health Visitor

The family consists of :

Mr. A, aged 30 years

Mrs. A, aged 27 years

Child, aged 1 year, 11 months

Previous History.

Mr. A. Family background poor. Lived in a Council House with parents and three younger brothers. The mother always worked and consequently the boys had much of their own way and were well out of control before leaving school. At the age of 10 years he had been before the Juvenile Court and was under supervision by the Probation Officer for two years. On leaving school he never kept a job for long, had several occupations and seemed very unstable. At 17 years he was referred to a psychiatric out-patient department for observation but was discharged without treatment. There is no real evidence of mental disorder in his family background which seems to have been fully investigated.

At the age of 18 years he joined the Regular Army and from then until his demobilisation in January, 1954, there is no record of instability or misconduct of any kind and he left the Army with an excellent record. It seemed that under discipline away from his home background Mr. A did very well.

Mrs. A. Background better than that of her husband. Fifth child of a family of eight children. Lived in a large suburban house, well-furnished and very clean. A good standard of living maintained by her parents. Always had sufficient to eat and well cared for. Mrs. A depends today on her home without which she might not have been able to carry on. Mrs A, like all her brothers and sisters, attended school regularly and obtained a scholarship to the City High School. They all attended church and Sunday school. Mrs. A did not leave school until 16 years of age. Her brothers and sisters obtained positions in schoolteaching, nursing and the Civil Service. Mrs. A decided to work as a shop assistant in a large chain store in the city. She seemed very happy there and completed over nine years service.

1953.

Mr. and Mrs. A were married at the local church. They had known each other just over a year, and most of their courtship was by correspondence. Mr. A continued in the Army and Mrs. A worked and saved her money, hoping to get a house. Mrs. A's mother allowed them to have two rooms in her house, which the couple furnished most tastefully. During Mr. A's Army service there do not seem to have been any difficulties arising from their marriage.

In 1954 Mr. A was demobilised from the Army. Mr. and Mrs. A apparently became dissatisfied with living with Mrs. A's parents and obtained a one-room flatlet in another part of the city. Mrs. A continued to work but disharmony commenced when Mr. A was on demobilisation leave, as he did not intend to help in the flat.

Mrs. A noticed that at this time her husband showed a temper which she had never experienced before and she began to be frightened of him. Occasionally he struck her, something that had never happened in her home life between her parents.

In May, after being violently attacked by her husband she was admitted to hospital with a threatened miscarriage. She remained in hospital for three months. Meanwhile Mr. A attended a rehabilitation centre for training as a mineworker. The flat was given up and Mr. A returned to live with his mother-in-law.

August, 1954.

Mrs. A discharged from hospital, looking very pale and overwrought. Her husband had now settled down to work as a miner.

September.

Mrs. A admitted to hospital with toxæmia of pregnancy until baby son was born on 13th October, 1954.

During this time Mr. A was behaving badly. He was out of work and spent all the money they had saved up for the baby. He had sold most of the furniture and the pram. The health visitor discussed the situation with the general practitioner who suggested he should attend the psychiatric clinic again.

In the course of making arrangements for Mrs. A's discharge from the hospital with the baby, the almoner at the hospital informed the health visitor that Mr. A had not visited his wife in hospital, as the result of which she was very distressed.

Mr. A now admitted to a mental hospital as a voluntary patient and remained in hospital until January, 1956. Mrs A and child progressed very well with outside help and her mother and family gave her considerable assistance.

Mr. A was discharged from hospital and resumed his occupation in another district. His wife and child went to live in a hostel with him.

September, 1956.

On 21st September the family returned to the city. Domestic conditions very poor, the accommodation consisting of two very poorly furnished rooms, very cold and damp. No coal in the house. Electricity and gas cut off. No facilities for cooking. No food in the house and no money to buy any. Health visitor got in touch with National Assistance Board, and Mrs. A went down to collect some money.

Mrs. A at this time ill-clad, very dirty and looking ill. Child—small, pale and thin, not very suitably clad wearing rubber shoes, trousers and jersey, no vest or socks. Skin rough and spotty. Poor muscle tone. Tendency to bluishness of lips. Not very active for his age. Not toilet trained completely. Gave the appearance of being undernourished. Under weight.

The family seemed to get a meal very infrequently. Mr. A was out a great deal, his wife not knowing where. At this time receiving psychiatric treatment again. Not working.

22nd September, 1956.

Mrs. A brought child to Infant Welfare Centre. Child weighed 21 lbs., height 30".

Seen by doctor. Medical examination suggested heart lesion. Referred to paediatric unit at local hospital. Application made for two weeks convalescence at a seaside home for mothers and children. Family fitted up with clothing ready for convalescent home.

Telephoned Ministry of Labour, spoke to Welfare Officer regarding work for Mr. A. Frequent visits to family by health visitor.

24th September, 1956.

Owing to cancellation of a booking at convalescent home, visit made to Mrs A to arrange at short notice for her to take this place. Sent off to convalescent home. Mr. A missing from home.

Persuaded Mrs. A's mother to tidy home while they were away.

25th September, 1956.

Message from psychiatric unit. Mr. A found wandering in another town, having stolen watches in his possession. Remanded in custody.

10th October, 1956.

Case before Court. Mr. A agreed to return to Army.

14th October, 1956.

Mrs. A already looking better now her husband was away. Stated to be eating and sleeping better.

Child seen at hospital, diagnosed congenital heart. To await admission for investigation, meanwhile having sunlight and extra nourishment. Seems at this stage to have started asking for father. Advised Mrs A about this, suggested sending information about child's progress to his father in an attempt to invoke a response from him.

Mrs. A approached health visitor regarding not having any more family at present. Appointment made at Family Planning Association for an interview.

2nd November, 1956.

Mr. A discharged from the Army medically unfit. Put under Probation Officer with a view to work being found.

Mrs. A again harassed by domestic situation. Advised to see own doctor who has full information concerning the family. Child happy to have his father back. Seemed attached to each other in their own way.

3rd. November, 1956.

Supply of clothes obtained from Women's Voluntary Service. Mrs. A—2 dresses, 2 vests, 2 prs. knickers, 2 cardigans and 2 pyjamas. Child—2 cardigans, 2 pants, 2 vests, 2 pyjamas, 2 trousers and 2 blouses.

29th November, 1956.

Mrs. A obtained the key to a small back-to-back house, consisting of one living-room and two bedrooms, in a very nice friendly neighbourhood. This has boosted up the couple's morale and they both seem happier at the prospect. Mr. A working fulltime and seemed delighted with his job.

1st December, 1956.

Mrs. A looked very tired, but happy. Now settled in the house. Mr. A has wallpapered and painted everywhere. Home very clean, but sparsely furnished. Obtained some furniture from Salvation Army, consisting of table, two easy chairs and a bed for child. Everything running very smoothly at the moment.

1st January, 1957.

Mr. A misbehaving again. Not working. National Assistance obtained. Appointment arranged for psychiatric outpatient's department. Psychiatric Social Worker visited as Mr. A has not kept his appointment. Own doctor in attendance.

Child making good progress under treatment.

6th January, 1957.

No change in domestic situation. Suggested second period of convalescence for Mrs. A and child.

22nd January, 1957.

Mrs. A and child at convalescent home.

Visited to see how Mr. A was managing alone. Home clean. Cooking a meal. Conditions satisfactory and Mr. A working shifts.

19th March, 1957.

Child admitted to hospital for heart investigations.

Telephoned hospital. Child settled down well. Mr. A awkward about this, threatening to take his child's discharge, and acting in a highly emotional and excitable manner.

20th March, 1957.

Mr. A violent again. Struck his wife.

6 a.m. N.S.P.C.C. officer called in by a neighbour, thinking the child was there. Mrs. A very distressed and frightened—advised.

18th April, 1957.

Child home again. Heart lesion inoperable. Mr. A working again regularly. Mrs. A in very poor spirits. Tried to cheer her up, suggested she cleaned the house which is getting very dirty again.

14th May, 1957.

Mr. A missing from home again. Mrs. A advised to seek legal aid. Husband has been away from home for four nights.

Child seemed to have missed his father badly.

14th June, 1957.

Mr. A found by police. Taken into custody for stealing bicycles. Mrs. A in tears and very hysterical. Sent for the doctor who put her on a course of treatment. Called to see Mrs. A's mother and asked her to come and see her daughter. She very tactfully had been staying away for a while, having been blamed for interfering. Very distressed to hear about her daughter, and came immediately to console her.

16th June, 1957.

Hearing at Court. Mr. A sent to prison for four months.

17th June, 1957.

Mrs. A looking much brighter this morning. On National Assistance grant for herself and child. Home dirty at time of visit. Suggested she cleaned and did some washing. Her mother prepared to help her. Has already bought a tin of paint for the cupboards. Long chat with her, believes she is pregnant. Arrangements made to attend ante-natal clinic, discussed possibilities of this and promised to help all we could. Urged to bring child to clinic for weighing and more free Virol.

21st June, 1957.

Mrs. A attended Town Hall for legal advice. Would like a separation order. This suggested on the grounds of desertion. Unable to obtain one until her husband is released from prison. Rather anxious about this as it means Mr. A can return to this house.

5th July, 1957.

Home clean and tidy, much more comfortable.

Grant of £5 obtained from Prisoners' Aid Association which has been spent on curtains and a rug. Womens' Voluntary Service have supplied some bedding and a coat for Mrs. A.

Mrs. A has booked her bed at the local maternity hospital. Expected date of confinement 1st January. Arrangements made with Care of Children Department to take child into a residential nursery while mother in hospital.

1st September, 1957.

Mrs. A looking very well. Taking vitamins and milk regularly. Busy knitting for the expected baby. Seems to be coping well, but anxious as to the future. Child attending clinic. Seems to be doing much better, gaining weight, toilet trained, less nervous, no bed wetting or nervous disorder noted.

Summing up.

This family have had to live from day-to-day under sense of insecurity due to father's behaviour. Mrs. A has shown some courage and toleration of her circumstances and, with the help of such people as (i) the Health Visitor, (ii) Probation Officer, (iii) Psychiatric Social Worker, (iv) her mother, (v) the vicar, and (vi) neighbours and friends, she has succeeded in continuing to look after her husband and son, under stress and strain. She has shown love for her husband and given care for the child. She has tried to make her marriage work. She has had to realise after four years that there is no clear cut solution to her problem and that she is faced with either continuing on the same lines bringing another child into the world to live under the same conditions or breaking up her marriage.

The future of this family is not plain to see. Much will depend on the husband.

FAMILY " B "

by

BARBARA SIMMONS

Health Visitor

At the time of first contact with this family there was one child—now there are nine. In 1954, when there were four children in the family, they came to live in a three-bedroom Council house. Mrs. B was at this time 25 years old and her husband a year older. He has worked steadily for over 10 years, earning an average of £12 weekly.

During the last two years the family has been under continuous supervision in order to sort out money difficulties and to give practical instruction to help in the home.

The family has lived in different houses on the same estate and on two occasions neighbours have reported the family to the N.S.P.C.C. for neglect, but the Inspector has not found it necessary to continue supervision.

In 1957 they were faced with eviction from their house due to non-payment of rent. In an effort to prevent eviction the health visitor made a personal visit to the Housing Department to plead their cause and to see to the payment of arrears. Regular rent is now paid by the health visitor on behalf of the family. A similar situation arose over grocery bills quite recently and the health visitor is trying to help the family over this latest hurdle.

Mrs. B has had yearly pregnancies. Efforts to get her to a Family Planning Association session are always too late. Her babies thrive up to the stage of weaning but fail to progress satisfactorily beyond this because their feeding is irregular. They become neglected and marasmic until about 14 to 15 months old when they seem to make rapid progress.

Three of the children have been taken by the health visitor to the clinic (with the mother's permission) for malnutrition and neglect. All three were admitted to hospital on these occasions.

In an effort to relieve the domestic pressure on Mrs. B, who again was pregnant, and to give her an opportunity to devote more time to the twin baby boys, admission of the three schoolchildren

to the Hollies for one school term was arranged. The parents were diligent in gathering together and preparing clothes according to the list required and have visited the children regularly.

To summarise, the family is happy and there is harmony between parents and between parents and children. The children are not planned but are made welcome when they arrive.

Money is not plentiful and what there is needs careful planning. Mrs. B needs driving hard to make her keep to essentials.

Meals are regular and, on the whole, good if rather slipshod. Each child has its own cot or bed, though there is no other furniture in the bedrooms.

The father is easy-going, but a mild man and helps with the children.

Constant supervision and kindly interest will be sufficient to keep this family out of the problem group. Further advice will be needed as the children grow up.

FAMILY " C "

by

JOAN POLLARD
Health Visitor

The family consists of husband and wife, aged 42 and 30 years respectively, and 5 children. The eldest child is 7 years of age and the youngest 8 months.

There was a further child in 1954 who died of congenital heart disease at age 3 weeks. Mrs. C is again pregnant and her expected date of confinement is 1st September, 1957.

Previous History of Parents.

Mr. C was born in a small village in Pakistan. He received no formal education and at the age of 16 years left his home to work as a ship's fireman. He married a white woman in London when he was 20 years old and there were two children of this marriage. They are now adults. He left his wife after about four years but there is no legal separation or divorce, the wife being unwilling on religious grounds, and for a number of years there has been no contact. Mr. C is a good workman but, due to his lack of education, can only take

simple labouring work. He is still completely illiterate. He is devoted to his children but has a violent and jealous disposition towards Mrs. C and regards her more as his property than his "wife." He does not trust her with money, for which attitude there is some justification.

Mrs. C was born in this country, her father being a dock labourer. The first seven years of her life were uneventful until her mother's death. Her father, who was always inclined to drink, appears to have deteriorated at this period and the children had a very unsettled way of life with little or no proper supervision. When Mrs. C was nine years old her father remarried a very poor type of woman and Mrs. C came under the attention of the Courts. She was eventually sent to an approved school from which she absconded several times, ending up in a Borstal institution. Her treatment there must have been very good as she always refers to this period as a very happy one ; when her time there was up she did not want to leave and begged to be allowed to remain on the domestic staff. On her discharge, the probation officer found her a job at a hospital as ward maid. Here, however, she was very miserable and eventually she left and went home to her father and stepmother. The conditions in this home appear to have left much to be desired and after a very short time she ran away to London and obtained work as a maid in a home for coloured families. The pay was poor and one day she robbed her employer of £50 which she spent. She was arrested, charged with theft and sentenced to a short term in prison. On discharge she again went to live at her father's home and obtained work in a dockside cafe. At this time she frequently met Mr. C on leave from his ship. Her father began making improper advances to her and instead of reporting the matter to the police she turned to Mr. C. Mr. C told her marriage was impossible but offered to give up his life at sea and make a home for her. She agreed. They set up house in a small back-to-back property and their first child was born about one year later. With her third pregnancy she developed Rh. atypical antibodies and her fourth and subsequent babies required exchange transfusions. At this stage in the association violent quarrels began to arise between them in which she threatened to leave and frequently did so, always, however, returning after 24 hours. Mr. C never gives Mrs. C a proper housekeeping allowance as she has no sense of money value ; instead he buys

food and clothing and gives her £2 per week and her family allowance for her day-to-day expenses. Despite this she is always in debt and any money he gives her to pay a bill, e.g., the rent, she fritters away and does not tell him, so he reacts with physical violence. This family is greatly in debt. A further problem for the children is due to the fact that Mr. C has his own religion and Mrs. C was born and brought up in a different religion and there is great friction as to the children's religious teaching.

The family are now living in a three bedroom Council house. It is simply but adequately furnished and always clean and neat. The family is well nourished.

August 1956.

First Week. Two children are recovering from whooping cough which started six weeks ago. Under treatment from general practitioner and appear to be progressing satisfactorily. Mrs. C found to be seven months pregnant, arranged for her to attend ante-natal clinic to book hospital bed and receive care. Very unwilling to do this as she says she doesn't want the baby.

Second Week. Mrs. C left home twice over the weekend for 24 hour periods. The children were left alone in the house and the police warned her that if this occurred again she might be charged with neglect. Mrs. C was taken by car to hospital for her booking and blood tests. An abnormality was found and it was arranged that she should enter hospital at the 32nd week. Mrs. C refused to have proper treatment.

Third and fourth weeks. Arrangements made for two older children to go to a convalescent home and the younger two to enter residential nursery while mother is in hospital. Some baby clothing given to help with layette. Mother much more co-operative and family life more settled.

September, 1956.

Father and children found to have scabies. Treatment arranged at local cleansing centre. Mother blamed father saying that he had brought the disease home after gambling in Indian houses. Taken by car to keep ante-natal appointment at hospital and admitted last week in September. Children went to homes as previously arranged.

October, 1956.

Labour induced on 14th October and mother delivered of 5lb. 10 ozs. girl. Baby very jaundiced and exchange transfusion performed. Mother also required transfusion. Lactation very poor and failed completely on 12th day. Mother discharged on 14th day. Baby kept in hospital.

November, 1956.

Older children returned home ; the cost of their care amounted to £4 4s.—this is to be paid at 2s. 6d. per week. New baby discharged home on 5th November to care of premature baby nurse. Weight 6lbs. General condition good. Mrs. C to attend Family Planning Clinic after her post-natal examination.

December, 1956.

Post-natal examination satisfactory. Children looked after by health visitor while mother kept Family Planning appointment.

January, 1957.

An uneventful month when satisfactory progress appeared to continue. There is still a great deal of debt and advice has been given on management of this.

February, 1957.

One child has discharging ear. Mother advised to seek medical treatment. The older children are well and appear happy but domestic situation is going downhill again with repeated quarrels between parents and still a great deal of debt. The home, however, is always clean and tidy and the family well nourished and adequately clad. Discussed possible social worker guidance with both parents who refused to consider this. Advice given on family budget. Mr. C much more able to cope with money than Mrs. C. Emotional difficulties still present in the family.

March, 1957.

On 2nd March Mrs C, accompanied by one of the children, arrived at the Health Department at 9 a.m. in great distress. She stated that she had left home the previous day at 1 p.m., removing one of the children from the school playground and leaving the other children alone in the house. She said she had 'phoned her husband's employers and asked them to send him home. She had broken into the gas meter and also taken her husband's watch. This money and the watch she wanted the health visitor to return. She had spent

the night sleeping with the child on the floor at a friend's house. Neither she nor the child had had any food. Mrs. C and child taken to see probation officer to see what could be done and enquiries made as to safety of the other children. At first the local gas company were willing to overlook the offence as the money was returned intact, but it was discovered that Mr. C had called in the police and the children had been taken into the care of the local authority. Mrs. C was then charged with deserting her children and robbing the gas company and remanded in custody until 11th March. The child meanwhile remained in the care of the health visitor until a place could be found for her in a children's home later in the day. Mrs. C appeared in Court on 11th March, 1957, and was given a conditional discharge. On 12th March the children were returned home and appeared no worse for the upset. A long talk with both parents revealed £17 of debt and due to the upset Mr. C had lost his job. Contacted the Coloured People's Society to see if any help could be obtained to straighten out the debts and also to see if Mr. C could be taught to read and write, as it was felt a more settled job such as a tram conductor would be better than labourer's work. No financial help available but lessons arranged at the local College of Commerce. Mr. C still without work despite every effort to obtain it by probation officer, labour exchange and health visitor. Family income at this time £6 os. 6d. national assistance, plus 38s. family allowance.

April, 1957.

Mrs. C three months pregnant. Invited to ante-natal clinic to book. Mr. C still out of work and considerable domestic disharmony. Summons issued against Mrs. C for debt. Health visitor interviewed manager of firm who agreed to withdraw summons if small weekly payments of 2s. 6d. were made. Mrs. C taken to ante-natal clinic and bed booked for her in local hospital. Mrs. C very anxious to be sterilized.

May, 1957.

Job obtained for Mr. C. He is still having his lessons but making very poor progress. He is much happier and more settled now he is working. The domestic situation is a little less tense and the children are well. Debts are gradually going down and the Council of Social Service is helping with the budgeting problems.

June, 1957.

Mrs. C again refusing ante-natal care and leaving family for odd nights. Mr. C on one occasion gave her a thrashing, resulting in a badly bruised arm. She does, however, refuse to allow a complaint to be made to the police. Health visitor talked with Mr. C who blames his wife. He has promised to behave better in the future. Talked to Mrs. C and told her the consequences of deserting her children again. She promises to be sensible and not spend nights away again. Taken to hospital for ante-natal appointment and informed she will be admitted on September 2nd.

July, 1957.

Domestic situation in a state of armed truce, but both parents behaving well to children. Debts are being gradually reduced and no further ones incurred so far as is known. Older children well and happy. Both parents are against vaccination and immunisation though these have been thoroughly explained to them. Mrs. C receiving proper ante-natal care and is collecting clothes for the new baby. Arrangements have started for the older children to again go for convalescence and the three young ones to go to a foster mother while Mrs. C is in hospital.

August, 1957.

Domestic situation unchanged. Older children due to leave for convalescence and the foster parents will receive the children on Mrs. C's admission to hospital.

Conclusions.

This family is always going to require a great deal of moral support and supervision if the members are to live as useful citizens. Mrs. C's problem goes a long way back to her own childhood and she will require a great deal of support until she learns to accept responsibility and be truthful. The hopeful feature is the children; they are healthy and intelligent and if they can be protected from the unhappy atmosphere of this home they should grow into satisfactory adults.

HEALTH VISITOR TRAINING

BY

FLORENCE M. MAWSON, S.R.N., S.C.M., D.N., D.P.A.,

Health Visitor Tutor

At the beginning of the year there were 13 student Health Visitors under the Leeds City Council Scheme taking part in the University Training Course, having registered at Leeds University in the previous October and completed one term of the academic year. There were altogether 31 students in the class for the year; the remaining students were from nearby local authorities with the exception of four overseas students, two from Thailand and the others from Jamaica and Ghana, who were quite an asset in discussion groups in spite of language difficulties.

Living Accommodation.—Arrangements were made for 18 students to stay in the Nurses' Home at Meanwood Park Hospital on payment of a sum agreed with the hospital authority. This was a very satisfactory arrangement as it has always been difficult to find comfortable lodgings at a price the students can afford and every year there are some members of the class who cannot live at home whilst taking the course.

Lectures.—The lecture course which is provided by the University is necessarily designed to cover the syllabus of the Royal Society of Health but includes suitable additions which are of educational value and encourage a broader outlook.

Tutorials and Practical Work.—These are arranged by the tutors. The class is divided into groups of six and each group spends the time allocated to practical work in the first and second terms alternately in Leeds and some of the county districts of the West Riding of Yorkshire.

Each student keeps a day-book in which she records her practical experience and many of these will no doubt prove to be of value to their owners after qualification. The students are taken out on the various districts with health visitors, public health inspectors, mental health and welfare workers and child care visitors. They attend a session at the Stipendiary Magistrate's Court in Leeds and visit Remand Homes, Approved Schools and Children's Homes of

various types. Handicapped children have a special appeal and very great interest is shown in the visits to Special Schools for deaf, physically handicapped and educationally subnormal children. Visits to occupation centres for mentally defective children are made to teach the effective use of careful training and suitable occupations.

Several hospitals are visited including Stanley Royd, Meanwood Park and Pinderfields. These are only a few of the total number of visits made, all of which are enhanced by the talks given by the departmental officers in charge and the kindness and interest shown by so many of the people who take part in training the health visitor students.

Social Activities.—There is little time for extraneous activities but, during the year, the students maintained the activities of the Health Society including the production of the usual annual edition of the "Health Society Journal." A reunion of past and present students was held in the University Union Building and this was very well attended.

Examination.—The examination of the Royal Society of Health was held in June, 1957, and 12 of the 13 Leeds students passed at the first attempt. Most of the students considered that they had benefited from the breadth of scope of the course. Comments from students are welcomed at the end of the course. A new course will commence on 1st October, 1958, for which there are already 36 registrations, 9 of which are Leeds Assisted Students.

SECTION 25

HOME NURSING

by

EDITH G. MEADOWS, S.R.N., S.C.M.

Superintendent Home Nurse

In September Miss J. Corcoran, the Superintendent Home Nurse for the Northern half of the city, reached retirement age. She has not been replaced and the supervision of the District Nursing Service for the city as a whole has been entrusted to Miss E. G. Meadows, thus completing the Health Committee's policy of integration of the Home Nursing Service. Miss E. M. Boulton has continued to be in charge of the arrangements for loan equipment.

SOURCES OF CASES 1955-1957

	1955	1956	1957
General practitioners	10,581	6,753	7,728
Hospitals	1,665	1,791	2,340
All Sections of the Public Health Department	909	2,586	317
Direct application and/or relatives, etc.	42	37	166
Totals	13,197	11,167	10,551

CLASSIFICATION OF CASES, 1955-1957

Classification	1955		1956		1957	
	New Cases	Visits	New Cases	Visits	New Cases	Visits
Medical ..	9,598	206,898	8,093	216,844	7,870	232,746
Surgical ..	2,011	35,298	1,819	34,676	1,666	33,165
Children under 5 years ..	789	5,992	726	6,225	643	5,369
Pneumonia ..	274	2,612	253	2,440	197	1,854
Tuberculosis ..	453	22,641	191	11,596	109	6,258
Maternal complications ..	49	357	74	659	61	341
Ophthalmia neonatorum ..	3	42	1	8	1	2
Infectious diseases ..	20	102	10	71	4	25
Totals	13,197	273,942	11,167	272,519	10,551	279,760

There has been a decrease of 616 new patients on the previous year but an increase of 7,241 visits.

Of these 10,551 patients, 5,033 have received injection treatment of various types necessitating 106,081 visits.

During the year 3,583 patients aged 65 years and over were nursed and received 161,216 visits compared with 4,271 patients and 149,421 visits during 1956.

The following table gives the number of patients nursed aged 65 years and over :—

		Patients	Visits
1955	..	.. 4,405	136,434
1956	..	.. 4,271	149,421
1957	..	.. 3,583	161,216

Tuberculous patients nursed numbered 109 and received 6,258 visits as against 191 and 11,596 respectively in 1956.

		Tuberculous Patients	Patients Nursed Visits
1955	..	.. 453	22,641
1956	..	.. 191	11,596
1957	..	.. 109	6,258

The nursing staff is as follows :—

		Full-time	Part-time	Staff in terms of full-time
December, 1955	..	66	22	77
„ 1956	..	61	14	68
„ 1957	..	59	14	66

There are 19 motor cars available for use in the more distant areas of the city.

In Circular 1/58 of 18th January, 1958, the Minister of Health expressed the wish that some information could be given about the “effectiveness of the home nursing services in relieving the pressure on hospitals by providing home care for patients who might otherwise have to be admitted to hospital.”

In an attempt to assess the value of the home nursing services in the above respect, the case record cards kept by the home nurses during 1957 of 6,685 patients were examined.

The case records were examined with reference to the following :—

- (a) type of illness,
- (b) age of patient,
- (c) number of nursing visits paid,
- (d) source of patient, e.g. from hospital, and
- (e) disposal of patient, e.g. to hospital, recovered or dead.

In each patient an attempt was made to assess the value of the home nurse in respect of the following three categories :—

- (i) whether the service of the home nurse was a factor in effecting earlier discharge of the patient from hospital than might otherwise be the case,
- (ii) whether admission to hospital would have been necessary if there had been no home nurse, and
- (iii) whether admission to hospital might have been required earlier than was actually the case.

The results were as follows. These figures should be regarded as nothing more than general indication. They represent a personal opinion only based on such evidence as can be obtained from records. No direct enquiries were made of doctors, nurses or patients.

- (i) Percentage of cases in which it was thought that earlier *discharge* from hospital had been made possible } 11.8%
- (ii) Percentage of cases in which it was thought that hospital admission would have been needed in the absence of the home nursing service. } 17.1%
- (iii) Percentage of cases in which it was considered that admission to hospital might have been needed at an earlier date than was actually the case. } 8.6%

Medical Requisites Loan Scheme.—The arrangements for the loan of sick-room equipment and medical and surgical requisites have been operated from the depot at Market Buildings and for tuberculous cases from the Chest Clinic.

During the year 4,126 articles were loaned, a decrease of 407 on the figure for the previous year and 4,103 returned as against 4,196. There were 4,730 applications for extensions of loan periods

and 521 persons defaulted with regard to conditions of loan, 248 more than in 1956. The number of articles on loan on 31st December, 1957, was 1,297.

CLASSIFICATION OF MEDICAL REQUISITES

Articles	Loaned	Returned
Air rings	737	791
Bed pans	974	962
Mackintosh sheets	1,156	1,142
Back rests	585	598
Urinals	372	349
Cradles	103	104
Commodore	48	26
Crutches	3	4
Douche outfits	9	7
Hot water bottles	1	1
Rubber bed pans	22	32
Bed trays and tables	5	5
Dunlopillo mattress and cover	6	3
Wheel chairs	68	57
Bedstead with chain and pulley	8	5
Ice bags	..	1
Relaxation chairs	6	5
Bed blocks	4	..
Stand pulleys	7	5
Diabetic scales	..	1
Single bed	3	1
Hair mattress	3	1
Bed with cot sides	1	1
Walking sticks	2	2
Geriatric chair	1	..
Hydraulic patient hoists	2	..
Totals	4,126	4,103

Training of Home Nurses.—The training arrangements continued as in previous years, students being prepared for the Queen's Institute Examination. Male and female State Registered Nurses may enter the course which lasts 6 months (or 4 months in the case of nurses who have had approved experience in district work or hold certain further certificates, e.g. midwifery, health visiting, etc.).

The course is designed to teach state registered nurses how to adapt hospital methods to domiciliary requirements along with the social and health needs of the patient and his family. The syllabus consists of lectures, visits of observation which may prove interesting and helpful to the nurse; also demonstrations and supervised

experience of nursing patients in their own homes. One month's "Theoretical Block" is given, followed by weekly half-day study, on completion of which there are practical and written examinations.

Leeds also accepts students from other authorities, either for the full course of training or for the "Theoretical Block" lectures only. During the year 44 nurses (6 of them from other authorities) took the full course and 22 the "Theoretical Block" only.

The Leeds hospitals send their student nurses in groups for a talk on district nursing, plus a morning on the district. This gives the nurse in training an opportunity of knowing a little more of the patient's background and a wider knowledge of his needs.

SECTION 26

VACCINATION AND IMMUNISATION

BY

L. J. MARSHALL, M.B., B.S., L.M.S.S.A.

Assistant Medical Officer of Health for Immunisation

For the fourth successive year no case of diphtheria occurred in the city. The eradication of this disease is due to children receiving the necessary immunisation at an early age and having their immunity maintained by refresher doses.

An investigation by the Medical Research Council into poliomyelitis following inoculations showed that the incidence varied according to the nature of the inoculation. The risk is greatest with combined prophylactics and with adsorbed prophylactics of the alum precipitated and aluminium phosphate precipitated types. Accordingly in November the Ministry of Health recommended that these prophylactics be replaced by formol toxoid, T.A.F. and plain whooping cough vaccine. A letter incorporating the Medical Research Council findings and the Ministry's recommendation was sent to all general practitioners in the city. The recommended prophylactics have been in use in the Council's clinics and available to general practitioners free of charge since December 1st. Because of the smaller number of inoculations required, a number of general practitioners have preferred to continue to use combined prophylactics, particularly in children who have had polio vaccine and in whom the risk of poliomyelitis following inoculation should be minimal. Combined prophylactics are still available for those general practitioners who wish to use them on their own responsibility.

During the year two new immunisation clinics were opened on the Seacroft Estate, one at St. Richard's Church, Kentmere Avenue, and the other at the Congregational Church, Brooklands Avenue.

Dr. L. J. Marshall, M.B., B.S., L.M.S.S.A., was appointed Assistant Medical Officer of Health for Immunisation in place of Dr. M. A. Axson (resigned) and commenced duty on 18th February, 1957.

Influenza Vaccine.—During October a supply of Influenza Virus A (Asian) Vaccine was made available by the Ministry of Health for the personal use of general practitioners and those members of the Public Health Department staff who were likely to come in contact with patients suffering from influenza. The amount of vaccine issued to general practitioners up to the end of the year was 129 c.c.s and the number of Public Health Department staff inoculated was 230.

Anti-Poliomyelitis Vaccination.—Anti-poliomyelitis vaccination was continued throughout the year and not suspended during the summer months as it was last year. Sessions were held at the Central Clinic, 8, Park Square, and parents were also given the opportunity to have their children vaccinated by their own doctor if they so wished. The amount of vaccine supplied to general practitioners during the year was 4,993 c.c.s.

New registrations during the year numbered 52,262; this figure includes 44,892 schoolchildren who were registered under the new age group. Total vaccinations done up to the end of 1957 are shown below :—

ANTI-POLIOMYELITIS VACCINATION
Progress of Vaccination Scheme since 1956.

Year of Birth	Number of children vaccinated with 2 injections		
	1956	1957	Total
1940	..	1	1
1941	..	12	12
1942	..	14	14
1943	..	21	21
1944	..	21	21
1945	..	27	27
1946	..	37	37
1947	345	2,573	2,918
1948	339	2,315	2,654
1949	311	1,980	2,291
1950	302	1,835	2,137
1951	216	879	1,095
1952	53	514	567
1953	61	559	620
1954	27	431	458
1955	..	538	538
1956	..	407	407
1957	..	7	7
Expectant mothers ..	..	4	4
Totals	1,654	12,175	13,829

Two cases of non-paralytic poliomyelitis and one case of paralytic poliomyelitis occurred in children who had received one or two inoculations of polio vaccine. In no case was the illness due to inoculation (see report on Infectious and Other Diseases, page 27).

Issue of Prophylactic Material to General Practitioners.—The following table gives details of the issue of prophylactic material to general practitioners during 1957 for diphtheria and whooping cough immunisation purposes.

ISSUE OF PROPHYLACTIC MATERIAL TO PRACTITIONERS

Material	1957	1956
Diphtheria (P.T.A.P.)	605 doses	880 doses
Diphtheria (T.A.F.)	288 „	124 „
Diphtheria (F.T.)	300 „	..
Combined diphtheria and whooping cough	4,049 „	5,913 „
Whooping cough vaccine ..	1,090 „	534 „
Diphtheria/Tetanus/Pertussis	3,744 „	2,823 „

Vaccination.—Numbers of vaccinations and re-vaccinations performed during the year are shown in the following table:—

	Under 1 year	1-4 years	5-14 years	15 and over	1957 Total	1956 Total
Vaccinated (a)	1,644	180	18	52	1,894	1,904
(b)	2,632	222	42	173	3,069	2,745
Re-vaccinated (a)	..	16	53	524	593	559
(b)	..	31	99	733	863	655
Totals ..	4,276	449	212	1,482	6,419	5,863

(a) by clinic staff.

(b) by general practitioners.

From the returns of primary vaccinations in infants, it is calculated that approximately 52·1 per cent. of the infant population born between July, 1956, and June, 1957, has been protected.

Diphtheria Immunisation.—This work has proceeded as usual during the year at the Central Clinic, at all infant welfare centres, at day nurseries and at schools. In addition, individual home visits were made where special circumstances were reported by the health visitors. The following table shows immunisation work done by clinic doctors and general practitioners during 1957 :—

Prophylactic	Clinic doctors :—				General Practnrs.	Total
	I.W.C.'s	Schools	Home visits	Mobile Clinic		
Diphtheria only ..	129	792	19	6	148	1,094
Diphtheria/ Whooping Cough ..	2,011	..	126	188	1,465	3,790
Triple Antigen ..	37	..	..	1	982	1,020
Whooping Cough only	5	..	1	1	77	84
Total protected against Diphtheria	2,177	792	145	195	2,595	5,904
Total protected against Whooping Cough	2,053	..	127	190	2,524	4,894
Refresher Doses :—						
Diphtheria only ..	25	8,703	..	1	303	9,032
Diphtheria/ Whooping Cough..	8	..	..	..	304	312
Triple Antigen ..	..	..	..	..	77	77
Whooping Cough only	..	..	..	..	21	21

Home Visiting.—This service is provided for the benefit of mothers who, for some good reason, are unable to bring their children to the clinics. During the year 371 visits were made.

Estimate of the Child Population Immunised against Diphtheria.—On 31st December, 1957, it was estimated that 61·0 per cent. of children under five years of age (66·9 per cent. between the ages of one and five years) and 94·5 per cent. between the ages of five and fifteen years had been immunised against diphtheria. It is calculated that of children up to the age of fifteen years 83·3 per cent. have been protected. The table opposite indicates the progress of diphtheria immunisation since 1928.

DIPHTHERIA IMMUNISATION.

Illustrating the progress of the Immunisation Scheme since its inception.
Number of Persons in Age Groups, having had Full Course of Injections.

Age at date of Inoculation	1928-1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	Total
Under 1 year ..	827	210	38	75	24	..	..	..	..	..	788	3,127	3,301	2,561	3,479	3,450	3,143	3,241	2,678	3,077	3,177	Total
1-2 years ..	1,754	820	215	411	941	3,980	3,990	4,412	5,110	5,137	5,304	4,923	3,078	2,931	2,714	2,056	1,757	1,898	1,658	1,857	1,413	under 5 years at end of 1957
2-3 ..	1,682	788	116	173	814	2,262	1,024	469	240	777	418	455	438	457	514	391	234	295	247	266	208	23,186
3-4 ..	1,880	1,008	96	121	943	2,053	1,063	463	220	557	327	220	231	249	277	212	137	144	128	142	111	
4-5 ..	2,317	1,241	64	62	865	1,940	1,043	381	257	463	288	260	196	147	193	152	111	146	102	102	70	
5-6 ..	3,165	1,752	46	30	1,563	1,486	1,667	451	359	556	366	323	328	290	263	321	274	270	338	301	288	Total
6-7 ..	3,353	1,818	12	10	1,450	940	1,622	302	233	467	296	229	286	215	234	320	348	315	393	387	262	5-10 years
7-8 ..	3,008	1,239	7	6	1,174	676	1,482	197	185	392	225	165	143	141	108	144	147	191	217	174	117	35,423
8-9 ..	2,914	571	13	6	979	466	1,357	164	188	275	153	126	132	95	72	71	109	99	133	101	68	
9-10 ..	2,940	396	6	3	926	325	1,271	157	142	259	142	110	119	70	51	65	68	70	82	79	62	
10-11 ..	3,222	317	19	4	892	252	1,197	130	152	250	100	90	108	79	64	61	71	63	57	55	41	Total
11-12 ..	3,096	287	17	4	921	205	1,089	109	128	249	113	67	73	60	55	37	31	42	40	26	27	10-15 years
12-13 ..	3,136	212	19	5	839	183	1,193	96	109	185	97	80	69	55	40	48	28	26	43	33	6	35,748
13-14 ..	2,851	164	32	7	704	175	1,035	78	79	138	100	61	55	35	40	48	25	29	24	21	23	
14-15 ..	627	17	20	..	74	148	392	8	29	34	13	49	54	31	27	38	23	20	41	29	23	
15 years and over	1,379	25	174	37	65	..	..	55	79	83	43	53	54	48	23	42	4	8	8	10	8	Total
Age not known	383	317	..	213	34	..	..	11	..	..	..	..	..	..	..	..	..	..	..	..	..	15 years & over 111,961 Total age not known 958
Totals ..	38,534	11,172	894	1,167	13,208	16,101	19,415	7,483	7,510	9,822	8,773	10,338	8,665	7,464	8,154	7,456	6,510	6,857	6,189	6,660	5,904	207,276

Whooping Cough Immunisation.—The following table shows the progress of whooping cough inoculations since 1947. The table includes inoculations of combined vaccine but excludes children inoculated in the Whooping Cough Immunisation Trial.

Year						Number immunised against Whooping Cough
1947	..	..	..	..	..	975
1948	..	..	..	..	..	908
1949	..	..	..	..	..	1,016
1950	..	..	..	..	..	1,537
1951	..	..	..	..	..	3,801
1952	..	..	..	..	..	3,892
1953	..	..	..	..	..	4,877
1954	..	..	..	..	..	5,276
1955	..	..	..	..	..	4,593
1956	..	..	..	..	..	5,238
1957	..	..	..	..	..	4,894
Total						37,007

This means that approximately 62·8 per cent. of children under the age of five years have received some protection against whooping cough.

Inoculations for Overseas.—The number of preventive inoculations given at the Central Immunisation Clinic against certain infectious diseases are as follows :—

Smallpox (vaccinations)	..	653
Typhoid	.. ..	170 (and 8 refreshers)
Cholera	.. ..	138 (and 14 refreshers)
Typhus	.. ..	8
Tetanus	.. ..	40 (and 5 refreshers)

The above figures are for completed courses.

Other Work Undertaken by the Section.—*Examination of Convalescents.*—During the year 523 applicants for convalescence, including 386 children, were examined.

Training.—Special sessions were again given to the training of health visitors who received, in addition, practical instruction on the organisation and working of immunisation clinics. The time and effort spent on this work is amply repaid by the appreciation of the students and the very real co-operation of the newly qualified health visitors.

Voluntary Workers.—The Department once again wishes to thank the voluntary workers of the Leeds Babies' Welcome Association who have given such valuable help at the immunisation clinics.

SECTION 27

AMBULANCE SERVICE

BY

F. E. J. LARGE

Ambulance Officer

The table appended shows the work carried out by the Municipal Ambulance Service during the year :—

Type of Case	Number	Mileage
By Ambulance :—		
Accidents (Road)	2,045	} 348,715
" (Emergency Calls)	2,041	
Illness	3,688	
Maternity	4,391	
Tuberculosis	87	
Hospital admissions and discharges	19,057	
Infectious diseases	1,018	
Mental	263	
Lunacy	8	
Special treatment	29,938	
Others (incl. fruitless journeys)	3,906	
Total	66,442	
By Sitting Case vehicles :—		
Maternity and Child Welfare	174	} 483,427
Special treatment	151,662	
Immunisation	96	
Doctors and Midwives	2,037	
Others (incl. fruitless journeys)	1,046	
Total	155,015	
Mortuary Service :—		
Bodies removed	658	3,547
Hospital Car Pool :—		
Special treatment	8,572	59,509
Grand Totals	230,687	895,198

In addition to the above, 4,757 Leeds cases were carried by other Authorities under the co-ordination arrangements.

The following table gives a summary of cases removed and mileage covered by the Municipal Ambulance Service vehicles during

the year. The figures for the five preceding years are given for comparison.

	1952	1953	1954	1955	1956	1957
Cases :—						
Ambulance ..	57,361	73,657	77,475	68,667	70,000	66,442
S.C. vehicles ..	97,649	114,018	141,574	164,245	164,135	155,015
Total ..	155,010	187,675	219,049	232,912	234,135	221,457
Mileage :—						
Ambulance ..	322,519	353,063	372,221	352,701	355,561	348,715
S.C. vehicles ..	379,707	415,634	469,358	504,117	503,619	483,427
Total ..	702,226	768,697	841,579	856,818	859,180	832,142

It will be noted from the comparison tables that there has been a decrease in the number of patients carried and mileage covered during the year.

“ 999 ” Calls.—The total number of calls of this type received during the year was 5,845.

Staff.—The staff of the Ambulance Service is 136, made up as follows :—

Administrative :—

Ambulance Officer	1
Station Officers	2
Chief Clerk	1
Clerks (male) (Rotary Shifts)	7
Radiotelephone operators (male)	2
Clerks (female)	2
Telephonist	1

16

Operational :—

Shift leaders	5
Drivers	84
Female attendants	17
Mortuary Drivers	2

108

Maintenance :—

Mechanics	..	..	..	..	..	2
Semi-skilled	..	..	..	..	..	2
Washers	..	..	..	..	..	2
Garage hand	..	..	..	..	..	1
Store-keeper	..	..	..	..	..	1

 8

Domestic :—

Cook	..	..	..	..	..	1
Cleaners	..	..	..	..	..	3

 4

Vehicles.—During the year three Morris J.1 six-seater sitting-case ambulances were replaced by three Morris J.2 nine-seater sitting-case ambulances. Also three of the stretcher-case ambulances were disposed of, thus reducing the fleet by three vehicles. The present strength is 58 vehicles, made up as follows :— ambulances 28, sitting-case ambulances 20, cars 8 and mortuary vans 2.

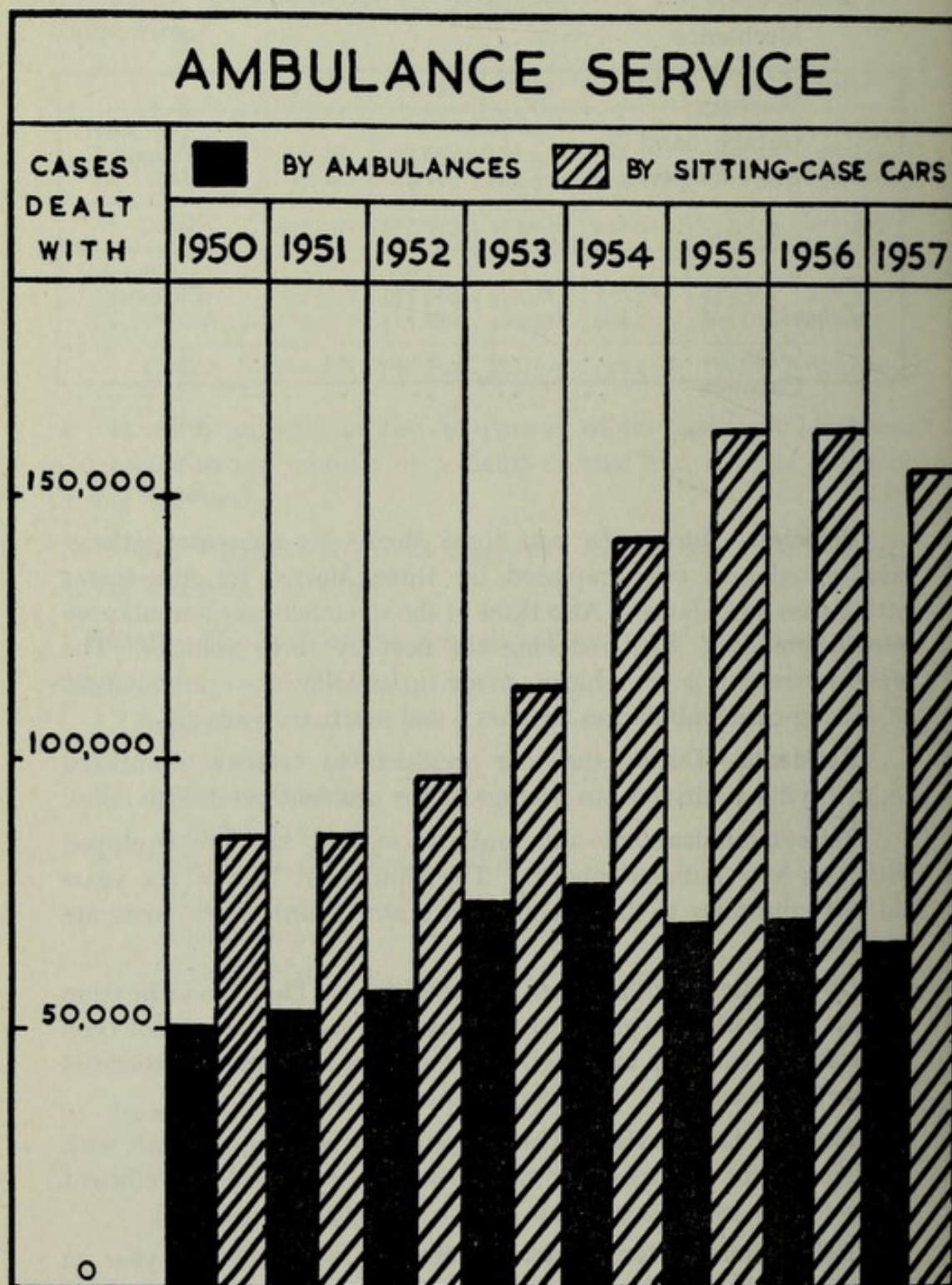
Accidents.—During the year accidents to vehicles numbered 48, involving 26 drivers, an average of one accident per 18,650 miles.

Telecommunications.—All ambulances and cars are equipped with two-way radio-telephones. The equipment is now six years old but continues to give good service and maintenance costs are very small.

Co-operation with other Authorities.—The co-ordination scheme has worked so efficiently during the year that it has not been necessary to call any meetings. Our thanks are due to Authorities within the scheme for their help and co-operation.

Hospital Car Service.—The Hospital Car Service has dealt with all requests for transport for sitting-cases in a helpful and efficient manner. The assistance of this service is greatly appreciated.

Babies Born Before Arrival at Hospital.—During the year 42 babies were born before arrival at hospital. The present arrangements, whereby the Ambulance Service calls upon a municipal midwife on emergency call, has worked very satisfactorily.



SECTION 28

PREVENTION, CARE AND AFTER-CARE

INCLUDING

HEALTH EDUCATION AND PUBLICITY

VENEREAL DISEASES

MEDICAL-SOCIAL WORK (GENERAL)

CONVALESCENT TREATMENT

CARE AND AFTER-CARE (HEALTH VISITING)

Other aspects are dealt with on pages 51 and 53 (TUBERCULOSIS) and page 141 (MENTAL HEALTH).

HEALTH EDUCATION AND PUBLICITY

Local Activities.—As in previous years, lecturers were provided to address youth clubs, associations and the like on various health topics. This is a valuable method of health education and the Department is always pleased to assist organisations by providing lecturers.

Posters, Leaflets, etc.—Copies of all posters and leaflets issued by the Central Council for Health Education have been received and, where appropriate, have been distributed within the city. Copies of the "Better Health" Journal were distributed monthly to out-patient departments of the hospitals in the city and to the infant welfare clinics. Six former Empire Marketing Board frames have again been utilised for the display of posters.

Hygiene.—Publicity material bearing on the clean handling of food was issued to catering establishments in the city.

National Activities.—Government sponsored press and poster publicity in relation to diphtheria immunisation and other health subjects has been maintained during the year and Leeds has shared in the benefits.

During the year the Ministry of Health's display sets on various health topics have been distributed for exhibition to Corporation Departments, hospitals and associations.

Smoking and Cancer of the Lung.—In June the Minister of Health made a statement in Parliament based upon a special report of the Medical Research Council. The Ministry of Health asked that the City Council should bring to the notice of the public the opinion of the Medical Research Council that the most reasonable interpretation of the very great increase in deaths from lung cancer in males during the past 25 years is that a major part of it is caused by smoking tobacco, particularly heavy cigarette smoking.

The Health Committee accepted the conclusions of the Medical Research Council and decided to present the findings to the public in a simple factual form. The two posters and the leaflet shown on the following pages were widely circulated for display and distribution in buildings and premises to which the public have access, the smaller poster being used in public transport vehicles.

The Health Visitor's part in Health Education.—The "Health Education Group" of health visitors continued its work and added to the stock of visual aids and demonstration material.

In January, a one-day course on Health Education and a one-day course on the Care of the Aged were arranged in the Public Health Department by the Central Council for Health Education; an exhibition of visual aids was held at the same time. The courses were attended by medical officers, health visitors and welfare officers from Leeds and surrounding local authorities. In September, visual aids which have particular reference to the prevention of accidents were exhibited at the Ideal Homes Exhibition, Fenton Street. Visual aids were also loaned for use at Red Court Hostel and at the Nursery Training Centre. A small display was arranged for the Leeds Industrial Welfare Group.

Early in the year the Health Education Group was made responsible for the display in the entrance to the Public Health Department and efforts are being made to ensure that subjects are both attractive and topical.

Group Teaching.—Group teaching has continued and has been arranged in clinics and welfare centres when circumstances have permitted; during the year 89 displays and 23 talks with flannel-graphs were arranged in clinics. The number of requests for talks to organisations such as Young Wives' Clubs and St. John Ambulance Brigade Cadets has increased satisfactorily; 83 talks were given to such groups by various members of the health visiting staff.

CITY OF LEEDS HEALTH COMMITTEE



lung **CANCER**

LUNBY



The Medical Research Council says:—

The heavy cigarette smoker is 40 times more likely to die of lung cancer than the non-smoker. It is reasonable to assume that heavy smoking is the cause and that atmospheric pollution is a relatively minor factor. Giving up smoking even as late as middle life reduces the risk by one half.

CITY OF LEEDS HEALTH COMMITTEE

This poster was displayed in public transport vehicles

City of Leeds Health Committee

SMOKING AND LUNG CANCER

The Health Committee of the City of Leeds are of the opinion that the following information is of importance to all members of the public and particularly to young persons.

- 1. The Medical Research Council has considered the evidence from many investigations in different countries and has come to the conclusion that a major part of the increase in lung cancer is due to smoking, particularly cigarettes. In the opinion of the Council the most reasonable interpretation of this evidence is that the relationship is one of direct cause and effect.**
- 2. Investigations in Britain and America have shown the following results :—**
 - (a) There are more deaths from cancer of the lung among smokers than among non smokers.**
 - (b) There are more deaths from cancer of the lung among heavy smokers than among light smokers.**
 - (c) There are more deaths from cancer of the lung among cigarette smokers than among pipe smokers.**
 - (d) The risk of dying from cancer of the lung is less in those smokers who give up the habit. Giving up smoking even as late as middle life reduces the risk by one half.**
- 3. Among lifelong heavy smokers one death in every eight is due to cancer of the lung. Among non smokers only one death in every 300 is due to cancer of the lung. In other words, the heavy smoker is 40 times more likely to die of cancer of the lung than the non smoker.**
- 4. A substance known to have the property of producing cancer under certain conditions has been found in tobacco smoke in small amounts.**
- 5. The Medical Research Council are of the opinion that the part played by atmospheric pollution in the causation of lung cancer is a relatively minor one.**

This leaflet was widely circulated for distribution in public buildings, etc.

Lectures to Students.—A development of the health visitors' group teaching work for the general public is lecturing on public health subjects to more specialised types of audiences. During the year two health visitors gave lectures on maternity and child welfare and social legislation to district nurse students. In connection with the practical training of health visitor students, two health visitors gave talks and demonstrations on testing young children for deafness and two gave talks on tuberculosis visiting, including the supervision of contacts. The Health Visitor Tutor and the Superintendent Health Visitor continued to give lectures on health visiting to student nurses at the Leeds General Infirmary and St. James's Hospital respectively.

VENEREAL DISEASES

BY

J. B. BITTNER, M.B., Ch.B.,

Venereologist

The General Infirmary, Leeds

Work of the Treatment Centre.—In last year's Report, note was made of the increase in the incidence of gonorrhoea which started during the second six months of 1956. This increase continued during 1957, reaching its peak by September. Vigorous efforts made to trace the consorts of these patients with the limited staff available were fairly successful and the incidence dropped again towards the end of the year. However, with more immigrants and a probable increase in prostitutes in the city, the situation must remain uncertain.

It is of some interest to examine the gonorrhoea cases more closely. Of the 339 male cases, 186 were white and 153 were coloured patients. Of the coloured, 123 were West Indians. Rarely do the immigrants bring the disease with them, nearly all being infected after their arrival in this country.

There were no cases of early syphilis during the year. The increase in late syphilis, as with gonorrhoea, is due to some extent to the immigrants, 23 out of the 85 cases being West Indians. Some of these cases probably had latent yaws and not syphilis, although it is impossible to be certain. In this instance the disease was brought into the country, but in its non-infectious stage.

Non-gonococcal urethritis continued to increase slowly as it appears to be doing all over the world. No corresponding disease in women has yet been found in the great majority of cases.

The accompanying graphs show the annual incidence of acquired syphilis and gonorrhoea dealt with in the Department of Venereal Diseases at the General Infirmary at Leeds from 1945 to 1957. The gonorrhoea graph shows the dramatic rise since 1955 in the number of new cases.

Staff.—During the year Miss Flora I. Beck, A.M.I.A., the part-time Almoner to the Department, resigned. Her position has been filled by Miss E. M. Booth, A.M.I.A.

The amount of medico-social work in the Department has increased during 1957 because of the larger number of patients,

Miss E. C. Clarkson, S.R.N., H.V., has played an important part both in "case holding" and "contact tracing."

NEW PATIENTS REGISTERED AT THE VENEREAL DISEASES CLINIC
AT THE GENERAL INFIRMARY AT LEEDS

	Year 1957		Year 1956		Increase or Decrease	
	M.	F.	M.	F.	M.	F.
Syphilis	85	53	58	55	+27	—2
Gonorrhœa	339	79	157	29	+182	+50
Non-gonococcal urethritis	240	..	201	..	+39	..
Other conditions	572	326	574	239	—2	+87
Total	1,236	458	990	323	+246	+135
Total attendances	6,509		5,727		+782	

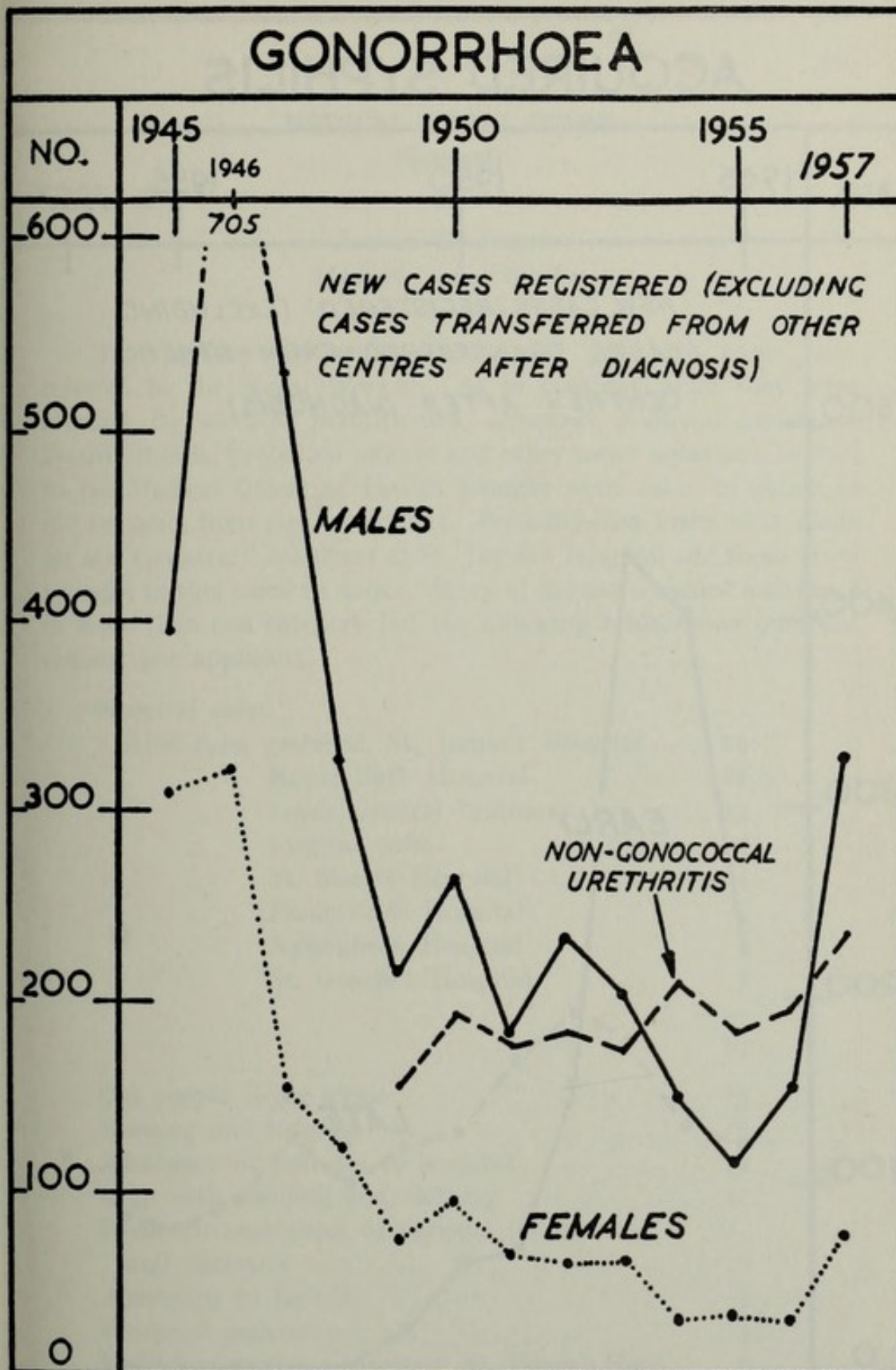
Details of new patients resident in Leeds registered during 1957 are given in the following table:—

LEEDS PATIENTS.

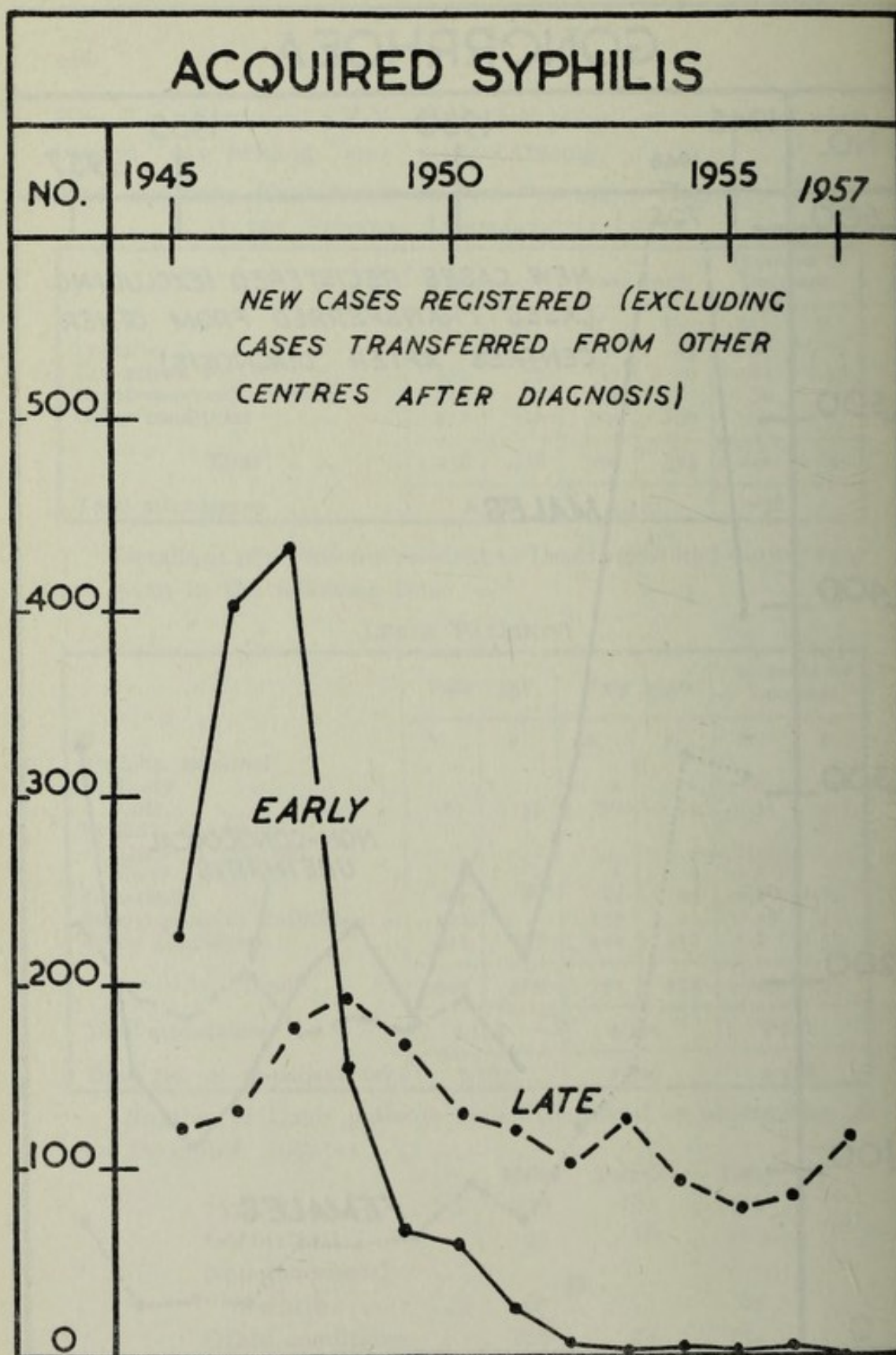
	Year 1957		Year 1956		Increase or Decrease	
	M.	F.	M.	F.	M.	F.
Syphilis, acquired						
Early	..	..	4	1	—4	—1
Late	67	35	36	34	+31	+1
Syphilis, congenital						
Under 1 year old	..	..	..	..	..	..
Over 1 year old	3	4	1	4	+2	..
Gonorrhœa	294	62	132	23	+162	+39
Non-gonococcal urethritis	192	..	157	..	+35	..
Other conditions	441	268	442	212	—1	+56
Total	997	369	772	274	+225	+95
Total attendances	5,503		4,742		+761	
Total No. of In-patient days	2,867		2,399		+468	

Number of Leeds patients under treatment or observation at 31st December, 1957:—

	Males	Females	Total
Syphilis	229	181	410
Gonorrhœa	93	16	109
Non-gonococcal urethritis	67	..	67
Other conditions	128	24	152
	517	221	738



GONORRHOEA—Item 12 of Ministry of Health Form V.D. (R)
 NON-GONOCOCCAL URETHRITIS—Item 20 of Ministry of Health Form V.D. (R)



ACQUIRED SYPHILIS—Item 4 of Ministry of Health Form V.D. (R)

“Early”=Primary, secondary and latent in the first year

“Late”=All other cases

MEDICAL SOCIAL WORK (General)

BY

ISOBEL B. PATON
Medical Social Worker

Type of Case dealt with.—During the year 218 cases were referred to the Social Workers. As in previous years they were referred by medical practitioners, almoners, National Assistance Board officials, probation officers and other social agencies. Letters to the Medical Officer of Health brought some cases to notice as did requests from city councillors. Pre-admission visits were made for the Geriatric Consultant at St. James's Hospital and these visits brought further cases to notice. Many of the cases needed assistance in more than one category but the following table shows only one request per applicant.

Hospital cases :

After-care, geriatric, St. James's Hospital	29
„ Royal Bath Hospital.. ..	21
„ Leeds General Infirmary	13
„ surgical cases	12
„ St. Mary's Hospital	4
„ Pinderfields Hospital	1
„ Killingbeck Hospital	1
„ St. George's Hospital	1
	82
Old people living alone	15
Housing and lodgings	13
Admission of patients to hospital	12
Help with bedding and clothing	10
Home circumstances of patients for doctors and almoners	10
Admission to hostels	7
Financial assistance	7
Visits for Geriatric Consultant, St. James's Hosp.	6
Treatment required for mental ill-health ..	6

Continued on next page

Problem girls referred by Mental Health	
Services, Police and Personnel Officer ..	7
Requests re nursing homes	4
Non-attendance of patients at out-patients clinic	4
Disposal of furniture, baby clothes and wireless	4
Domestic help	3
Requests for Christmas parcels	3
Cases referred to Medical Officer of Health	2
Chiropody	2
Spectacles	2
Requests for cots and perambulators..	2
Wireless repairs	2
Investigations for other local authorities ..	2
Matrimonial trouble	2
Offer of accommodation and employment ..	2
Cases referred to Education Department ..	2
Information re Mother and Baby Homes	
outside Leeds	2
Admission of children to a Home	1
Convalescence	1
Non-maintenance of children by putative father	1
Invalid chairs	1
Transport to visit patient at hospital	1
	218

The number of geriatric patients visited on discharge from hospital was lower than last year, mainly because one of the hospitals was for a period without a geriatric almoner.

The above cases have meant much work with several offices of the National Assistance Board, Ministry of Pensions, Ministry of Labour ; the Social Workers are grateful for the help given to them by the Area Officers and their staff.

After-Care of Patients discharged from Hospital.—These patients are visited according to their need. Old persons living alone and without family receive frequent visits. The geriatric Almoner is given a report of the patient's condition from time-to-time. The co-operation between Almoners and the Social Workers is most cordial.

Medical Service for the Elderly and Chronic Sick.—During the year the Social Workers visited 1,291 patients on the waiting list for admission to the geriatric wards of St. James's Hospital. This was a decrease of 141 as compared with the number referred in 1956.

Patients referred by their own doctors for admission to hospital now receive a postcard informing them that they are on the waiting list and it is customary for the Social Workers to visit them on the same day that the postcard is received. The doctors also inform their patients that they will be visited. This seems a practical idea as the patients and their families usually have questions; the Social Workers are able to reassure them on many points. Frequently they ask what they have to take with them to hospital, about their pension and national assistance books and payment of rent. The Social Workers are able to explain to anxious patients that the Almoner will assist them in sorting out their difficulties. There is no doubt that they are greatly relieved to know that they will be helped.

Sometimes temporary admission to hospital can be arranged for a chronically sick patient, so that relatives who have been caring for him can have a short holiday. In such cases the family doctor is notified. He in turn informs the hospital. The Social Workers visit the patient and report to the Geriatric Consultant.

In some instances, where a district nurse has not been in attendance, patients do not know about the Medical Requisites Loan Scheme and during the year 20 patients were advised of this scheme; 20 patients were advised regarding home help and 46 regarding National Assistance.

During the year 657 visits were paid to new cases and 1,587 to old cases; 174 visits were received from new cases and 126 from old cases. 592 visits were paid to St. James's Hospital, the Magistrates' Court and various social agencies in the city. 98 visits were made on behalf of the Home Help Assessor.

Social Care of the Unmarried Mother.—During 1957, 207 women and girls having an illegitimate child were visited and advised, 16 more than in 1956. In 147 cases it was the first, in 29 the second, in 11 the third, in 3 the fourth, in two the fifth, in one case the sixth and in two cases the seventh illegitimate child. Twelve married women having an illegitimate child were referred for help.

Of the 207 women and girls visited, it was found that 66 were to be married ; 28 intended to return home whilst 21 intended to return to friends, relations or to their lodgings after confinement ; 31 made arrangements to have a home confinement and 10 applied for admission to Wyther Hostel ; 16 were referred to Mount Cross Home, 3 to Browning House and 5 to the Roman Catholic Social Worker. 3 girls had miscarriages, 4 left the district, 2 girls made arrangements privately and one was undecided as to her arrangements. Of the 17 girls returning to the putative father, 8 hoped to be married after a short while.

All the above cases attended the Department's Infant Welfare Centres. A case referred directly to the Social Workers, by for example, a doctor or a probation officer, is referred to the clinic in the district where the woman resides.

During the year 15 girls were assisted in obtaining Affiliation Orders. In certain other cases, where there have been difficulties, girls have been referred to a lawyer or to the National Assistance Board.

After-Care.—The after-care of girls completing their stay in Wyther Hostel gradually decreased and after the closing of the Hostel in October, 1957, little after-care work was needed. The voluntary homes do their own after-care work. Girls who have their babies in hospital or at home are asked to visit the Social Workers if they have any problems and are encouraged to seek assistance in obtaining Affiliation Orders and assistance when payments are not made regularly.

General.—During the year the Senior Social Worker has, when possible, attended the monthly meetings of St. Margaret's Committee and the Mount Cross Home. She has attended the quarterly meeting of the Leeds Council of Social Service Old People's Welfare Committee and is also a member of the British Epilepsy Association Leeds Group.

During the year the Assistant Social Worker visited and advised parents regarding school clothing for children sent to the Hollies Home. Visits were made to 30 families and to offices of the National Assistance Board and Education Department for help with clothing. Eight children were fitted-out with necessary garments, the cost being met by the Education Committee.

Again the Social Workers would like to thank the Editor of the " Yorkshire Evening Post " for toys and the Editor of the " Yorkshire Evening News " for 44 Christmas parcels for house-bound old people : 33 old people each received 7s. for coal. These gifts are greatly appreciated. Thanks are due to the friends of a member of the Health Committee who so kindly donated parcels to five elderly people.

The Social Workers are much indebted to the British Red Cross Society for help with bedding and clothing ; also to the Organiser of Old People's Welfare and to the Women's Voluntary Service. They would also like to thank the people who gave them furniture, clothing and a wireless.

The Senior Social Worker would like to express her thanks to Dr. McAlpin for his help with cases and to Mr. Wallace of the Housing Committee for his guidance on housing queries.

CONVALESCENT TREATMENT

BY

JESSIE CHIPPERFIELD

Convalescent Treatment Organiser

During 1957, 2,028 applications for convalescent treatment were received, and 48 were brought forward from 1956, making a total of 2,076. This is somewhat less than in the preceding year. Of this number, 1,446 patients were sent to Convalescent Homes, 615 applications were withdrawn or refused, and 15 were held over until 1958.

The following table gives details of the number of adults and children sent for convalescence and the number of weeks per patient.

	Adults	Children
Number sent for convalescence	1,026	420
Weeks away	2,052	941
Extensions (weeks)	3	15
Total number of weeks away	2,055	956
Average number of weeks per stay	2	2

Commencing in July 1957, a charge of £2 2s. has been made to each adult person receiving two weeks convalescent treatment. Payment of half that amount has been made for each school child by the Education Department.

Provision for the health and comfort of the patients in all the Homes now in use is of high standard.

The number of mothers with babies admitted to our Southport Home was less than in the previous year, due largely to the closing of the Home for three weeks during the Warden's illness, and for three weeks due to minor infections. The health of patients has shown marked improvement during their stay in the Home.

The children's Home at Freshfield ceased to be available in April. Sufficient places were found in the other Homes.

The Ambulance Service has continued to provide transport for children, and for mothers with babies.

137 adults and 386 children attended at the Central Clinic for medical inspection prior to admission to Convalescent Homes.

The allocation of patients to the various homes is shown as follows :—

Home	Adults	Babies	Children	Total
Southport (Mother and Baby Home) ..	167	130	6	303
Blackpool (Horncliffe)	241	..	6	247
Blackpool (Westwood)	133	..	13	146
Bridlington (Yorkshire Foresters) ..	92	..	7	99
St. Annes (Ormerod)	..	..	93	93
St. Annes (Blackburn)	101	..	..	101
Freshfield (St. Joseph's)	..	..	8	8
St. Annes (Seabright)	136	..	..	136
Morecambe (Craig)	..	..	113	113
Southport (Milne)	80	..	1	81
Grange-over-Sands (Boarbank Hall) ..	53	..	..	53
St. Annes (Rochdale Home)	..	..	43	43
Southport (Jewish Home)	4	..	..	4
Chathill	6	..	..	6
Harrogate (Metcalfe Smith)	13	..	..	13
Totals	1,026	130	290	1,446

The following table gives monthly statistics of cases sent for convalescence.

	Adults	Mothers and Babies		Children	Total
		(M)	(B)		
January ..	25	..	..	6	31
February ..	34	2	2	9	47
March ..	57	18	18	32	125
April ..	96	15	15	22	148
May ..	139	20	22	37	218
June ..	105	16	17	28	166
July ..	110	9	10	25	154
August ..	126	9	10	32	177
September ..	104	18	18	40	180
October ..	67	18	18	28	131
November ..	32	..	..	11	43
December ..	6	..	..	20	26
Total ..	901	125	130	290	1,446

CARE AND AFTER-CARE (HEALTH VISITING)

BY

JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London)

Superintendent Health Visitor

The Sick, Aged and Handicapped.—Visits to the sick, aged and handicapped, and for research purposes were continued during the year. Although the number of visits paid in this category, 5,939 (excluding tuberculosis) is only a small part of the total of 135,547 paid by health visitors for all purposes, these visits are particularly long and time consuming and represent a greater proportion of health visiting time than is apparent from the figures. Many of the patients visited are referred by the hospital almoners after discharge from hospital, or because they have defaulted from out-patient clinics. Others are referred by neighbours, friends or relatives, and occasionally by general practitioners. Still more are found when the health visitor investigates recommendations for rehousing on medical grounds.

Cancer.—An important group of patients referred by hospital almoners consists of sufferers from carcinoma. These fall into 3 groups :—

- (1) Suspected cases, who refuse admission to hospital for investigations or default from out-patient clinics. Patients, unaware of the probable diagnosis, often need to be convinced by the health visitor of the urgency of the need for investigation.
- (2) Patients discharged as inoperable or in the terminal stage of illness. Supervision is continued and arrangements made for financial and domestic help, if necessary, until the patient requires district nursing care or re-admission to hospital.
- (3) Patients successfully treated, who are visited so that long-term records can be maintained.

Fifteen patients treated by Professor Claye at the Women's Hospital over a period of 20 years were followed up during the year and information obtained about their present health. One old lady, aged 86 years, who had been treated surgically for carcinoma of cervix 20 years earlier was in excellent health and still enjoyed dancing.

Diabetes.—The visiting of diabetic patients for Dr. Leese of St. James's Hospital was continued, and an investigation into the care of syringes and needles was carried out. A brief questionnaire was completed in respect of all the patients under supervision.

Tuberculosis.—All newly notified cases were visited and arrangements made for the examination of contacts. Particular attention has been paid to the families of sputum positive patients. As before, 8 health visitors spent half their time on urgent and special tuberculosis visiting and attendance at the contact clinic. The total number of visits to tuberculous households was 6,387, 291 less than in 1956.

Loan of Nursing Requisites.—In the autumn, arrangements were made for health visitors to assist in tracing nursing equipment which had been loaned and not returned. Other needs, apart from the loan of equipment, may be found when a visit is made.

Special Surveys.—The Medical Research Council survey which is being carried out in order to ascertain the efficacy of B.C.G. vaccination was continued.

In all this work close co-operation with officers in other sections of the Public Health Department, other Corporation Departments, and other statutory and voluntary organisations is essential. Necessary help can often only be provided if contact with a colleague is promptly made, as in the case of an elderly man who had been under the supervision of the health visitor and welfare services officer for several months. On Christmas Eve, he was found by the health visitor in a rapidly deteriorating state. Discussion with the Welfare Services Officer resulted in his removal to South Lodge late in the afternoon, at which time he was mentally confused and had no food in the house except a packet of potato crisps.

The usefulness of the health visitor, as an all purpose worker, in carrying out duties under Section 28 is becoming established, but she can only be completely successful if she has time and opportunity to develop good relationships with her specialist colleagues on whom she must rely for help.

SECTION 29

HOME HELP SERVICE

BY

Mrs. DOROTHY W. ALFORD

Organiser

At 31st December, 1957, the Home Help employees numbered :—

Whole-time	..	..	..	89
Part-time	..	..	..	163
				252
				252

During the year 3,157 applications for help were received and 2,099 cases received help. 1,142 applications were withdrawn; reasons for withdrawal included : (i) death of the patient, (ii) removal of the patient to hospital, (iii) arrival of a relative able to care for the patient and (iv) the cost of the proposed service.

The cases helped were brought to the notice of the Home Help Service by the following :—

Blind Welfare Department	..	52	(2½%)
Welfare Services Department	..	206	(10%)
Hospitals	..	295	(14%)
General medical practitioners	..	336	(16%)
Midwives and district nurses	..	131	(6½%)
Health visitors, social workers and Chest Clinic	..	37	(1¾%)
Mental Health Services, W.V.S., National Assistance Board, Church workers, relatives and members of the general public	..	1,042	(49½%)

Cases which received help are classified as follows :—

Maternity (including expectant mothers) ..	471
Chronic sick, aged and infirm	1,123
Others	474
Tuberculosis	31

2,099

The above numbers represent individuals but since help may continue intermittently from January to December, a clearer picture of the total service offered is given by a table of hours worked.

Hours	Type of case :—							Total
	Maternity	Old age Pensrs.	Emergency Illness	Hospital discharge	Chronic sick	Tuberculosis	Nights	
Jan.	2,408	12,567	2,108	1,280	3,832	1,540	32	23,767
Feb.	1,960	12,994½	2,252	1,796	4,064	1,732	64	24,862½
March	2,760	17,078½	2,660	1,480	4,586	2,070	110	30,744½
April	2,764	12,335½	1,580	984	3,012	1,348	..	22,023½
May	3,710	16,460	2,705	2,180	4,240	1,860	..	31,155
June	2,508	12,348½	2,528	1,184	3,240	1,364	..	23,172½
July	2,540	12,996	2,286	1,508	3,432	1,328	8	24,098
Aug.	1,915	13,255	1,635	1,560	3,910	1,155	..	23,430
Sept.	1,536	12,488	1,800	1,512	3,060	728	16	21,140
Oct.	2,200	13,658½	2,260	1,468	3,588	732	..	23,906½
Nov.	2,580	18,141	2,900	2,525	4,655	1,285	55	32,141
Dec.	1,516	13,972½	2,780	1,998	3,358	832	..	24,456½
Totals	28,397	168,294½	27,494	19,475	44,977	15,974	285	304,896½

During 1957, 48,514 more hours were worked than in 1956. The increased hours were with the aged, hospital discharges, emergency illnesses and night cases, less time being needed by maternity and tuberculosis cases.

Rehabilitation is a feature of the work of the Home Help Service. Many patients discharged from the geriatric wards of hospitals are, with the aid of home helps, able to live in their own homes again. Patients who had been inmates of hospitals for months or years received daily help for two or three days per week. Many of these cases were in hospital as the result of cerebral seizures ; after rehabilitation treatment they returned home, often to houses which

had been left empty and were in a deplorable state. Home helps have, for example, laid rolled-up linoleum, washed floors and linen, aired beds and generally made houses habitable again. In one case recently helped, the home help begged curtains, a rocking chair and rugs from her friends ; she was thus able to make a dwelling again look like a home.

When frail or infirm patients are re-installed in their homes, much tolerance and patience is needed. Many of these patients are unable to realise that they can manage without the help of the hospital nurse and that the crutch is unnecessary. Implicit faith and trust is put in the home help who collects pensions and does shopping. In many cases the money must be budgeted for the patient who does not realise that prices have changed since she entered hospital ; everything must be written down and explained. A good home help can be of immense value in such a case, giving the necessary assurance and material help.

SECTION 51

MENTAL HEALTH SERVICES

BY

J. M. McALPIN, M.B., Ch.B.,
Medical Officer of the Mental Health Services

AND

J. SQUIRE HOYLE,
Executive Officer

The service is administered by a Sub-Committee of the Health Committee consisting of twelve elected representatives of the City Council and three co-opted members. Meetings are held monthly.

During the year two psychiatric social workers have left on accepting appointments in other cities ; one has been replaced and there is a vacancy for a Senior Psychiatric Social Worker.

The City Council has approved the appointment of two " trainee " mental health workers as part of the Department's scheme of in-training. A list of the whole-time staff is shown in Table I of the Appendix.

The Committee has continued to make annual grants to the National Association for Mental Health and the Child Guidance Department, and is pleased to report a happy liaison with other agencies, voluntary or statutory, in the city.

WORK UNDERTAKEN IN THE COMMUNITY

Prevention, Care and After-Care (*Mr. A. Marrington*).—The Local Authority continues to provide services under Section 28 of the National Health Service Act. The volume of cases dealt with declined, largely due to a reduction in staff. However, new staff appointments made at the end of the year have again brought the Department up to strength. The total number of new cases referred shows little change and the reduction is mainly in work with " after-care " cases. With only a limited number of staff available, urgent new cases were given priority and this was especially true with regard to " pre-care " cases. These are cases referred by general

practitioners and other social workers and organisations in the city where, although the possibility of eventual mental breakdown cannot be excluded, the main problem appears to be the individual's response to abnormal social stress and where the solution to the problem is more likely to be effected by social work rather than psychiatric treatment. This is the essential preventive aspect of the Department's work and it is encouraging to report that there has been an increase in the referrals of this type of case, 67 in 1956 and 101 in 1957. It is encouraging also to report that an increasing number of individuals are presenting themselves at the Department asking for help either for themselves or for a relative, accepting the Department as a possible aid to the solution of their problem rather than a service to be utilised only as a last resort when removal to hospital is unavoidable. It is to be hoped that this slight but significant trend will continue. Nevertheless, many authorities suggest that the incidence of emotional disturbance amongst the population is in the region of 8 per cent., some putting the figure considerably higher. If this is so, it is clear that the number of cases seen at the Department is only a very small proportion of those who may be requiring help. Fear and ignorance of mental illness in many cases delay early referral and the subsequent diagnosis and treatment which may prevent a more serious breakdown developing. The educational function of the Department is recognised and the mental health workers continue to play their part in fostering more realistic attitudes towards mental illness in the community.

The Therapeutic Social Club is now meeting on two nights per week and continues to play an important part in the services the Department offers. The average attendance on both nights remains at 25.

Members of the Department continue to attend at the Psychiatric Unit at St. James's Hospital, where close co-operation with the medical and nursing staff facilitates continuity in the approach to the patient's problems and also allows for early appointments to be made for those "pre-care" patients who are found to need psychiatric investigation.

Lunacy and Mental Treatment Acts, 1890—1930 (*Mr. T. S. Hawkesworth*).—1957 showed no great change in the number of cases referred to the Department, the total being 1,817 as compared with 1,915 for 1956.

During the year 590 patients were admitted to St. James's Hospital under the provisions of Section 20 of the Lunacy Act, 1890 (3-day Order). This is a slight reduction as compared with 1956. Of the patients admitted it was found necessary to transfer to mental hospitals on Summary Reception Orders 63 men and 111 women; a further 16 men and 30 women were transferred as voluntary-temporary patients. Of the remainder, 64 men and 77 women remained in the Psychiatric Unit for treatment as voluntary patients.

The total number of patients admitted to mental hospitals on Summary Reception Orders shows a decrease of 33, 195 as against 228 in 1956. Voluntary and temporary admissions totalled 862, an increase of 10 over the previous year.

During 1957, a further 141 patients have been regraded from certified to voluntary class and although this figure has not, for statistical purposes, been included in the discharges and admissions they can be regarded as voluntary admissions, bringing the percentage of voluntary admissions to 83.6 per cent.

Close co-operation with the Welfare Services Department and Dr. Droller of St. James's Hospital has been maintained in dealing with the ever-growing problem of old age.

Mental Deficiency Acts, 1913—1938 (*Mr. R. Perry*).—Statistical information is contained in Tables IV and V of the Appendix. The total on the register represents 3.6 per thousand of the estimated population of the city, of whom 3.4 per thousand are "ascertained" and 0.2 not "subject to be dealt with," i.e. voluntary cases. Although the numbers have not varied a great deal there is a slight decrease in the numbers per thousand population owing to the extension of the city area pursuant to the Leeds Corporation Act, 1956.

The number of children leaving schools for the educationally sub-normal, who have been referred to the Department as in need of a measure of supervision, is 20. This is a gradually diminishing number which for some years averaged 40 per year.

The practice has been continued of removing from the supervision register mentally handicapped adults who have stabilised themselves in the community and who can manage without such supervision. The registers are regularly reviewed.

A survey has been made of the home conditions under which the mentally handicapped are living in the community, which reveals

that 97 per cent. are under good or fair home care compared with 79 per cent. in 1927, and that only 3 per cent. are living under bad home conditions compared with 21 per cent. in 1927. This would suggest that the re-housing of families from slum clearance areas to pleasant housing estates with improved accommodation is gradually effecting an improvement in the standard of living, which is bound to make its mark on the character and conduct of young children growing up under improved conditions. The same method of assessment has been employed as in 1927, i.e. the standard of cleanliness, comfort and home care provided by the parents.

Hostel Scheme.—Leeds is fortunate in being able to provide facilities similar to those of a hostel at the home of Mrs. Glynn at 17, Spencer Place. Mrs. Glynn has, for some years, had residing with her a number of youths and men who are either (i) under the guardianship of an officer of the local health authority, (ii) on licence from mental deficiency hospitals, or (iii) with Mrs. Glynn under a private arrangement. There were 15 youths residing at this address at the end of the year.

All the youths, with the exception of four, are in remunerative employment and their wages range from £5 to £8 per week. Of the other four, three are in receipt of National Assistance benefit and the other is employed by Mrs. Glynn as a house-boy for which he receives free board and lodging, clothing, holidays and 30s. per week in cash.

A welfare officer visits the hostel each Saturday morning for the purpose of interviewing the patients and assisting them with their budgeting. A charge of £3 per week is made by Mrs. Glynn for board, lodging and laundry; pocket money, bus fares and other incidental expenses are paid and any balance is paid into the patients' saving accounts at the City Treasury, on which interest is accrued.

Some of the patients have considerable sums to their credit which are used for the provision of clothing, holidays, etc. Arrangements have been made with various shops in the city to supply clothing and the patients select their own articles, after which the bill is forwarded to the Department for payment through the individual accounts.

The men residing at Mrs. Glynn's are provided with good living conditions and meals and, although it is a business proposition

so far as Mrs. Glynn is concerned, she also takes a very deep personal interest in all the patients in her care ; we are very grateful to Mrs. Glynn for the excellent care provided.

There are, in addition, other male patients residing at other addresses in the city under similar conditions.

The majority of these patients are also provided each year, at their own expense, with a seaside holiday, either in holiday camps or in small boarding establishments.

INDUSTRY AND OCCUPATION CENTRES

The modernisation of the laundry centre has now brought it into line with other occupation centres and, with the exception of Rutland Lodge, all the Committee's centres are in new buildings, specially designed for the purpose, or in old ones which have been altered and brought up-to-date ; the old and unsuitable buildings have disappeared. Reports on the work are contained in the head teachers' reports.

Thanks to the co-operation of the Education Committee, medical inspections are in the hands of Dr. Holoran, whose report follows. The Medical Officer for Mental Health regularly visits the centres and co-operates with the family practitioner in cases of ill-health amongst the children.

Medical Care of Children in the Occupation Centres (*Dr. I. M. Holoran*).—Routine medical examinations are carried out by the doctors of the School Health Service. All Leeds children of school age who attend occupation centres have a medical examination every two years at the centres. Parents are invited to be present. Any disability which requires treatment is reported to the parent. Children are seen in between these regular examinations if any physical defect is found.

The orthopaedic care of cerebral palsied children and any other physically handicapped children who attend occupation centres is in the hands of the School Health Service orthopaedic team. Dr. Holoran now visits the centres every six months. Previously the children attended the clinic at the Education Offices. In the intervals between her visits, children may be seen at the Education Office clinic if necessary. The opinion and advice of Mr. Clark, F.R.C.S., Orthopaedic Consultant, is available at the Education Office clinic when this seems desirable, also that of Dr. Soutter, the paediatric member of the team.

By seeing the children in the centres, a much better liaison is maintained between the staff and the doctor. Furniture and appliances can be seen and advice given as to the child's management. The staff can explain their views on the child's special difficulties and their opinion as to his progress. Sometimes a re-assessment of the child's I.Q. is planned as a result of the discussion. Sixteen children are seen at the Stanningley centre and fifteen at the East Leeds centre.

A part-time physiotherapist has been appointed and began work in November, 1956. Efforts to secure a full-time physiotherapist proved unsuccessful. It has not been possible to secure the services of a part-time speech therapist. Mr. Lewis, physiotherapist, spends four mornings per week at the Stanningley centre and one morning at the East Leeds centre. The majority of the heavily handicapped children attend the Stanningley centre. Another reason for this division of Mr. Lewis's time is that the East Leeds centre is very close to the School Health Service East Leeds clinic, so that certain children for whom once-weekly therapy is inadequate may receive supplementary treatment at the school clinic.

At the Stanningley centre, six children have treatment once a week, four children twice a week and three children three times a week. At the East Leeds centre twelve children have treatment once a week.

It is sometimes very difficult to form an adequate opinion as to a pre-school child's educability. This is particularly true when the child has a dual defect and when there has been no opportunity for prolonged observation of his potentialities. For example, if a cerebral-palsied child has attended the pre-school cerebral-palsy clinic, the assessment is much easier than if he is not already well-known to the team. When such difficulties arise a period of attendance at an occupation centre on a voluntary basis will usually provide a solution. A six-month's period of observation by skilled staff provides material for a most valuable report to add to the doctor's observations on the child at a second interview. Some idea of the child's response to training will have been gained. In addition, the parents will be more satisfied that every care is being taken to form a just opinion if a decision is not made at the first interview. In the interval, the mother may be glad to be relieved of the care of the child during the day, rather than that he should remain at home until a decision can be

made. Thus, the arrangements for attendance of some young children at the centres for a period of observation on a voluntary basis are of value to the child, the parents and the school medical officer. It is usually possible to make a definite recommendation after a trial period of this kind, especially in view of the arrangements whereby such a recommendation can be revised if unexpected progress takes place.

East Leeds Occupation Centre and Nowell House (*Mrs. A. M. Taylor*).—On 31st December, 1957, 105 children were attending the centre. Of these, 65 were boys and 40 girls, three of whom were admitted from the West Riding County Council area. The ages ranged from 2½ to 14 years with children under five years of age in the nursery department. The staff is made up of the head and six school staff supervisors, six general helpers and three children's maids. As there are 80 low-grade children in the centre—many of them young — the general helpers have been engaged on an hourly basis to assist with the toilet and habit training, meals and general domestic work, playground duties and escort rotas, and general supervision of the youngest children. Two recent school staff vacancies have not been replaced; instead the policy has tended towards the employment of a small nucleus of school staff to take the more specialised subjects such as physical education, handwork, music and art and to supplement their work with that of general helpers who are paid an hourly rate corresponding to that paid to Corporation Home Helps.

The children remaining in the centre have no ability for classroom and three-R work; the timetable and work scheme has been adapted, slowed down and the classification altered. Speech training is taken daily throughout the centre but two children are given speech therapy at the Central Clinic. Children requiring physiotherapy are attended in the centre on one morning weekly by a physiotherapist, and supplementary treatment is given to certain children on other days at the clinic near the centre. Children suffering from cerebral palsy are re-inspected frequently by the School Medical Officer in addition to the regular routine medical examination, and dental attention can be received at any time at the dental clinic nearby.

The staffing of the Short-stay Home and Centre as a single unit is now established with the employment of some members of the

centre staff on an extra part-time basis, with hours varying according to the number of children resident in the home. Two members of the school staff and five of the general helpers now take duties in Nowell House and one of the children's maids is resident there. Four night duties are taken by one of the general helpers and three by a member of the school staff. Supervision of the stores and food stuffs and general equipment of the home is done from the centre. One hundred and nine children have been resident for short periods in Nowell House during 1957, with ages ranging from 2 to 14 years. The home has been open all through the year except for three weeks at Christmas when extra cleaning was done. Some children from outside the Leeds area have been admitted. The general health of the children has been very satisfactory and stringent precautions have been taken to guard against dysentery and enteritis.

The parents are encouraged to visit both the home and the centre and their co-operation and generous gifts are greatly appreciated by the children and staff. Many visitors and students from home and abroad have visited, and various women's and other organisations have shown an interest in the work.

Stanningley Occupation Centre (*Miss I. Bye*).—During the year ten boys have been transferred to Rutland Lodge and one girl to the Armley Grange Adult Centre; one boy left for work, one girl was returned to a county primary school, one boy transferred to a school for the educationally sub-normal, and one spastic was admitted to Hawksworth Hall. Of the West Riding children, six boys have been transferred to Rutland Lodge and one girl to Armley Grange. Fourteen children have been removed by that Authority to new centres opened in their area.

The Parents' Association continues to be very active. They provided a garden party in July for the children, which included entertainment and tea. They have also provided a maypole. One parent donated a sum of money from which were purchased two infra-red lamps for the spastic department. In December the local secondary modern school joined in a carol service, bringing with them a handbell team. Gifts of money to spend on the children have been given by another local school and a Guide company.

In October, the Minister of Health, Mr. Derek Walker-Smith, paid a visit to the centre which has also been visited by university students, nursery nurses and social workers, deputations from other

local authorities and students from the National Association for Mental Health for practical work.

The annual trip to the seaside, Filey, was very much enjoyed and a film was made of the day's outing by a parent.

The evening swimming club run by the Spastic Society continues to be a source of benefit.

Rutland Lodge Sheltered Workshop and Occupation Centre (*Mr. J. D. Hall*).—For some years the firewood department had operated at a considerable loss; furthermore the work was dull and uninspiring and not very suitable for many of the patients employed upon it. On the other hand, the light metal assembly work, begun in 1954, had proved a success from every point of view. Accordingly the Health Committee decided to close the firewood department and to concentrate upon light metal assembly and similar work. The change over was made in February, the patients engaged upon firewood work being disposed of as follows:—eleven unemployable youths were transferred to the occupation centre; four other youths left, having refused to transfer, but remain unemployed, and two psychotic cases left at the same time. One boy died, one was transferred to the gardens as a wage-earner, and one to the kitchen.

After the closure of the firewood section and the removal of plant and machinery, a new concrete floor was laid, the old tiles removed, the walls replastered and painted, and fluorescent lights were installed throughout the room. The metal work benches were transferred here from the former workroom and two large oil heaters were installed for space-heating.

The new metal work department began with nine youths, and we transferred one youth to this work from the firewood section at the end of March. At the beginning of the period a working week of 40 hours was operated, and at the end of March the seven youths on fettling work were put on a 44 hour week, in response to increased demand from the contracting firm. We were asked to revert to a 40 hour week from 8th May, and by 20th May we had to reduce the working week to 35 hours due to seasonal trade recession. We were given the option of reducing our weekly output of components, or of continuing at full capacity for two or three months and then coming to a complete stop for a similar period—we chose the former course as being more expedient.

We are most grateful to the Managing Director of the contracting firm, who has taken a close personal interest in the work. He has been tireless in his efforts to seek out suitable work from other concerns and has at all times maintained the closest liaison with the Department. Furthermore, he has loaned us a quantity of roller equipment, for the speedy unloading of boxes of components from the waggon to our workroom and back again to the loading point. This loan is for an indefinite period ; it has eliminated risk of injury to our workpeople while handling weights of up to 1-cwt or more and has greatly reduced the time taken in loading and unloading the waggon.

Throughout the year fifty different types of components have been handled for this firm, and in this period we have fettled or assembled 550,000 to a value of £3,900. This is an increase in output of 10 per cent. on last year, in spite of six months on short time.

During August we had a visit from a director and works manager of a Leeds firm who agreed to give us a trial order of assembly work. This we fulfilled to their satisfaction, and we have recently received from them a further order for a larger quantity of assemblies, though we cannot assess the prospects of a continuation of this firm's work in the future.

The wages earned by the youths vary from 1s. 7d. to 3s. 7d. per hour according to their ability.

At the end of November, we transferred two youths, one spastic and one epileptic, from the workshop to the occupation centre, and one youth to the kitchen as a wage earner. This leaves seven youths at the close of the year.

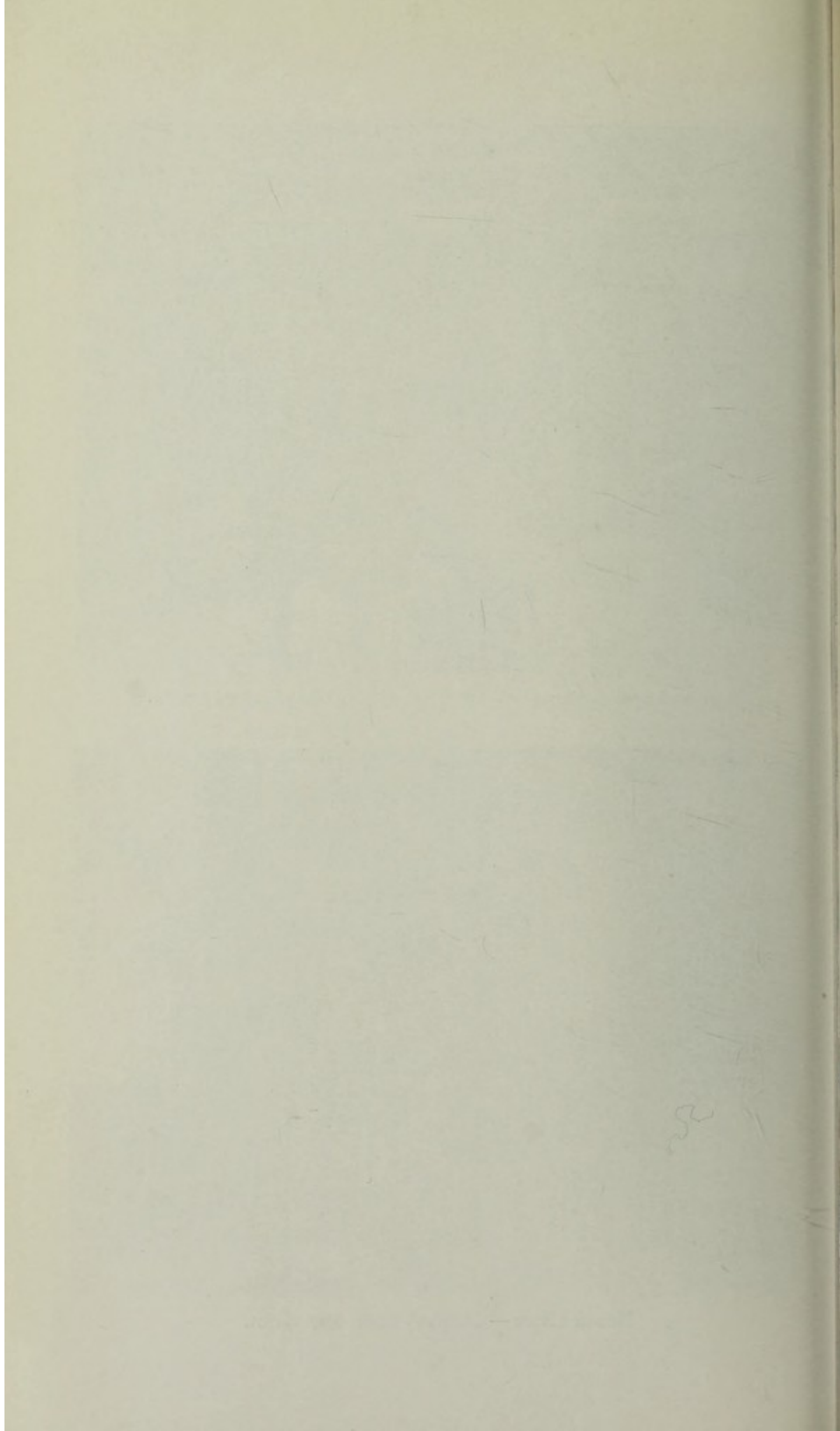
Occupation Centre.—At the beginning of the year there were 66 Leeds cases in the occupation centre, and by the end of the year the number of boys in the centre had risen to 87, exclusive of 12 West Riding cases. Twenty-three new cases were admitted during the year, and fourteen were transferred to this section from the sheltered workshops. A total of six boys were found work during the year, and five of these are still gainfully employed. Two of our older cases died ; four cases were admitted to institutions and three boys were absent on protracted sickness.



Rutland Lodge Sheltered Workshop for mentally handicapped youths.



Nowell House — Children's Short-Stay Home.



The boot repairing work diminished in quantity early in the year, and the one man employed solely in this work began to take up craft work in April. He now does both types of work and switches from one to the other as necessary. All previous types of craft work continue here, and we have increased our range by the production of mats from sizal string, dyed on the premises by our own boys to any required colour. We also carry out repairs to a large number of toys for the Leeds day nurseries, and undertake repairs to wool blankets for the ambulance service. The boys make aprons and face towels, and a small amount of tailoring work is still carried out.

The social highlight of the year for the boys was the starting in September of serious training to create a football team. The boys responded admirably to training by the two recently recruited instructors after the mid-day meal; on rainy days the boys' disappointment is apparent, though they play darts, table tennis and billiards in the recreation room.

The latest sporting activity is a tentative approach to basket ball—this will be played on a pitch in the former timber yard which has now been cleared.

Armley Grange Occupation Centre (*Mrs. K. Taylor*).—This centre has almost reached its maximum capacity—having over 50 girls and women on the register. The year has been both happy and successful. Cookery classes have been started and more domestic work has gradually been introduced into the curriculum. The cook and a part-time cleaner are the only domestic employees, and the number of patients being trained to assist in the kitchen and with washing, ironing and light cleaning duties, is steadily increasing.

Contemporary cane work has quite a prominent place among the handcrafts. Handwork to the value of approximately £175 has been sold during the year. A very delightful day was spent at Bolton Abbey in early June; in September another happy day was spent gathering blackberries. The annual garden party was held indoors owing to adverse weather, but this in no way hampered the success of the afternoon. Many flower seeds have been planted in the borders and next Spring we hope to grow a useful crop of vegetables. There have been many visitors from other towns and centres who have been greatly impressed by the happy and independent atmosphere of the centre.

Pioneer Laundry (*Mrs. A. Petty*).—There were 30 girls engaged in this laundry at the end of the year.

The laundry has been working under considerable difficulty during the last twelve months owing to the delay in the delivery of the new boiler. This was installed during Christmas week and together with new machinery and plant, it will mean that the output of the laundry should rise by one hundred per cent. There is still much decorating and clearing up to do before the laundry is finally complete. The alterations have provided a pleasant lounge on the first floor for dining and recreation. The girls have enjoyed a visit to the pantomime and a trip to the seaside. Many visits have been paid to the laundry by representatives of other Authorities and social organisations.

The Committee's film "Occupation and Training of the Mentally Handicapped" has been brought up to date to show the fettling and assembly of die-cast components and explains the necessity for bringing industry to those who have been tried in competitive work in the community but have failed to make the grade. Here, in sheltered workshops, they are able to carry out useful work and receive a fair rate of wages for their output.

The film has a sound commentary, lasts approximately 28 minutes and has to date been hired out on 235 occasions to medical officers of health, universities, parents' associations and other technical and picked audiences.

Conclusion.—The Department is pleased to acknowledge and to record its appreciation of the excellent co-operation received from other organisations, Corporation Departments, social agencies, and the various departments of the University. It is particularly grateful to the medical superintendents of the local mental and mental deficiency hospitals and to the Chief Assistant School Medical Officer. Although the pendulum is now swinging over from statutory to voluntary action in connection with the admission of patients to hospital there will always be a number for whom compulsory or coercive measures are required, and in this connection the Department wishes to tender thanks to the Chief Constable who is always willing to permit his officers to be available, if necessary, to assist the Department.

APPENDIX.

TABLE I.

STAFFING

Mr. R. Perry..	..	Deputy Executive Officer							
Mr. W. B. Sykes	..	Chief Clerk							
Mr. T. S. Hawkesworth		Senior Authorised Officer							
Mr. A. Marrington	..	Senior Psychiatric Worker							
Mrs. U. A. Fletcher		Senior Mental Health Worker							
Miss M. A. Casson	..	Secretarial							
OTHER STAFF									
<i>Administrative Staff:—</i>									
Clerks and Typists	..	..	..	..	..	..	..	..	3
Telephonist	..	..	..	..	..	..	..	..	1
<i>Clinical Staff:—</i>									
Mental Health Workers	..	..	..	..	..	..	..	..	7
Psychiatric Social Worker	..	..	..	..	..	..	..	..	1
Part-time Physiotherapist	..	..	..	..	..	..	..	..	1
<i>Sheltered Workshops and Occupation Centres:—</i>									
Supervisors	..	..	..	..	..	..	..	..	4
First Assistant Supervisors	..	..	..	..	..	..	..	..	2
Assistant Supervisors	..	..	..	..	..	..	..	..	19
General helps to above	..	..	..	..	..	..	..	..	10
Handcraft Instructors (male)	..	..	..	..	..	..	..	..	4
Workshop Foreman	..	..	..	..	..	..	..	..	1
Laundry Foreman	..	..	..	..	..	..	..	..	1
Laundry Staff	..	..	..	..	..	..	..	..	7
Cooks and Domestics	..	..	..	..	..	..	..	..	18
Caretakers	..	..	..	..	..	..	..	..	3
Motor Driver	..	..	..	..	..	..	..	..	1
									83

TABLE II.

NUMBER OF LEEDS CASES IN HOSPITALS.

	Menston			Stanley Royd			Storthes Hall		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
On books 1.1.57 ..	506	426	932	201	474	675	25	48	73
Admitted 1.1.57-31.12.57 ..	108	131	239	42	114	156	2	4	6
Deaths and discharges ..	614	557	1,171	243	588	831	27	52	79
Remaining on books 31.12.57	129	114	243	34	116	150	..	4	4
	485	443	928	209	472	681	27	48	75

TABLE III.
CASES DEALT WITH BY AUTHORISED OFFICERS

	Males	Females	Total
1. Visits paid	604	1,213	1,817
2. Removed to St. James's Hospital under Section 20 of the Lunacy Act, 1890 ..	266	324	590
3. Certified patients transferred to Menston Hospital	51	68	119
4. Certified patients transferred to Stanley Royd Hospital, Wakefield	7	45	52
5. Certified patients transferred to Storthes Hall Hospital	2	2	4
6. Certified patients transferred to other Mental Hospitals	7	4	11
7. Direct admissions to Mental Hospitals (certified)	2	7	9
8. Total Mental Hospital admissions on Summary Reception Orders or Petition	69	126	195
9. Patients admitted to St. James's Hospital under Section 20 and transferred to Voluntary	64	77	141
10. Voluntary patients admitted to Mental Hospitals	277	345	622
11. Voluntary patients admitted to Mental Hospitals on transfer from St. James's Hospital	29	59	88
12. Total voluntary patients	370	481	851
13. Temporary patients admitted to Mental Hospitals (all via St. James's Hospital)	2	9	11
14. Total admissions to Mental Hospitals (Total of Items 8, 9, 10, 11 and 13) ..	441	616	1,057

TABLE IV.
PARTICULARS OF LEEDS MENTAL DEFECTIVES ON 1ST JANUARY, 1958.

	Males	Females	Total
1. " Subject to be dealt with " :—			
(a) Under Statutory Supervision ..	415	333	748
(b) Under Guardianship	9	16	25
(c) In certified Institutions	487	426	913
(d) In " Places of Safety "	1	..	1
2. Certified defectives but not yet " subject to be dealt with " :—			
Under Voluntary Supervision ..	68	60	128
Totals	980	835	1,815

TABLE V.
PARTICULARS OF MENTAL DEFECTIVES ASCERTAINED DURING 1957.

	Males	Females	Total
1. Ascertainment.			
(a) Cases reported by Local Education Authority (Section 57, Education Act, 1944) :—			
(i) Ineducable children	9	9	18
(ii) At 15 years—on leaving Special School	14	6	20
(b) Other cases reported during 1957 and ascertained to be "subject to be dealt with"	5	..	5
(c) Other cases reported during 1957 who are not at present "subject to be dealt with" but for whom the Local Health Authority may subsequently become liable	22	18	40
Total number of cases reported during the year	50	33	83
2. Disposal of cases reported during the year.			
(a) Cases ascertained to be "subject to be dealt with" :—			
(i) Placed under Statutory Supervision	22	15	37
(ii) Placed under Guardianship (by Order)	1	..	1
(iii) Admitted to Institutions (by Order)	5	..	5
(b) Cases not at present "subject to be dealt with" :—			
(i) Placed under Voluntary Supervision	22	18	40
Totals	50	33	83

TABLE VI.
OCCUPATION CENTRES

Centre	Male		Female		Totals
	Under 16	Over 16	Under 16	Over 16	
Occupation Centres					
Stanningley	48	1	27	2	78
Harehills, East Leeds	65	..	39	1	105
Rutland Lodge	34	65	..	..	99
Armley Grange	..	..	16	33	49
Sheltered Workshops					
Rutland Lodge	..	9	..	..	9
Pioneer Laundry	..	1	..	29	30
	147	76	82	65	370*

*Includes 24 cases from the West Riding County Council.

TABLE VII.
PSYCHIATRIC AFTER-CARE 1957

	Males	Females	Total
1. Hospital cases (in- and out-patients) ..	77	138	215
2. After-care cases	255	347	602
3. Total cases dealt with	332	485	817
4. Total new cases referred	172	230	402
5. Total visits and interviews	1,563	2,313	3,876

Housing

HOUSING ACTS, 1936-1957

Repair, Individual Demolition, Clearance and Overcrowding

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,
Chief Public Health Inspector

Statistical data in this section of the report has been compiled by Mr. H. P. Gill, Supervisory Inspector, Housing Section.

Number of Houses.—The total number of houses and flats in the city on 31st December, 1957, was 167,725, made of up 55,926 back-to-back houses and 111,799 through houses and flats.

New Houses.—The number of permanent new houses and flats completed during the year was 3,251, 2,103 of these being built by the Corporation and 1,148 were erected by other bodies and persons. During the year the Local Authority converted 36 houses into 100 flats and 34 houses were converted into 79 self-contained flats by private owners.

Housing Shortage.—The number of applications for houses on the registers at the Housing Department on 31st December, 1957, was 26,791 of which 24,586 were regarded as inadequately housed.

Overcrowding.—There is a small improvement in the degree of overcrowding, the percentage on Corporation Estates having fallen from 0.93 to 0.70.

HOUSING ACTS, 1936-1957, PART IV.—OVERCROWDING. January 1st to December 31st, 1957.

	1956	1957
Number of new cases of overcrowding discovered in houses owned by the Corporation	12	4
Number of cases of overcrowding in houses owned by the Corporation which have been relieved	26	71
Number of overcrowding cases relieved during the year in course of slum clearance operations	73	143
A. No. of dwellings known to be overcrowded at the end of the year	1,641	1,238
B. No. of new cases of overcrowding reported during the year	333	413
C. No. of cases of overcrowding relieved during the year ..	997	831
D. Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority has taken steps for the abatement of overcrowding	2	8

There are 38,355 occupied dwellings on the municipal estates in the city and the average percentage of overcrowding during the year was 0·70.

162 families that were living in overcrowded privately owned houses have been re-housed ; all these families have been accommodated in municipal dwellings.

There have been no applications for licences to permit temporary overcrowding during the year.

413 new cases of overcrowding were reported to the Housing Department ; the number of certificates of permitted numbers issued during the year was 153, making a total of 90,237 certificates issued since the Act became operative.

Housing Repairs and Rents Act, 1954, and Housing Act, 1957.—

By the terms of these Acts, Local Authorities are empowered to retain in occupation houses in clearance areas which, in the opinion of the Local Authority, are or can be rendered capable of providing accommodation of a standard which is adequate for the time being and carry out repairs to them. During the year sixteen houses in the Buslingthorpe Lane (Meanwood) Clearance Areas and seven houses in the West End Terrace (Hyde Park) Clearance Areas were so retained.

Unfit Houses.—During the year 23,361 dwelling-houses were surveyed and examined and 7,117 nuisances and housing defects were remedied. Houses numbering 2,951 found to be defective in one respect or another under the Public Health Act were repaired in response to notices served under this Act.

The number of houses inspected under the Housing Acts, 1936-1957, and found not to be in all respects reasonably fit for human habitation and capable of repair was 375. One dwelling-house was repaired in response to notices served under these Acts.

When private owners failed to remedy urgent housing defects or serious nuisances after the service of statutory notices, the Department carried out the necessary work as a matter of urgency. Such work in default was carried out to one house under the Housing Acts at a cost of £18 18s. 6d. and to 49 houses under the Public Health Act at a cost of £437 9s. od., these amounts being recovered from the owners of the properties concerned.

Demolition of Individual Unfit Houses.—The number of Demolition Orders made was 172 whilst 7 Closing Orders were made on parts of buildings. In the case of 106 houses, the demolition of which was inexpedient because of structural considerations, Closing Orders were made under the terms of Section 10 of the Local Government (Miscellaneous Provisions) Act, 1953, and Section 17, Proviso to Sub-Section 1, of the Housing Act, 1957.

The number of houses demolished was 72. During the year 207 families affected by either Demolition or Closing Orders were re-housed by the City Council, while 20 families found their own accommodation; a further 44 houses were demolished by other Corporation Departments.

Housing Subsidies Act, 1956.—During the year 26 houses owned by the City Council were declared to be unfit for human habitation and the necessary certificate of unfitness was furnished in respect of them; 38 houses affected by action under this Act were demolished.

Clearance Areas.—With the re-housing position becoming easier it was found possible to step up the rate of representation of unfit houses; 44 areas comprising 1,190 houses were officially represented to the City Council.

During the year two Public Inquiries were held in respect of the following 6 areas, comprising 127 houses :—

No. of houses	Areas	Date of Inquiry
56	Burley Village Areas No. 1 and 2	19.2.57
71	Meanwood Street (Meanwood Road) Areas No. 1, 2, 3 and 4	19.2.57

The confirmation of the Minister of Housing and Local Government has been received for 35 areas, the total number of houses affected being 1,057 as compared with 55 areas involving 2,098 houses in the previous year.

The average number of persons per house in all areas represented since the war was 2.89.

SUMMARY OF POST-WAR ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Skinner Lane Areas 1 and 2	19.9.49	C.P.O.	27	71	..	29.5.51	27	27
Upper Carr Place Areas 1, 2, 3 and 4	17.7.51	C.P.O.	30	107	..	26.11.52	30	30
Brown's Yard (North Street)	12.5.52	C.P.O.	32	131	..	1.2.54	32	32
Temperance Street (Kirkstall)	8.9.52	C.P.O.	21	62	..	19.5.51	21	21
Burton Street (Dewsbury Road)	20.10.52	C.O.	33	76	..	28.10.53	33	29
Benson Street (Sheepscar)	19.1.53	C.O.	7	13	..	1.8.53	7	7
Franchise Street Areas 1, 2, 3 and 4	15.12.52	C.P.O.	25	79	..	Areas 1, 2 and 4 :— 10.11.53 Area 3 :— 29.10.53	25	25
Low Moor Side (Holbeck) Areas 1 and 2	16.3.53	C.P.O.	30	101	..	18.1.54	30	30
Freehold Street Area	16.3.53	C.P.O.	20	52	..	3.2.54	20	20
Monkton Street (Dewsbury Road) Area	15.6.53	C.P.O.	30	83	14.1.54	8.3.54	30	30
Camp Street Area	15.6.53	C.P.O.	24	76	..	20.1.54	24	24
Saville Green No. 1 Area	13.7.53	C.P.O.	115	349	9.6.54	22.7.54	116	116
Victoria Place (Camp Road) Area	13.7.53	C.P.O.	10	108	6.4.54	9.6.54	10	10
Carr Road (Camp Road) Areas 1, 2 and 3	13.7.53	C.P.O.	16	65	6.4.54	14.5.54	16	16
Sheepscar Street North Area	21.9.53	C.P.O.	14	38	9.6.54	22.7.54	14	12
Pottery Fields Area No. 1	21.9.53	C.P.O.	23	89	..	28.6.54	23	23
Oldfield Lane Areas 1 and 2	16.11.53	C.P.O.	27	84	9.6.54	22.7.54	27	27
Potternewton Lane Areas 1 and 2	16.11.53	C.P.O.	17	36	19.10.54	24.1.55	17	17
Area No. 1	16.11.53	C.P.O.	8	22	9.6.54	22.7.54	8	8
Area No. 2	16.11.53	C.P.O.	16	45	..	7.5.56	16	15
Woodhouse Cliff (Smith's Court) Areas 1 and 2	14.12.53	C.P.O.	6	7	..	7.7.54	6	6
Area No. 1	14.12.53	C.P.O.	16	45	..	7.5.56	16	15
Area No. 2	14.12.53	C.P.O.	6	7	..	7.7.54	6	6

C.O.—Clearance Order C.P.O.—Compulsory Purchase Order

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Cobourgh Street Areas 1 to 8 :—								
Area No. 1 ..	14.12.53	C.O.	2	6	19.1.55	6.7.55	2	..
Areas Nos. 2, 3 and 4 ..	14.12.53	C.P.O.	36	123	19.1.55	6.7.55	35	30
Area No. 5 (part) ..	14.12.53	C.O.	4		19.1.55	6.7.55	4	..
Area No. 6 (part) ..	14.12.53	C.O.	5		19.1.55	6.7.55	5	5
Area No. 5 (part) ..	14.12.53	C.P.O.	5	83				
Area No. 6 (part) ..	14.12.53	C.P.O.	11		19.1.55	6.7.55	21	19
Area No. 7 ..			3					
Area No. 8 ..			367	1,140	19.1.55	10.6.55	367	360
Saville Green Areas 2 to 10 ..	18.1.54	C.P.O.	3	3	19.10.54	24.1.55	3	2
Potternewton Lane Area 3 ..	18.1.54	C.P.O.	42	159	19.10.54	24.1.55	42	42
Carlisle Street (Wellington Road) ..	15.2.54	C.P.O.	204	595	19.10.54	24.1.55	202	201
Charing Cross Street and Scott Street (Woodhouse) ..	22.3.54	C.P.O.	154	489	26.10.54	25.2.55	154	154
Pottery Fields Areas 2 to 7 ..	15.2.54	C.P.O.	5	8			5	1
New Inn Street (Tong Road) :—	22.3.54	C.P.O.	6	8			6	6
Area No. 1 ..	22.3.54	C.P.O.	43	116	1.3.55	5.5.55	43	43
Area No. 2 ..	22.3.54	C.P.O.	69	186		24.3.55	69	68
Area No. 3 ..	22.3.54	C.P.O.						
Area No. 4 ..	22.3.54	C.P.O.						
Whitelock Street (North Street) :—								
Area No. 1 ..	22.3.54	C.P.O.	11	47	26.10.54	10.2.55	10	7
Area No. 2 (part) ..	22.3.54	C.P.O.	31	114	26.10.54	20.5.55	29	21
Area No. 2 (part) ..	22.3.54	C.O.	16	53	26.10.54	20.5.55	2	2
Area No. 3 ..	22.3.54	C.P.O.	2	8	26.10.54	16.2.55	16	16
Area No. 4 ..	22.3.54	C.P.O.	39	170	26.10.54	20.5.55	2	..
Area No. 4 (part) ..	22.3.54	C.P.O.	154	435	30.8.55	20.5.55	39	36
Upper Wortley Road Areas 1 to 8 ..	21.4.54	C.P.O.	1			8.11.56	148	26
do. Area 2 (part)		C.O.	6	..		8.11.56	1	..
do. Area 4		C.O.	7	..		8.11.56	6	..
do. Area 8 (part)		C.O.	3	..		8.11.56	7	7
do. Area 8 (part)		C.O.		..		8.11.56	3	..

C.O.—Clearance Order C.P.O.—Compulsory Purchase Order

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Silver Royd Hill Areas 1 and 2 ..	21.4.54	C.P.O.	44	111	1.3.55	16.2.55	44	39
Greenside Road (Lower Wortley) Areas 1 to 4 ..	21.5.54	C.P.O.	62	173	14.6.55	4.8.55	62	54
Green Road (Burmantofts) Areas 1 to 5 ..	16.7.54	C.P.O.	645	1,805	6.10.55	4.2.56	642	526
Town Street (Beeston) Areas 1 to 11 ..	24.9.55	C.P.O.	184	413	25.10.55	20.2.56	185	156
Armley Road Areas 1 and 2 ..	19.10.54	C.P.O.	84	229	8.6.55	3.8.55	84	83
Oatland Row (Meanwood Road) ..	19.11.54	C.P.O.	37	86	..	19.5.55	37	37
Church Street (Hunslet) Areas 1 to 15 ..	19.11.54	C.P.O.	162	440	22.11.55	..	..	3
Cross Lane Farnley Areas 1 to 5 ..	17.12.54	C.P.O.	146	374	17.4.56	19.7.56	144	120
Alfred Place (Camp Road) Areas 1 to 6 ..	17.12.54	C.P.O.	21	92	8.6.55	4.8.55	21	21
Villiers Terrace (Camp Road) Areas 1 to 3 ..	21.1.55	C.P.O.	67	491	23.11.55	16.3.56	65	65
Belinda Street (Hunslet) Areas 1 to 6 ..	18.2.55	C.P.O.	126	391	25.9.56	31.1.57	388	..
Michael Street (Hunslet) ..	18.2.55	C.P.O.	12	28	..	2.11.55	12	12
Minor Street (Kirkstall Road) ..	18.2.55	C.P.O.	14	30	..	4.8.55	14	14
Langham Street (Wellington Road) (part) ..	25.3.55	C.P.O.	} 297	913	19.6.56	8.11.56	287	..
Milnes Street (Wellington Road) (part) ..	25.3.55	C.O.			..	..	8	..
Areas 1 and 2 ..	25.3.55	C.P.O.	33	88	19.6.56	25.10.56	33	..
Area No. 1 ..	25.3.55	C.O.	10	20	19.6.56	25.10.56	10	..
Beckett Street (Burmantofts) Areas 1 and 2 ..	25.3.55	C.P.O.	429	1,111	19.6.56	3.10.56	429	..
Meynell Street (Holbeck) Areas 1 to 5 ..	20.5.55	C.P.O.	443	1,194	6.11.56	29.5.57	438	..
Northfield Villas (Northfield Terrace) ..	16.6.55	C.P.O.	4	26	..	9.3.56	4	..
Nevin Street (Hunslet Road) ..	14.7.55	C.P.O.	13	36	..	17.4.56	13	..
Ramsden Terrace (North Street) ..	14.7.55	C.P.O.	4	17	..	17.4.56	4	3

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Busingthorpe Lane (Meanwood)								
Areas 1 to 7	14.7.55	C.P.O.	179	471	12.12.56	..	..	..
West End Terrace (Hyde Park)								
Areas 1 to 4	14.9.55	C.P.O.	34	56	24.10.56	21. 1.57	..	..
Burley Village (Burley Road)								
Areas 1 and 2	14.9.55	C.P.O.	56	105	19. 2.57	17. 5.57	..	..
Oatland Houses (Duxbury Street)	20.10.55	C.P.O.	3	15	..	..	..	..
Meanwood Street (Meanwood Road)								
Areas 1 to 4	20.10.55	C.P.O.	71	207	19. 2.57	17. 5.57	..	..
Bentley Cottages (Meanwood)	17.11.55	C.P.O.	15	46	24.10.56	4. 1.57	15	14
Burton Row (Hunslet) Areas 1 and 2	17.11.55	C.P.O.	40	79	24.10.56	8. 3.57	..	..
Rutland Terrace Areas 1 to 4 ..	17.11.55	C.P.O.	55	173	19.6.56	24.10.56	..	..
Old Belle Isle Cottages (Middleton)								
Areas 1, 2 and 3	17.11.55	C.P.O.	21	60	..	..	..	..
Louis Street	17.11.55	C.P.O.	2	25	19.6.56	24.10.56	2	2
Newsam Square (Halton)	15.12.55	C.P.O.	27	64	..	31. 7.57	..	..
Sowden Row (Crossgates) Areas 1 and 2	15.12.55	C.P.O.	10	21	24.10.56	31.12.56	10	..
Miss Lane (Armley) Areas 1 and 2	15.12.55	C.P.O.	38	101	24.10.56	12. 3.57	..	..
Strawberry Road (Hall Lane) ..	15.12.55	C.P.O.	4	10	..	19.10.56	4	..
Byron Street	15.12.55	C.P.O.	7	26	..	31.10.56	7	..
Argyle Road (Burmantofts)								
Areas 1, 2 and 3	21.6.56	C.P.O.	301	787	..	..	..	..
Club Row (Kirkstall)	16.3.57	C.P.O.	30	65	..	..	..	..
Kirkstall Road (East) Areas 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12 ..	15.6.57	C.P.O.	437	1,006	..	..	..	..
Stansfield Row Area	15.6.57	C.P.O.	60	839	..	..	..	..
Albert Grove (Camp Road) Areas 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17	17.10.57	C.P.O.	386	1,290	..	..	..	..
Lower Wortley Road Areas 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13 ..	19.12.57	C.P.O.	277	688	..	..	..	..

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order

During the year 9,310 enquiries about the position of houses in relation to the City Council's Slum Clearance Programme were answered.

The table below gives a summary of action under the Demolition, Closing and Clearance Sections of the Housing Acts, 1936 and 1957.

	1955	1956	1957
SECTION 11—HOUSING ACT, 1936, and SECTION 17—HOUSING ACT, 1957 :—			
No. of houses represented for demolition	87	97	184
No. of Demolition Orders made	99	99	172
No. of families concerned	97	101	176
No. of persons concerned	286	299	503
SECTION 12—HOUSING ACT, 1936, and SECTION 18—HOUSING ACT, 1957 :—			
No. of dwellings represented for closing	23	10	9
No. of Closing Orders made	15	9	7
No. of families concerned	23	9	10
No. of persons concerned	70	28	24
SECTION 10—LOCAL GOVERNMENT (MISCELLANEOUS PROVISIONS) ACT, 1953, and SECTION 17 (1), HOUSING ACT, 1957 :—			
No. of dwellings represented for closing	9	94	96
No. of Closing Orders made	9	71	106
No. of families concerned	9	82	100
No. of persons concerned	30	251	375
No. of undertakings accepted from owners	7	90	52
No. of houses demolished	106	115	72
No. of houses and rooms closed	15	9	13
No. of houses closed	9	73	34
No. of families re-housed by Corporation at 31.12.57 (S. 11 and S. 12, H.A., 1936 and S. 10, L.G.M.P.A., 1953; S.S. 17, 17(1) and 18, H.A., 1957)	124	164	207
No. of families awaiting re-housing at 31.12.57 (S. 11 and S. 12, H.A., 1936 and S. 10, L.G.M.P.A., 1953; S.S. 17, 17(1) and 18, H.A., 1957)	30	59	123
No. of families who found own accommodation at 31.12.57 (S. 11 and S. 12, H.A., 1936 and S. 10, L.G.M.P.A. 1953; S.S. 17, 17(1) and 18 H.A., 1957)	13	12	20
No. of families re-housed at 31.12.57 (S.25, H.A., 1936)	1,121	1,214	1,625
No. of families who found own accommodation (S. 25, H.A., 1936)	94	122	130
No. of houses referred for opinion but not represented	154	257	221
No. of dwellings represented (S. 11 and S. 12, H.A., 1936 and S.S. 17, 17(1) and 18 H.A., 1957) which stood in Slum Areas	58	138	234

The following table shows the number of houses examined by the Medical Officer of Health as part of the general survey of the city during the year ended December 31st, 1957, and the numbers represented or otherwise dealt with, pursuant to the Public Health Act and Housing Acts.

	1955	1956	1957
Number of new houses erected during the year	2,613	1,151	3,251
(i) By the Local Authority	1,659	1,031	2,103
(ii) By other bodies and persons	954	1,151	1,148
1. <i>Inspection of dwelling-houses during the year.</i>			
(1) Total number of dwelling-houses inspected for housing defects under Public Health or Housing Acts and the number of inspections made	24,068	26,523	23,361
(2) Number of dwelling-houses (included under Sub-head (1) above) which were inspected and recorded under the Housing Consolidation Regulations, 1925, and the number of inspections made	2,881	1,023	2,081
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	2,137	502	1,411
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	30	237	375
2. <i>Remedy of Defects during the year without Service of Formal Notices.</i>			
Number of defective dwelling-houses rendered fit in consequence of informal action	2,502	3,897	1,899
3. <i>Action under Statutory Powers during the year.</i>			
A.—Proceedings under Section 9 of the Housing Acts, 1936 and 1957.			
(1) Number of dwelling-houses in respect of which notices were served requiring repairs	23	1	1
(2) Number of dwelling-houses which were rendered fit after service of Formal Notices :—			
(a) By owners	28	2	1
(b) By Local Authority in default of owners	12	2	1
B.—Proceedings under the Public Health Acts.			
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	2,176	3,103	1,297
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—			
(a) By owners	1,197	2,172	1,052
(b) By Local Authority in default of owners	30	17	50
C.—Proceedings under Sections 11 and 12 of the Housing Act, 1936, Sections 17 and 18 of the Housing Act, 1957.			
(1) Number of dwelling-houses in respect of which			
(a) Demolition Orders were made	99	99	172
(b) Closing Orders were made :—			
(i) S. 12, H.A., 1936 and S. 18, H.A., 1957	15	9	7
(ii) S. 10, L.G.M.P.A., 1953, and S. 17(1), H.A., 1957	9	73	106
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	106	115	72

Certificates of Disrepair.—Details of the number of applications for Certificates of Disrepair and applications for cancellation of Certificates of Disrepair which have been dealt with since the Rent Act, 1957, came into force on the 6th July, 1957, until the 31st December, 1957, are given in the following table :—

RENT ACT, 1957.
First Schedule

APPLICATIONS FOR CERTIFICATES OF DISREPAIR	
(1) No. of applications for certificates	721
(2) No. of decisions not to issue certificates	11
(3) No. of decisions to issue certificates :—	
(a) in respect of some but not all defects	526
(b) in respect of all defects	112
(4) No. of undertakings given by landlords under Paragraph 5 of the First Schedule	449
(5) No. of undertakings refused by Local Authority under proviso to Paragraph 5 of the First Schedule	Nil
(6) No. of certificates issued	78
APPLICATIONS FOR CANCELLATION OF CERTIFICATES OF DISREPAIR	
(7) Applications by landlords to Local Authority for cancellation of certificates	34
(8) Objections by tenants to cancellation of certificates	10
(9) Decisions by Local Authority to cancel in spite of tenant's objections	2
(10) Certificates cancelled by Local Authority	21

Improvement Grants.—The Housing Committee has continued the making of Grants under the provisions of Section 20, Housing Act, 1949. The City Council's Slum Clearance Programme is proceeding as fast as circumstances permit, but in addition to the houses which will be dealt with under the Slum Clearance Programme within the next ten years or so, there are in the city a number of reasonably well-built back-to-back houses which are without separate water closets and bathrooms and which fall below modern standards in other respects. Many of these houses will have a useful "life" of at least fifteen years if they are improved and, as far as possible, brought up to modern standards. Two areas, which consist mainly of this type of back-to-back house, were surveyed and details of the ownerships, and the suitability of these houses for improvement, were reported to the Housing Committee. One of these areas, consisting of 168 houses, is situated in the Noster Road district

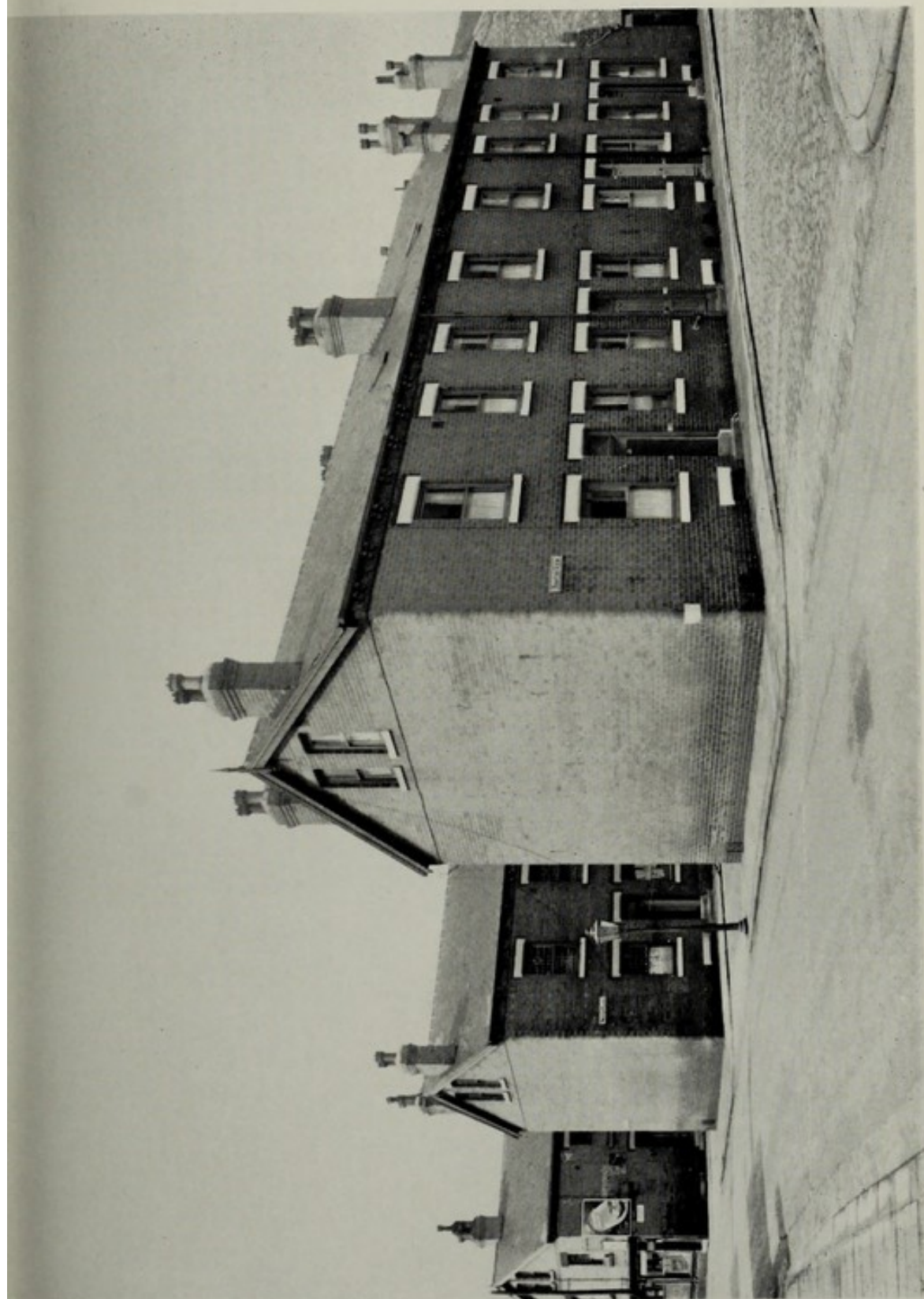
of Beeston (see photograph opposite this page); the other, of 129 houses, is at Compton Road, Harehills. It was suggested to the owners that, with the help of the City Council, they might carry out the improvements which are necessary to bring the houses to a higher standard by installing a W.C. and bath in a separate room and by securing proper ventilation. They were also advised that, since the Improvement Grant was limited to half the cost of the works (with a maximum of £400), the City Council was prepared to lend that part of the cost remaining to be borne by the owner. Alternatively, it was suggested that the City Council would be prepared to purchase the property and to carry out the improvements.

The position from the commencement of the scheme to the 3rd October, 1957, when the making of Grants had to be suspended following the increase in the bank rate, is as follows:—

Number of houses in respect of which applications received	1,206
Number of houses in respect of which applications withdrawn	186
Number of houses not suitable for improvement.. ..	358
Number of houses suitable for improvement	670
Number of houses in respect of which formal applications have been received	372
Number of formal applications approved by Local Authority	357

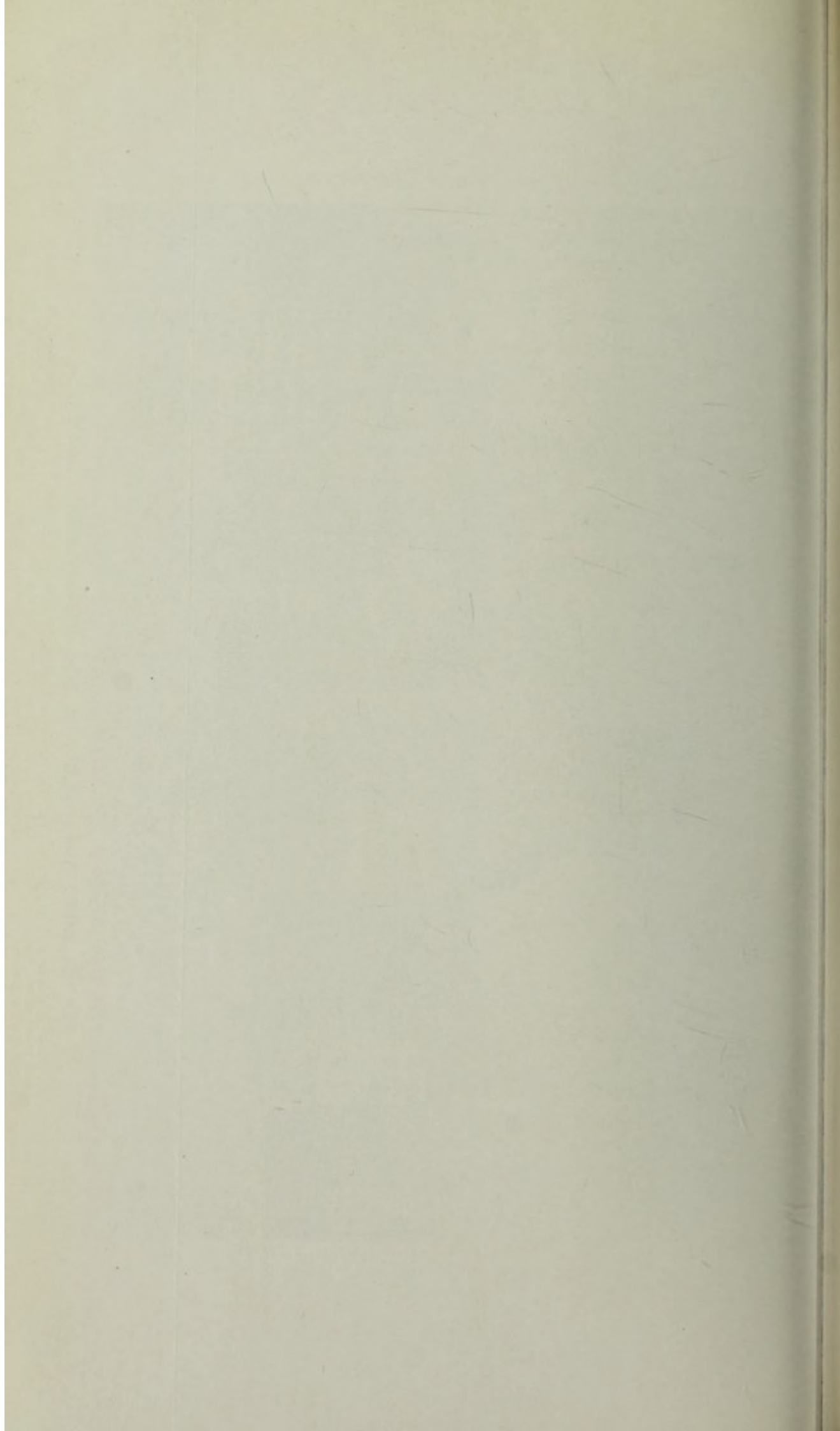
All applications are dealt with by the staff of the Health Department from reception to completion.

In addition to the upgrading of the better type of back-to-back houses, the Council is also concerned at the large number of houses which are, by present day standards, too large to be suitable for occupation by most single families, which are difficult to maintain and which are, or may become, the subject of a number of lettings without the provision of adequate facilities. The Council feel that such houses, where possible, should be properly converted into flats and maisonettes so that each occupier enjoys satisfactory self-contained accommodation.



NOSTER ROAD AREA, BEESTON, FOR IMPROVEMENT GRANTS

There are 168 houses in this area, 50-60 years old, well-built and well maintained back-to-back houses. They have water closets in common yards (some shared) and baths in sculleries. The owners have been offered improvement grants to modernise their houses and loans to cover the balance of costs: as an alternative the City Council has offered to purchase the property and carry out the improvements. Improvement includes installing bath, lavatory basin and water closet in the small bedroom, replacing attic skylight with adequate dormer window, and provision



The four areas mentioned below were surveyed and reported on :—

Name of Area	Number of Houses	Number of Families
Louis Street Area No. 2, Chapeltown ..	39	184
Spencer Place Area, Roundhay Road ..	56	116
Woodland Grove Area, Chapeltown ..	8	56
Belle Vue Road, Burley	26	59

In these cases an approach was made to the owners informing them that the Council would be glad to acquire these houses (if a satisfactory price could be agreed) in order to ensure the proper conversion of the property, and accept the responsibility for seeing that the present occupants are re-housed. Those owners who are not desirous of selling the property to the Council were informed that Improvement Grants and loans are available to meet the cost of the conversion of the houses into self-contained flats and maisonettes.

The first part of the book is devoted to a general survey of the subject.

Name	Rank	Age	Service	Remarks
John Smith	Lieut.	25	1861-63	Died of cholera
James Brown	Capt.	30	1861-63	Died of cholera
William Jones	Major	35	1861-63	Died of cholera
Robert Taylor	Lieut.	28	1861-63	Died of cholera

The second part of the book is devoted to a detailed account of the events of the day.

Food Hygiene

FOOD INSPECTION

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,
Chief Public Health Inspector

During 1957 public health inspectors paid 6,052 visits to premises in which foodstuffs intended for human consumption were manufactured, stored or sold. Of these, 1,829 were to premises registered with the Local Authority under the provisions of Section 16 of the Food and Drugs Act, 1955, that is, to places which are used for the manufacture of prepared foods such as ice-cream, sausages, pork products, pickles and sauces, and fried fish. The remaining 4,223 visits were to places not so registered, such as bakehouses, restaurants, cafes, canteens, butchers', provisions merchants, etc. All these premises, whether or not they are registered under the Food and Drugs Act, must comply with the provisions of the Food Hygiene Regulations, 1955, and a great deal of work has been done under these Regulations in food premises throughout the city. During the year, 235 notices were served for contraventions of the Regulations, or to require alterations to premises to bring them into line with modern ideas. These notices and other action resulted in a large number of improvements to premises of various kinds. Details of this work and of these improvements are contained in the table of work done by public health inspectors printed on page 223 of this Report.

Conditions in the City Markets have continued to engage the Department's attention, and following the completion of the alterations to the butchers' shops, approaches were made to the occupiers of the shops in the Game Row. The shops here have now been altered to conform to this Department's requirements, in some instances requiring almost complete reconstruction, and the work has been virtually completed. The new shops now present a most attractive sight, and, more important from the Department's point of view, they also comply with the Food Hygiene Regulations in detail. An approach has now also been made to the occupiers of shops in the Fish Row to improve their premises. No work has, as yet, been commenced here, but several occupiers have had plans drawn up and are obtaining estimates of the cost of the necessary

alterations. In addition to this, various other stalls and shops in the Markets have been inspected and improvements secured, e.g. several grocers' shops have been re-constructed to comply with Departmental requirements, and in many other food shops in the Markets, other minor improvements such as the provision of sinks and wash-hand basins with hot and cold water have been secured.

Cafes, Canteens, etc.—During 1957, inspectors in the Department paid 1,190 visits to cafes, canteens, snack bars and other places where meals and light refreshments are sold for immediate consumption by the public. This number includes visits made to premises in which new cafes or snack bars have been established. Such food businesses must conform to the provisions of the Food Hygiene Regulations, and a great deal of routine work in the Department is directed to this end. The cafes and canteens are regularly visited and notices, verbal and written, are given to the occupiers to acquaint them of any contraventions of the Regulations which may be found. In my 1956 Report, I pointed out that following the coming into force of the Food Hygiene Regulations, an effort had been made to visit all cafes in the city to try and bring them into line with the requirements of the Regulations, and 246 notices had been served. Many of these were outstanding at the end of the year, but all were complied with during 1957. In addition, 7 further notices have been served in 1957 for contraventions found, and in 2 instances legal proceedings have been taken against occupiers of premises for offences against the Regulations. The following defects were noted during visits paid in 1957 :—

Dirty conditions	7
Accumulations of refuse	3
Smoking in food rooms	1
Insufficient and defective sinks, and lack of hot water supplies to sinks	2
Lack of washing facilities (including hot water, soap, nail brushes and towels)	8
Structural defects in floors, walls and ceilings of food rooms	6
Lack of proper protection for foodstuffs	2
Unsuitable working surfaces	4
Lack of accommodation for clothing	3
Lack of proper facilities for the storage of foodstuffs ..	3
Insufficient sanitary accommodation	4

The number of cafes and snack bars in the city remains the same at 254, nine cafes having been closed during the year and nine new premises opened. No mobile snack bars were approved during the year.

The public health inspectors who visit factories and work-places, inspect also, as a matter of routine, the canteens and mess rooms provided in these places. These again must conform to the provisions of the Food Hygiene Regulations if food is prepared for sale. During the year 13 notices have been served requiring improvements at these places. The notices referred to the following matters :—

Dirty conditions of food-preparing rooms	15
Accumulation of refuse	1
Insufficient refuse containers for kitchen waste	1
Insufficient or defective sinks, and lack of hot water supplies	4
Lack of washing facilities (including hot water, soap, nail brushes and towels)	5
Structural defects in floors, walls and ceilings of food rooms	16
Lack of, or unsuitable, ventilation	7
Unsuitable working surfaces	15
Lack of accommodation for clothing	4
Lack of proper facilities for the storing of foodstuffs ..	6
Other matters	4

In addition to the above items a complaint was received about mice infestation in one canteen. This infestation was satisfactorily dealt with by the Rodent Control Section of the Department. Conditions in these industrial canteens have continued to improve during the year. Many major structural alterations have been made and much new equipment provided, and the standards of hygiene now existing are comparable with those in commercial kitchens where food for the general public is prepared for sale.

Ice-Cream Premises.—During the year 614 visits were made to the premises in the city which are used for the manufacture or sale of ice-cream.

Fish-Frying Premises.—The number of visits paid to registered fish-frying premises was 748. Two applications for registration were approved during the year.

Other Registered Food-Preparing Premises.—During the year 61 visits were paid to other registered food-preparing premises such as those used for the manufacture of sausages or preparation of pork products, meat pies, jams, pickles and sauces. Fourteen applications for registration of premises used for one or other of these purposes were granted subject in twelve cases to the carrying out of works of alteration to the premises.

Statistics with regard to registration of premises under Section 16 of the Food and Drugs Act, 1955, are set out in the following table.

REGISTRATION

Number of premises registered for the manufacture of ice-cream during 1957	..
Number of premises registered for storage of ice-cream during 1957	..
Number of premises registered for the sale of ice-cream during 1957	77
Number of premises registered for the preparation or manufacture of sausages or potted, pressed, pickled or preserved food intended for sale (4 fried fish shop, 13 manufacturers of sausages, potted meat, meat pies, etc.)	17
Number of notifications of change of occupier received :— ice-cream premises	87
food-preparing premises	24
Number of premises removed from register :— Ice-cream premises (manufacture)	4
Ice-cream premises (storage)	..
Ice-cream premises (sale)	28
Food preparing premises	10
Number of premises on the register 31st December, 1957 :— (a) used for manufacture of ice-cream	50
(b) used for the sale of ice-cream	1,492
(c) used for the storage of ice-cream intended for sale	9
(d) used for the manufacture of sausages, or preparation of preserved food	766

Transport and Handling of Meat.—All vehicles used for the cartage of meat are now metal lined, are usually in a good condition and kept in a reasonable state of cleanliness. The practice of utilising private motor cars for carrying meat has practically ceased, offal only being allowed to be carried if placed in a suitable receptacle.

Some difficulty has been experienced in ensuring that slaughtermen's clothing is maintained in a reasonable condition as to cleanliness.

Transport of Fish.—The condition of fish boxes has been fairly satisfactory. A little more use has been made of the small non-returnable box.

Legal Proceedings.—*Food Hygiene Regulations, 1955.*—During the year the proprietors of two cafes in the city were prosecuted under the provisions of the Food Hygiene Regulations, 1955, in respect of the dirty condition of their premises and equipment. Both defendants were found guilty and were fined £90 and £75 respectively.

The owner of a butcher's shop was prosecuted for smoking while assisting in the unloading of meat from a delivery van and was found guilty and fined 40s.

A further case was taken against the occupier of a grocer's shop in respect of the dirty condition of the premises and equipment and for failing to protect food from the risk of contamination. The defendant was given a conditional discharge for 12 months, and 12s. costs were awarded to the Corporation.

A meat carrier was prosecuted for carrying meat into a shop and not wearing protective head covering. The defendant was found guilty and fined £1.

Food Sampling.—Supervisory Inspector H. Long reports that the inspectors in the Food and Dairies Section took 359 samples of food and drugs, made up of 316 formal and 43 informal samples. A large variety of food has been sampled and the City Analyst has reported that, with few exceptions, they have been found satisfactory.

Administrative action was taken in all cases where the samples were found to be adulterated or deficient. Minor cases of adulteration or deficiency were dealt with by a warning letter to the firm or

persons responsible. Serious cases were dealt with by prosecution and the results of the summonses issued under the Food and Drugs Act, 1955, during the year are shown on the table on page 189.

Canned Meats.—The Meat Products (No. 2) Order, 1952, has been revoked and there are now no legal standards for meat content in these products. There is now considerable variation in the meat content of various brands. The meat content of samples of Pork Luncheon products was found to be 60 to 65 per cent., of Canned Braised Steak 49 to 55 per cent. and Canned Beef Steak with Gravy 54 to 65 per cent. The minimum standards under the Meat Products Order had been 90 per cent., 95 per cent. and 75 per cent. respectively.

Other Foods.—A complaint was received from a member of the public at the beginning of the year regarding a bottle of Malt Vinegar which she had purchased. The person doubted whether she had in fact been supplied with malt vinegar. The liquid was a deep red colour and was found to consist of a concentrated solution of red dye in acetic acid. The City Analyst reported that the acid strength was 28·8 per cent. compared with the 4 to 5 per cent. of a normal vinegar. The bottle was not intended for sale and had been sold in error. The article was, in fact, a dye used in the preparation of salmon paste.

In the normal course of sampling, one of the officers purchased an article of food described as "Chicken Fingers." These consisted of seasoned potato, cereal and fat. The article had been wrongly described by the shopkeeper and investigations showed that they had been sold and invoiced to him as "Chicken Flavoured Fingers."

A sample of food described as "Real Minced Chicken" has been the subject of extensive enquiries. On analysis this product was found to contain only 63 per cent. chicken, the remaining 36 per cent. consisting largely of added water to which agar had been added. The label was considered misleading and the matter was taken up with the firm concerned. Eventually the packers agreed to withdraw the label and to amend the wording contained thereon.

Ice-Cream Sampling.—During the year 71 samples of ice-cream were taken for bacteriological examination from the places of manufacture and local vendors. Of this number, 8 samples were

classified unsatisfactory and one very unsatisfactory. All the laboratory results were communicated to the ice-cream manufacturers and vendors. When the result showed an unsatisfactory ice-cream, a special follow-up visit was made to advise on improved methods.

The sales of loose ice-cream in the city are now very small and the majority of the shops sell only well-known makes of wrapped ice-cream. These have always been found satisfactory, bacteriologically and chemically.

The results are shown in the following table :—

METHYLENE BLUE TEST

Grade	No. of Samples	Percentage	Remarks
1	57	80.3	Good
2	5	7.0	Satisfactory
3	8	11.3	Unsatisfactory
4	1	1.4	Very unsatisfactory

Drugs.—Two samples of drugs taken during the year were found to be unsatisfactory. The first, Iodised Throat Lozenges, were grossly deficient in the two principal ingredients, iodine and phenol. The actual deficiencies were 63 per cent. in the iodine and 100 per cent. in the phenol. The lozenges no longer had any appreciable antiseptic properties.

The second sample was a Halibut Oil. According to the label the oil contained 40,000 International Units of Vitamin A per gramme at the time of manufacture. Analysis showed the amount of Vitamin A to be only 28,500 International Units. On investigation it was found that the oil had been packed several years ago. A warning letter was sent to the manufacturers.

Meat Products.—Because of a number of notifications of *Salmonella typhi-murium* infection, the food sampling officers visited manufacturing premises and shops and submitted samples of meat products to the Public Health Laboratory Service for bacteriological examination.

One sample of Beef Sausage was reported to contain *Salmonella typhi-murium*. A follow-up visit was paid to the factory premises

where the sausage was made and a group of samples taken of meat and meat products in the course of manufacture. From two of these samples (one a mixture of beef and pork sausage meat from the chopping machine and the other sausage meat from the grinding machine) *Salmonella typhi-murium* phage type 2B was again isolated. Appropriate steps were taken to deal with the source of infection and all equipment was thoroughly sterilised.

Systematic sampling of meat products continued as a matter of routine and for some time no further pathogenic organisms were isolated. Subsequently *Salmonella typhi-murium* phage type 2B was isolated from a sample of pork sausages prepared at a second sausage factory. This factory was visited and samples were taken of various meat products. Later, the Public Health Laboratory Service reported that *Salmonella typhi-murium* phage type 2B had been isolated in chitterlings. Special steps were taken at the factory concerned to ensure thorough cleansing and sterilisation of all equipment.

The findings suggested that pigs might have been the source of infection and it was decided to carry out further investigations at a pig slaughterhouse. In collaboration with the Public Health Laboratory Service, two visits were made to the pig slaughterhouse and certain specimens were taken for examination. Pooled liver, spleen and glands were obtained from four pigs forwarded from Ripon Market, three pigs from Malton Market, one pig from Pannal Market, one pig from York Market and from one of five pigs from a local source. From one of these specimens *Salmonella typhi-murium* was isolated.

A second batch of specimens was taken from pigs a week later but *Salmonella typhi-murium* was not found in this batch of samples.

Bacteriological Examination of Food.—Routine bacteriological examinations of various types of food and wrappers have been carried out during the year and 225 samples have been examined by the Public Health Laboratory Service as follows:—

Artificial Cream	..	..	..	..	..	..	1
Sausage and Sausage Rolls	..	..	..	..	..	..	88
Meat Pies and Other Products	..	..	..	..	..	..	73
Fresh Eggs	..	..	..	..	..	..	4
Fresh and Frozen Meat and Offal	..	.	..	..	..	..	17
Iced Lollies	..	..	..	..	..	..	6
Confectionery	..	..	..	..	..	..	9

Dripping	..	..	..	..	..	..	..	5
Egg Albumen	..	..	..	..	..	..	..	1
Liquid Frozen Egg	..	..	..	..	..	..	..	2
Fish Cakes	..	..	..	..	..	..	..	2
Bread	..	..	..	..	..	..	..	1
Soup Powder	..	..	..	..	..	..	..	1
Potted Salmon	..	..	..	..	..	..	..	1
Toffee Apples	..	..	..	..	..	..	..	2
Meat Wrappers	..	..	..	..	..	..	..	12

Reference should be made to the helpful co-operation of the Laboratory staff at all times and for the valued services performed by them.

Extraneous Matter in Food.—The number of complaints from the public of extraneous matter in food is about the same as last year. In five instances it was necessary to institute proceedings and the results of the hearings are set out in the table on page 181. In all other instances which have been brought to the notice of the Department, suitable action has been taken.

During the year the following extraneous matter has been found in food :—

- *Blood-stained first-aid dressing in small brown loaf
- *Wrapped sliced loaf having strands of wool embedded in sole of loaf
- Oily matter in breadcake
- Rubber tubing in white loaf
- Dirty grease in sliced loaf
- Sea-shell in teacake
- Glass in currant loaf
- Machine-oil in wrapped sliced loaf
- Rusty metal pin in malt loaf
- Dried fruit stalk in scone
- Glass in Cornish pasty
- Metal nail in cake (3 cases)
- *Glass in bottle of fruit chutney
- Glass in salmon and cucumber sandwich
- Piece of paper in biscuit
- 2-inch piece of rubber in butter
- *Piece of wire in mince pie

Portion of insect in packet of cereal food
 *Two dead flies in meat pie
 Wasp in bottle of orange juice
 Fly in cake
 Beetle (*Carbida* species) in packet of currants
 Bluebottle fly in tin of baked beans
 Insect (*Gryllus* species) in tin of peaches
 Beetle in small white loaf
 Flour beetles in a meringue
 Insect in sliced loaf.

* denotes legal proceedings taken.

EXTRANEEOUS MATTER IN FOOD.

SUMMONSES ISSUED DURING 1957, UNDER THE FOOD AND
DRUGS ACT, 1955.

Article	Extraneous Matter	Result of Hearing
Small brown loaf	Contained a blood-stained first-aid dressing	Fined £10. Bakers.
Wrapped sliced loaf	Contained strands of wool in sole of loaf	Fined £5. Bakers.
Fruit chutney ..	Contained a piece of glass	Fined £5 and ordered to pay 7s. 6d. costs. Manufacturers.
Mince pie ..	Contained a piece of wire	Fined £10 and ordered to pay £4 12s. 8d. costs. Baker.
Meat pie	Contained 2 dead flies in the substance of the meat	Fined £10. Bakers.

Fertilisers and Feeding Stuffs Act, 1926.—During the year 15 formal samples and 2 informal samples of fertilisers and one formal sample of feeding stuffs were taken under the above-mentioned Act and submitted to the Agricultural Analyst for examination. Seven of the fertiliser samples were classified as unsatisfactory by analysis or by reason of some non-compliance with the provisions of the Act. In five of the unsatisfactory samples the matter was taken up with the manufacturers concerned. In the remaining two cases, a firm of horticultural seedsmen in the city was prosecuted for selling John Innes Base Fertiliser without a statutory statement. The defendants were given an absolute discharge on payment of 4s. costs. This firm was also prosecuted for selling Chrysanthemum

Fertiliser containing less than the stated amount of nitrogen, soluble phosphoric acid and potash. The summons was withdrawn on a technicality.

Rag Flock and Other Filling Materials Act, 1951.—During the year the licences of two premises used for the manufacture of rag flock and one licence of premises used for the storage of rag flock were renewed.

No applications were received for the registration of premises where rag flock and other filling materials are used. The total number of registered premises in the city is 55.

Four samples, viz. woollen mixture felt, cotton felt, rag flock and coir fibre, were taken and submitted for analysis to the prescribed analyst. All the samples passed the prescribed tests.

Pharmacy and Poisons Act, 1923 (Part II).—The administrative year for the purpose of the above-mentioned Act is the period 1st May to 30th April. The following table gives a detailed summary of the work done during the year ended 30th April, 1958.

Persons on the List on 30th April, 1957	426
Persons added to the List during the year	26
Persons removed from the List during the year	45
Persons on the List on 30th April, 1958	407
Premises on the List on 30th April, 1957	544
Premises added to the List during the year	30
Premises removed from the List during the year	47
Premises on the List on 30th April, 1958	527
Visits paid to :—	
1. Listed Premises in connection with new applications	5
2. Listed Premises in connection with unpaid fees	..
3. Listed Premises for routine inspection	74
4. Unlisted Premises	..
Contraventions :—	
Persons found to be selling Part II Poisons on Unlisted Premises	..
Listed Sellers found with incorrectly labelled Part II Poisons in stock	..
Contraventions dealt with :—	
Persons ceasing to sell Part II Poisons from Unlisted Premises	..
Persons selling Part II Poisons from Unlisted Premises who subsequently applied for listing	..
Listed Sellers who have corrected labels found to be not in accordance with requirements as to labelling	..

Pharmacy and Medicines Act, 1941.—No contraventions came to the notice of the Department during the year.

SAMPLING OF MILK

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,

Chief Public Health Inspector

Supervisory Inspector H. Long reports that the sampling officers in the Food and Dairies Section have taken, in all, 4,147 samples of milk for examination. This figure was made up of 2,922 chemical samples, 1,126 bacteriological samples and 99 biological samples.

The quality of the milk supplies in the city remains satisfactory. The total consumption has not varied to any degree over the past few years. There has been, however, a customer demand for certain changes in the types of milk. The sale of Tuberculin Tested (Pasteurised) milk has increased with a corresponding decrease in the sale of Pasteurised milk.

During the year one pasteurising plant, the property of a small retail producer, has been discontinued. The farm premises and the plant have been demolished to make way for a new housing estate. This supplier changed over to the sale of Tuberculin Tested Farm Bottled Milk. A start has been made on the construction of a new modern dairy by one of the largest companies in the city. This should be in operation in 1958 and will be a great improvement on the present conditions.

Distribution.—The changing pattern of milk distribution is bringing new problems to the trade. As the new housing estates extend to the perimeter of the city, it has been necessary to establish milk depots at various points of advantage. There has been a reduction in the number of shop premises from which "Sterilised" milk is sold and this can, in many instances, be accounted for by the increase in the demolition of property in clearance areas.

Complaints were received from the public regarding the indiscriminate dumping of empty milk bottles. The greatest difficulty was found to be in the centre of the city and, in particular,

in relation to offices and shops. When bottles of milk were left at the various places of employment, the practice appeared to be that the empty bottles were not being put out for daily collection but were often retained for several days. This created difficulties for the roundsmen as they had not the facilities for the collection of fluctuating numbers of bottles. The dairy companies were interviewed and agreed to send out special transport to collect the accumulation of bottles and their roundsmen were instructed to report accordingly.

Adulterated Milk.—During the year under review, 2,922 samples of milk have been taken for the purpose of chemical analysis by the sampling officers. Of this number the City Analyst adversely reported on 85 of the samples. 47 were found to contain added water, 31 showed a fat deficiency and in the remaining 7 samples added water and fat deficiency was reported. From the 85 unsatisfactory samples, legal proceedings involving 19 of the samples were instituted against six farmers.

Fat Deficient Milk.—With regard to the fat deficient samples, a batch of 23 churns belonging to two farmers was involved. These milks, representing consignments on successive days, were shown as a result of appeal-to-cow samples to be naturally fat deficient. Although they were, therefore, legally genuine it is most unsatisfactory that a purchaser should be provided with a milk more than 30 per cent. fat deficient. In both cases the County Milk Production Officer was advised for any action he considered necessary.

Improvement of Milks of Low Compositional Quality.—The scheme operated by the Joint Milk Control Committee for the improvement of milks of low compositional quality has now been in operation for a full twelve months. Although it is early to pass considered judgement, it does appear, from the results of the large number of producers sampled, that the quality of the milk brought into the city has improved slightly. The average compositional value of the 2,922 samples taken during the year was as follows:—fat—3·71 per cent., solids-not-fat—8·71 per cent., total solids—12·42 per cent.

Dairy Inspection and Milk Sampling.—The following visits were paid during the year by the Food and Drugs Inspectors :—

To dairies	158
To pasteurising and sterilising plants	828
To bottled milk shops	101
Other visits of enquiry	310
No access visits	23
Attendance at Court	29
Visits in connection with adulterated samples.. .. .	62

During the year 1,126 samples of milk were submitted to the City Analyst for bacteriological examination. The samples were taken from dairies, day nurseries, schools and retailers in the streets. They were taken from the following grades of milk :—

" Pasteurised "	345
" Tuberculin Tested " (Pasteurised)	254
" Sterilised "	100
" Tuberculin Tested " (Farm Bottled)	427

Bacteriological Examination of Milk.—Of the 1,126 samples submitted to the City Analyst for bacteriological examination, 12 failed to pass the methylene blue test and one failed the phosphatase test.

METHYLENE BLUE (REDUCTION) TEST.

Designation		Total Samples Taken	Result of Test			
			Satisfactory		Unsatisfactory	
			No.	Percentage	No.	Percentage
*Pasteurised	{ Dairies ..	151	151	100·0	..	..
	{ Schools ..	121	121	100·0	..	..
	{ Day Nurseries	73	73	100·0	..	..
	{					
*Tuberculin Tested (Pasteurised)	{ Dairies ..	214	214	100·0	..	..
	{ Schools ..	32	32	100·0	..	..
	{ Day Nurseries	8	8	100·0	..	..
	{					
†Tuberculin Tested (Farm bottled) Dairies		427	415	97·2	12	2·8

*Satisfactory samples not to decolourise Methylene Blue at 37°C. in 30 minutes.

†Satisfactory samples not to decolourise Methylene Blue at 37°C. in 4½ hours, May to October, or 5½ hours, November to April.

PHOSPHATASE TEST.

Designation		Total Samples Taken	Result of Test			
			Satisfactory		Unsatisfactory	
			No.	Percentage	No.	Percentage
Pasteurised	Dairies ..	151	151	100.0	..	..
	Schools ..	121	121	100.0	..	..
	Day Nurseries	73	73	100.0	..	..
Tuberculin Tested (Pasteurised)	Dairies ..	214	213	99.5	1	0.5
	Schools ..	32	32	100.0	..	..
	Day Nurseries	8	8	100.0	..	..

Satisfactory samples not to give colour reading of more than 2.3 Lovibond Blue Units.

TURBIDITY TEST.

Designation		Total Samples Taken	Result of Test			
			Satisfactory		Unsatisfactory	
			No.	Percentage	No.	Percentage
Sterilised .. .. .	.. .. .	100	100	100.0	..	..

Dairies and Milk Sellers.—The following tables show the number of registered dairies and milk sellers in the city.

DISTRIBUTORS OF MILK AND DAIRY PREMISES.

		Dairies	Distrib- utors of milk
No. on the register on 31st December, 1956	..	40	42
No. added to the register during the year ..	..	..	..
No. removed from the register during the year	..	1	1
No. on the register on 31st December, 1957 ..	..	39	41

DISTRIBUTORS OF BOTTLED MILK ONLY.

No. of distributors of milk on the register on 31st December, 1956.. .. .	902
No. added to the register during the year	109
No. removed from the register during the year.. .. .	134
No. of distributors of milk on the register on 31st December, 1957	877
No. of shops, etc., from which bottled milk only is sold, on 31st December, 1957	1,140

LICENCES ISSUED UNDER THE MILK (SPECIAL DESIGNATION) REGULATIONS, 1949-1954.

Description	Number in force on 31st December		
	1955	1956	1957
To use the designation "Tuberculin Tested"—			
1. To sell by retail	159	164	156
To use the designation "Pasteurised"—			
1. Pasteurisers' Licences	5	5	4
2. To sell by retail	174	178	168
To use the designation "Sterilised"—			
1. Sterilisers' Licences	2	2	2
2. To sell by retail	1,108	1,112	1,038

Biological Examination of Milk.—During the year 99 samples of milk were submitted to the Public Health Laboratory Service at Leeds for biological examination for the presence of tubercle bacilli. The results are shown in the following table :—

Designation	Total Samples Taken	Result of Test			
		Positive		Negative	
		No.	Percent-age	No.	Percent-age
Tuberculin Tested ..	46	1	2·2	45	97·8
Ungraded	53	2	3·8	51	96·2
Total	99	3	3·0	96	97·0

Three of the 99 samples taken for biological examination were found to contain tubercle bacilli. The milk in each case was produced in the city. Details of these samples were forwarded to the Divisional Veterinary Officer of the Ministry of Agriculture, Fisheries and Food (Animal Health Division) for investigation.

The first of the three samples was taken at one of the large dairies and consisted of a one-pint bottle of Channel Island Tuberculin Tested Farm Bottled milk.

In the further two cases the milk was from a non-tuberculin tested herd taken from the same farm. This producer was already sending the whole of the supply to one of the large dairies in the city and the milk was being heat treated.

Milk and Dairies Regulations, 1949—Regulation 20.—During the year it was found necessary to serve one notice under the above Regulations on farm premises of a producer situated within the city boundary. The notice remained in force for several weeks and all the milk was dealt with by heat treatment during the period.

In the other two cases it was not found necessary to serve a notice as the milk was already being pasteurised before retail sale (the samples were taken before pasteurisation).

Legal Proceedings.—*Milk and Dairies Regulations, 1949—Article 26.*—A large dairy firm in the city was prosecuted for filling an unclean vessel, to wit a milk bottle, with milk. The firm pleaded guilty and was fined £5.

SUMMONSES ISSUED DURING 1957 UNDER THE FOOD AND
DRUGS ACT, 1955.

No. of Sample	Article.	Adulteration or Deficiency.	Result of Hearing.
140/L	Milk	4.2% added water. . .	Given an absolute discharge on payment of £1 19s. costs. Producer.
184/L	Milk	13.2% added water . .	Given a conditional discharge on payment of £7 1s. costs. Producer.
185/L	Milk	18.4% added water . .	
192/L	Milk	12.4% added water . .	
193/L	Milk	19.3% added water . .	
231/L	Milk	12.0% added water . .	Given a conditional discharge on payment of £4 8s. costs. Producer.
232/L	Milk	2.8% added water . .	
244/L	Milk	3.3% added water . .	
56/J	Pork Luncheon Meat	Contained moist cereal filler, the presence of cereal is not declared in the statement of ingredients on the label. Contravention of the Labelling of Food Order, 1953	Fined £5. Importer.
371/J	Milk	8.9% added water . .	Producer given an absolute discharge on payment of 4s. costs on each of 5 counts. Producer's son fined £25 and ordered to pay £10 costs.
373/J	Milk	8.3% added water . .	
388/J	Milk	7.7% added water . .	
393/J	Milk	9.0% added water . .	
394/J	Milk	9.2% added water . .	
490/J	Canned Braised Steak	42% deficient in meat content	Case dismissed. Manufacturer.
614/J	Milk	7.5% added water . .	Fined £20 and ordered to pay £5 19s. 6d. costs. Producer.
619/J	Milk	10.2% added water . .	
624/J	Milk	6.7% added water . .	
625/J	Milk	10.7% added water . .	
798/B	Milk	5.6% added water . .	Given an absolute discharge on payment of £5 4s. costs. Producer.
799/B	Milk	10.7% added water . .	

MEAT INSPECTION

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,
Chief Public Health Inspector

Statistical data in this section of the Report has been compiled from reports submitted by Mr. D. Forbes, Supervisory Public Health Inspector for Meat and Other Foods.

Animals Slaughtered.—During the year 266,640 animals were slaughtered for human consumption at the Public Abattoir and private slaughterhouses.

The following table gives an analysis of the animals slaughtered for human consumption at the Public Abattoir and private slaughterhouses.

ANIMALS SLAUGHTERED AT THE PUBLIC ABATTOIR AND PRIVATE SLAUGHTERHOUSES.

	Year	Cattle ex. Cows	Cows	Calves	Sheep	Pigs	Total
Public Abattoir ..	1956	23,916	9,002	40,605	116,759	16,901	207,183
	1957	23,954	9,938	29,071	132,317	16,138	211,418
Danube Road ..	1956	5,723	..	..	11,282	11,182	28,187
	1957	5,663	..	1	11,922	11,383	28,969
26, Gelderd Road ..	1956	..	..	3	1	17,722	17,726
	1957	..	..	4	..	17,773	17,777
Marshall Street, Cross-gates	1956	244	..	..	953	1,906	3,103
	1957	245	..	4	1,020	1,922	3,191
Cross Lane, Wortley	1956	416	172	1	998	6	1,593
	1957	474	317	2	1,242	1	2,036
Harrison's Yard, Bramley ..	1956	..	..	..	..	3,762	3,762
	1957	..	..	..	..	3,249	3,249

It can be seen from the foregoing table that there was a slight increase in the number of bovine animals slaughtered for human consumption (with the exception of calves), there being a notable decrease in the number of calves slaughtered.

Since the end of control, slaughtering has been spread more evenly over the year and this has enabled the increased number of animals slaughtered to be dealt with satisfactorily.

Slaughterhouses.—The licences of five private slaughterhouses were renewed during the year, namely those belonging to the Leeds Industrial Co-operative Society, Ltd., Danube Road, Leeds; C. H. and J. W. Ellison, Cross Lane, Wortley; Mrs. S. U. Wilson and H. Lunn (trading as Wilson), Marshall Street, Crossgates; E. Taylor, Harrison's Yard, Bramley; and T. Adamson and Sons, 26, Gelderd Road.

The five private slaughterhouses in the city have continued to kill a good class of animal and have been conducted in a satisfactory manner.

Licensing of premises used for the purpose of confinement of animals awaiting slaughter at a slaughterhouse.—In accordance with the provisions of Section 63 (2) of the Food and Drugs Act, 1955, applications were received for the renewal of licences relating to three premises for the confinement of animals awaiting slaughter as follows:—Leeds Industrial Co-operative Society, Ltd. (lairage in Gelderd Road), H. Sherburn (lairage at piggeries, Field End Road, Halton) and H. Driver (field at Coal Hill Lane, Rodley). The licences were granted in each case.

Knacker's Yard.—There is only one knacker's yard in the city, namely that belonging to J. R. C. Wilkinson, 133, Carr Moor Side, Hunslet, which was well conducted and accordingly its licence was renewed.

In accordance with the Slaughter of Animals (Prevention of Cruelty) (No. 2) Regulations, 1954, Mr. J. R. C. Wilkinson submitted a return to the Local Authority showing the number of horses slaughtered and the number of carcasses of horses received during the year as follows:—

Horses slaughtered at knacker's yard	..	20
Horses slaughtered at collieries	.. ..	36
Horses slaughtered at farms and customers'		
own premises	.. .. .	11
Horse carcasses received	.. .. .	58

Slaughter of Animals Acts, 1933-1954.—During the year 13 new licences to slaughter or stun animals were granted by the City Council and 147 were renewed.

Whole and part carcasses condemned.—The following table shows the different species of animals and the number of whole carcasses or parts condemned for tuberculosis, cysticercosis and other diseases:—

CARCASSES INSPECTED AND CONDEMNED.

	Cattle (exclud- ing cows)	Cows	Calves	Sheep and Lambs	Pigs	Horses
NUMBER KILLED ..	30,336	10,255	29,082	146,501	50,466	..
NUMBER INSPECTED ..	30,336	10,255	29,082	146,501	50,466	..
ALL DISEASES EXCEPT TUBERCULOSIS AND CYSTICERCI						
Whole carcasses con- demned	23	103	158	232	111	..
Carcasses of which some part or organ was condemned	2,615	809	15	4,112	3,385	..
Percentage of numbers inspected affected with diseases other than Tuberculosis and Cysticerci ..	8.70	8.89	0.59	2.97	6.93	..
TUBERCULOSIS ONLY						
Whole carcasses con- demned	35	64	2	..	13	..
Carcasses of which some part or organ was condemned	1,581	829	..	1	1,079	..
Percentage of numbers inspected affected with tuberculosis ..	5.33	8.71	0.01	0.001	2.16	..
CYSTICERCOSIS						
Carcasses of which some part or organ was condemned	119	3	..	78	..	..
Carcasses submitted to treatment by refrig- eration	1	..	..	..	..	..
Generalised and totally condemned	1	..	..	..	..	..

Cysticercus Bovis.—Inspection for *cysticercus bovis* was carried out systematically during the year and 122 cases of slight infestation were found in cattle, an increase of 49 as compared with the previous year. In only one instance was the infestation so heavy as to warrant the total condemnation of the carcase. In a case found at one of the private slaughterhouses, it was considered necessary to subject the carcase to refrigeration for the requisite period.

Most of these cases of *cysticercus bovis* occurred in Irish cattle, but one case proved to have originated in the North Riding of Yorkshire. This was followed back by making contact with the Health Department for the area and the public health inspector for the area reported that he had made investigations at the farm which he found to be a mixed farm growing a large quantity of root crops requiring casual labour. It was thought that this casual labour might have been responsible for bringing the infestation of *cysticercus bovis* to the farm. The farmer promised to lecture his employees on the importance of the use of the water closet and to provide a portable pail closet for use in the fields.

Cysticercus Ovis.—During the year 78 cases of *cysticercus ovis* were noted, an increase of 3 as compared with the previous year. 30 per cent. of the cysts were in a viable state, the remainder being in various stages of degeneration.

Tuberculosis.—The incidence of tuberculosis, both in cattle and pigs, has decreased slightly.

Meat and Other Foods condemned as unsound.—The total weight of food destroyed by consent during the year was 491,501 lbs. as compared with 502,497 lbs. in the previous year. About 73 per cent. of the total weight condemned comprised carcasses of cattle, swine and sheep or parts of carcasses and offal found to be diseased at the time of slaughter.

Details of food destroyed are given in the table on page 194.

Disposal of Condemned Food.—The wholesale butchers disposed of their own condemned carcasses, the bulk going to the firm of Mitchell and Broadbent of Halifax. A few small animals (sheep and calves) and the offal from the wholesale offal dealers of Wildblood and White were collected by Messrs. Wiles of Beverley. Both these

firms used the material for the manufacture of meat meal for animal consumption or for fertiliser. All meat and offal were stained with a vegetable dye before leaving the abattoir.

All other condemned foods, including tinned goods, fruit and vegetables, etc., were disposed of by incineration at the Corporation Destructors.

MEAT, ETC., DESTROYED BY CONSENT.

	1957	1956	1955	1954
Beef	124,296 lbs.	142,457 lbs.	124,073 lbs.	182,558 lbs.
Veal	5,763 "	3,578 "	3,551 "	6,922 "
Mutton	15,053 "	11,902 "	10,428 "	9,838 "
Pork	27,062 "	27,488 "	38,501 "	52,359 "
Bacon and Ham ..	232 "	256 "	773 "	77 "
Offals	184,900 "	185,107 "	181,641 "	226,963 "
Rabbits	715 "	169 "	2,565 "	8,377 "
Poultry	770 "	1,561 "	1,278 "	2,475 "
Game	26 "	220 "	54 "	391 "
Horseflesh	..	..	1,190 "	4,260 "
Horse Offals	..	..	1,127 "	2,238 "
Fish	21,518 lbs.	29,826 lbs.	31,250 "	29,121 "
Shellfish	3,184 "	4,924 "	5,302 "	4,246 "
Vegetables	38,413 "	39,786 "	48,436 "	17,109 "
Fruit	14,224 "	8,451 "	7,329 "	10,309 "
Tinned goods	51,576 "	39,277 "	68,780 "	61,455 "
Cheese	124 "	131 "	1,624 "	2,147 "
Edible fungi	..	152 "	222 "	12 "
Bread and Cereals ..	..	200 "	..	..
Flour	..	..	..	..
Confectionery	378 lbs.	508 lbs.	589 lbs.	3,243 lbs.
Sundries	3,267 "	6,504 "	17,316 "	11,212 "
Totals	491,501 lbs.	502,497 lbs.	546,029 lbs.	635,312 lbs.

Fish.—Frozen fish brought into the market at times of shortage has been in better condition than for some time. The refrigeration conditions have been improved.

Shellfish.—Nine samples of mussels were taken during the year, six from Eire, one from Denmark and two from the Wash District. All were found to be satisfactory. Practically all the mussels sold in Leeds during the year came from Eire and Denmark and had been purified.

Rabbits.—Larger quantities of rabbits have been arriving in the market; presumably some rabbits have become immune to myxomatosis and are breeding again. Owing to the higher price they are making, conditions of transport and handling have improved

and the only condemnations have been of animals coming from the Orkneys in unsuitable weather. Australian frozen rabbits have continued to arrive in good condition.

Vegetables.—The condemnation of vegetables has remained high, peas and cabbage being mainly concerned. The deterioration has been usually due to vegetables being gathered in a wet condition ; in such a condition, if not quickly sold, they soon deteriorate.

Salmon and Freshwater Fisheries Act, 1923.—(*Imported Salmon Out of Season Regulations*).—No infringements of the Act or Regulations were noted during the year. Large quantities of Japanese salmon have been arriving in the market but in each case a certificate is affixed on each individual fish.

Dried Fruit.—Condemnations have been very small, the usual cause now being grub or maggot infestation.

Tinned Goods.—The amount of tinned goods dealt with during the year has increased ; this is due to the fact that certain multiple firms who have no depot in Leeds send in their goods from individual shops to enable them to use the certificate of condemnation to obtain credit and not because there is any doubt as to the condition of the contents.

Cheese.—The majority of cheese brought for condemnation is of the processed type and is usually in a mouldy condition due to having reached the limit of its keeping qualities. Very little ordinary cheese is now brought for condemnation.

Liquid Egg.—During the year two samples of fresh liquid egg and two samples of frozen egg produced in the city were taken and submitted to the Public Health Laboratory Service who reported the samples to be satisfactory.

Danish Crystal Hen Egg Albumen.—During the year it was found that a consignment of Danish Crystal Hen Egg Albumen had been purchased by a baker in the city. Samples submitted to the Public Health Laboratory Service showed the presence of *Salmonella typhi-murium* and the baker was forbidden to use the material and made arrangements to return it to the importers.

DISEASES OF ANIMALS

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,

Chief Public Health Inspector

During the year 2,316 acres were added to the area of Leeds by the Leeds Corporation Act, 1956. This added 14 farms on which animals were kept bringing the total number of farms in Leeds, involving diseases of animals work, to 62.

Tuberculosis Order of 1938.—The table hereunder, which shows the number of bovines suspected to be affected with tuberculosis and the action taken, was compiled from information supplied to the Local Authority by the Animal Health Division of the Ministry of Agriculture, Fisheries and Food.

No. of suspected animals reported or found.	No. affected with tuberculosis and slaughtered.	No. of animals found to be not amenable to the Order.
2	2	..

Swine Fever Order of 1938.—During the year 9 cases of suspected swine fever were notified, all of which were investigated by the Ministry of Agriculture, Fisheries and Food. One of these cases was confirmed.

Regulation of Movement of Swine Order, 1954.—Under this Order, 487 licences for the disposal of 5,036 store and fat pigs from the Whitkirk Auction Mart were issued and 542 visits have been paid to pig-keeping premises to ascertain whether the recently removed store pigs were detained and isolated for the appropriate period. In addition, 18 licences have been issued for the movement of pigs within the city.

The Sheep Scab Order, 1938.—Under the Sheep Dipping Regulations, all sheep are required to be dipped in an approved dip during the period 1st September to 15th December.

All farms within the city boundary were visited and it was found that only eight farms were keeping sheep.

During the year eight farms undertook the dipping of sheep in accordance with the above Regulations. At seven of these farms this was done under observation by an inspector from this Department. In the case of the remaining farm (Mount Pleasant Farm, Eccup), owing to the close proximity of the reservoir the sheep were dipped at a neighbouring farm in the West Riding area under police supervision.

The undermentioned list gives sheep farms and the number of sheep dipped :—

O. Lister, Black Hill Farm, Eccup..	..	270	sheep	dipped
G. Whitfield, Park Farm, Colton	..	31	„	„
G. Dalby, Bank House Farm, Eccup	..	70	„	„
H. Warrington, Grove Farm, Eccup	..	34	„	„
J. S. Rowling and Son, King Lane Farm, Alwoodley	.. .. .	199	„	„
E. E. Todd, Mount Pleasant Farm, Eccup		83	„	„
H. C. Peate, Owlet Hall Farm, Eccup	..	40	„	„
D. Osborn, White Laith Farm, Whinmoor		31	„	„

Two farmers omitted to notify this Department of intended sheep dipping (as required by the Regulations) and warning letters were sent to the farmers concerned.

The Diseases of Animals (Waste Food) Order, 1957.—This Order came into operation on 1st June, 1957. The Order, which rescinds the Diseases of Animals (Licensing of Waste Food Sterilisation Plant) Order, 1954, transfers to the Local Authority the responsibility of inspecting and licensing waste food boiling plant. The inspection and licensing of the plant was previously carried out by the Ministry of Agriculture, Fisheries and Food.

There were 47 licence holders at the time of the change-over, the records of these holders being sent to the Department by the Ministry.

In accordance with the terms of the Order, inspection of the plant and equipment at each of the existing licensed premises was made and accordingly it was decided to issue new licences under the above-mentioned Order.

At the end of the year 78 waste food boiling plants had been licensed.

Animals (Landing from Channel Islands, Isle of Man, Northern Ireland and Republic of Ireland) Order, 1955.—This Order deals with the importation of sheep and pigs only. During the year 9,110 Irish sheep were received under licence for immediate slaughter at the Public Abattoir, Leeds, and the Leeds Industrial Co-operative Society, Ltd., Slaughterhouse, Gelderd Road, Leeds. As compared with the previous year the number of imported sheep increased by 593. No imported pigs were received on licence during the year.

Foot-and-Mouth Disease Order of 1928.—No case of foot-and-mouth disease occurred in the city during the year and the city was not affected by the various Orders made by the Ministry of Agriculture, Fisheries and Food in connection with outbreaks of foot-and-mouth disease in other parts of the country.

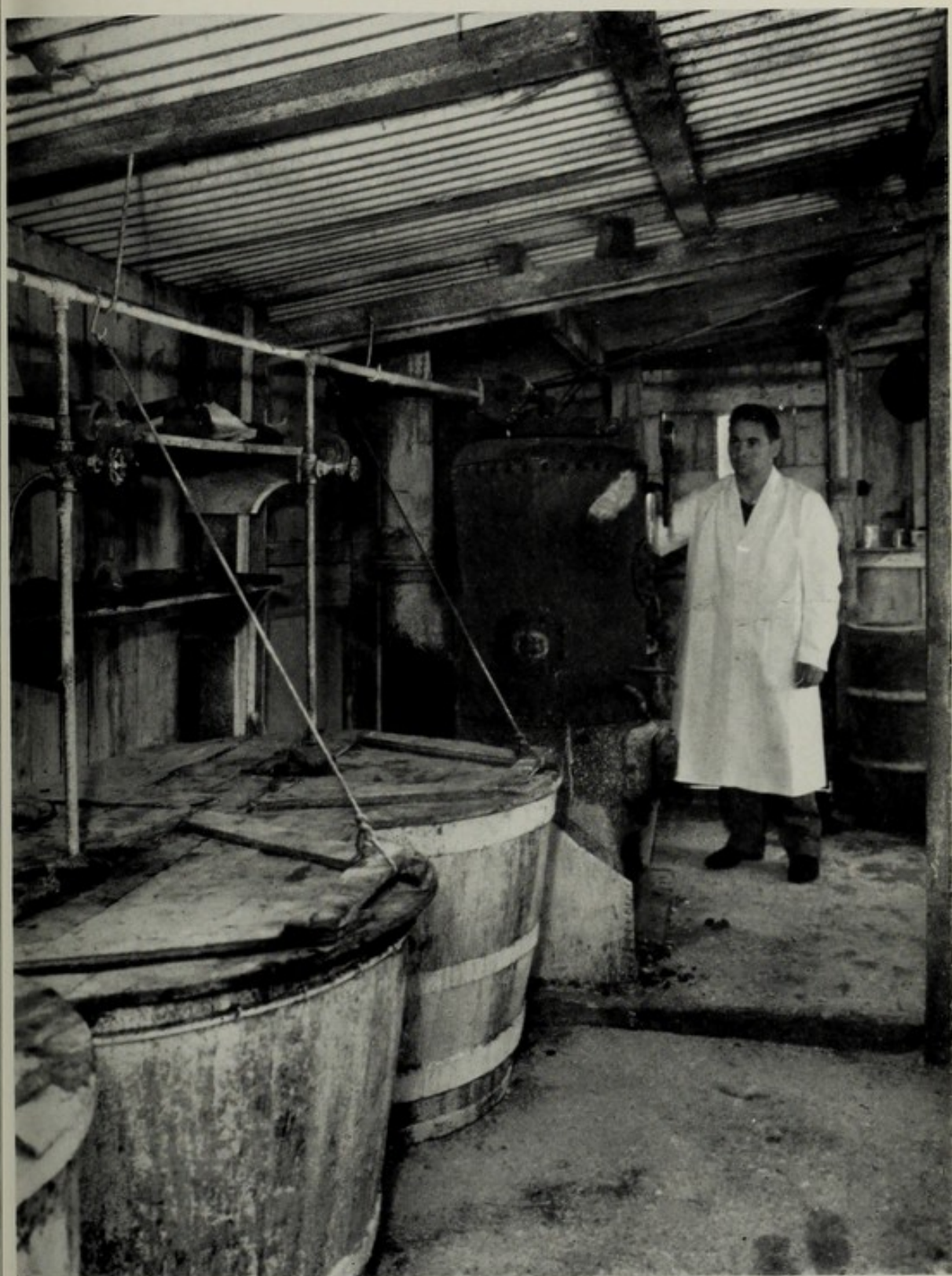
Fowl Pest Order of 1936.—During the year 14 suspected cases of Fowl Pest were reported by the Ministry of Agriculture, Fisheries and Food and 13 of these cases were confirmed. From these premises 719 carcasses of poultry were burned at the Armley Road Destructor and 269 carcasses at the Kidacre Street Destructor. Disinfection of the premises was carried out under the supervision of the Ministry's Veterinary Inspector.

As a result of these outbreaks, 52 premises contiguous to the "Infected Places" were placed under movement restrictions and Form B Notice was served in each case by the Ministry of Agriculture, Fisheries and Food.

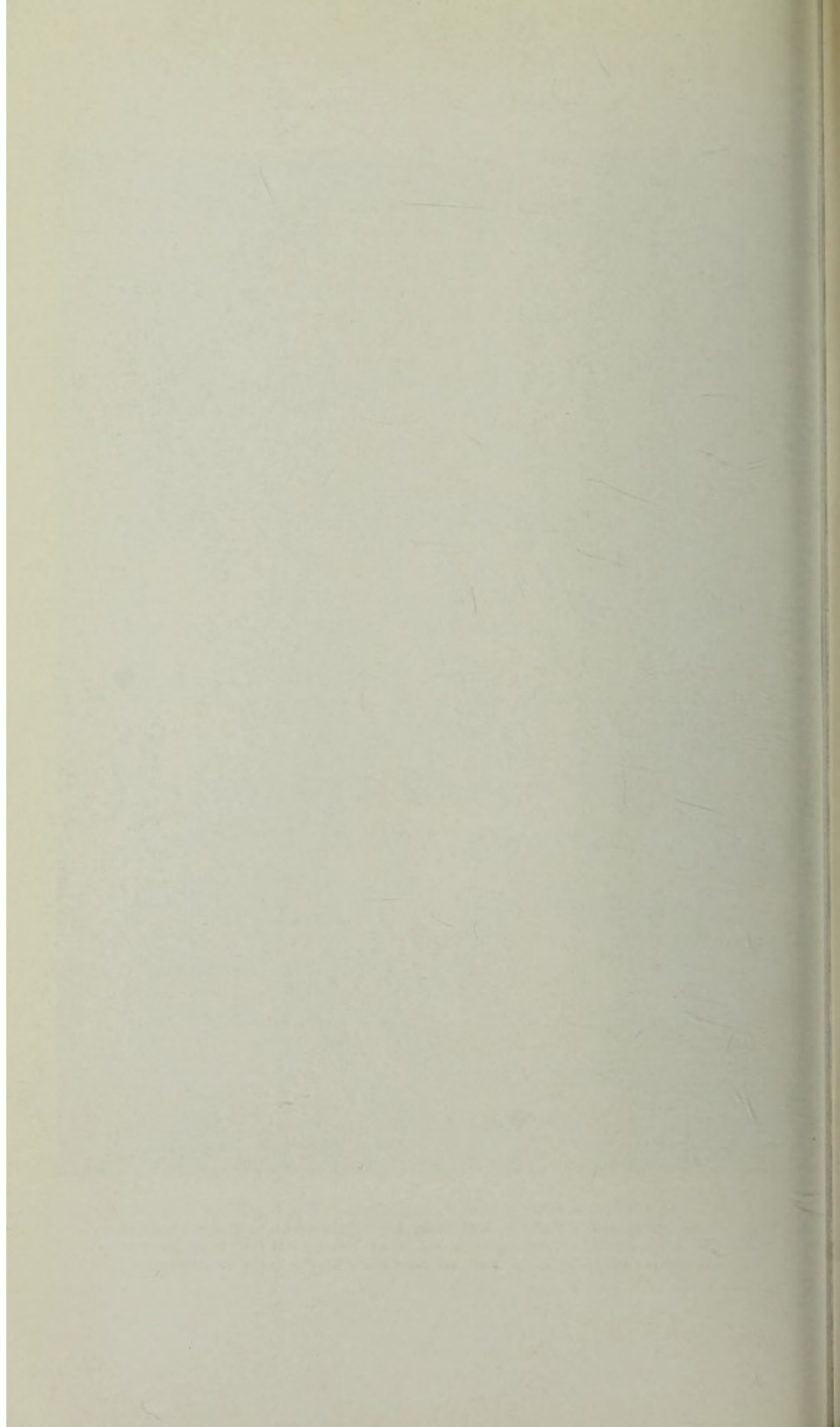
At the request of the Ministry of Agriculture, Fisheries and Food, 3,464 poultry carcasses from infected premises in areas outside the city were destroyed at the Armley Road Destructor.

The Poultry Premises and Vehicles (Disinfection) Order, 1956.—During the year the lay inspector under the Diseases of Animals Act paid 107 visits to the Jewish poultry dealers in the city to inspect their premises, vehicles and equipment. In general it has been found that cleansing and disinfection of premises and crates has been satisfactory during the year.

Warble Fly (Dressing of Cattle) Order, 1948.—The following measures were adopted in connection with the enforcement of the above-mentioned Order :—copies of the Order in pamphlet form were



A boiling plant licensed under the Diseases of Animals (Waste Foods) Order, 1957, for the processing of animal feeding stuffs. Under this Order, the responsibility for the control and licensing of such plants was transferred from the Ministry of Agriculture, Fisheries and Food to the Local Authority. The picture shows a Leeds pig-keeper sterilising pig-swill by means of steam injectors.



delivered by hand to each cattle farmer in the city together with a post-card (pre-paid) asking that in the event of infestation being discovered, the post-cards be completed and returned. Posters received from the Ministry of Agriculture, Fisheries and Food were prominently displayed at the Whitkirk Auction Mart, the Corn Exchange and the Public Abattoir, Leeds.

During the period of operation of the Order all premises where cattle were kept were visited and the cattle inspected. In cases of infestation the cattle were inspected during dressing or shortly after.

Notification by post-card of intention to dress infested cattle was received from two farmers. Both farms were visited for the purpose of supervising dressing, the number of cattle involved being 18.

In addition to the above, 581 non-infested cattle were treated voluntarily.

There was a marked increase in the number of infested cattle as compared with the previous year due to the importation of 75 cattle from Ireland to a farm in the city during April. These animals were examined at the Port of Landing by a Veterinary Officer of the Ministry of Agriculture, Fisheries and Food and found to be infested with Warble Fly. Instructions were issued for the animals to be dressed on arrival at the farm, dressing being carried out under the supervision of the lay inspector.

It was not found necessary to institute any proceedings under the Order.

DETAILS OF WORK DONE				1955	1956	1957
No. of visits paid to farms	..	..	..	182	200	105
No. of cattle inspected on farms	..	..	..	2,198	2,291	1,376
No. of leaflets and cards distributed	..	..	..	77	72	52
No. of cattle infested	..	..	..	18	27	93
No. of infested cattle treated	..	..	..	18	27	93
No. of non-infested cattle treated voluntarily ..	..	..	..	214	387	581

Anthrax Order of 1938.—Three cases of suspected anthrax were reported during the year; on post-mortem examination of the carcasses it was found that death had ensued from causes other than anthrax.

It is interesting to note in connection with one of these cases that six other cattle died at the same farm. On investigation it was found that some yew trees had been dug up and deposited on waste ground and subsequently someone had thrown them into the field. It is assumed that the cattle had died as a result of eating yew tree leaves.

Diseases of Animals Act, 1950 (Second Schedule).—During the year 4,587 Irish cattle were received under licence for immediate slaughter at the Public Abattoir and the Leeds Industrial Co-operative Society, Ltd. Slaughterhouse, Gelderd Road, Leeds. As compared with the previous year the number of imported cattle increased by 152.

Colorado Beetle.—As in previous years a request was received from the Ministry of Agriculture, Fisheries and Food asking for full publicity to be given to the danger of invasion by the Colorado Beetle. In this connection large posters illustrating this danger were displayed in various parts of the Whitkirk Auction Mart, the Corn Exchange, Leeds, the Public Abattoir and the Leeds Industrial Co-operative Society Slaughterhouse, Gelderd Road. In the course of his duties, the lay inspector under the Diseases of Animals Act left small leaflets explaining the danger and methods of recognition. In many cases advice and information was given and the subject discussed freely.

No notification of infestation has been received during the year.

Legal Proceedings.—A farmer was prosecuted under the Live Poultry (Restrictions) Order, 1954, for the movement of five ducks within 28 days of movement onto the premises. The defendant was given an absolute discharge on payment of 4s. costs.

A pig-keeper was prosecuted under the Movement of Animals (Records) Order, 1925, Article 2 (2), for failing to keep a "form of record." The defendant was given an absolute discharge on payment of 8s. costs.

A pig-keeper was prosecuted under the Regulation of Movement of Swine Order, 1954, for the movement of pigs within 28 days of arrival at premises without a licence. The defendant was fined £1.

General Sanitation

INSPECTION OF FACTORIES

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,
Chief Public Health Inspector

Mr. J. Norton, Supervisory Inspector of the Factories Section, has furnished details of the inspections included in this part of the Report.

Factories.—Details of the work done by inspectors in factories are set out in the four tables printed on pages 204 and 205. The first three of these tables are extracted from the return which must be made annually by the Medical Officer of Health to the Minister of Labour and National Service, in accordance with the provisions of Section 128(3) of the Factories Act, 1937. The inspectors here deal with all those matters in the Factories Act, 1937-1948, which have been declared to be the responsibility of the District Council, with the single exception of the certification of the means of escape in case of fire in factories. This work is dealt with by the City Engineer's Department, and no details are available about this.

The register of factories, which the District Council is required to keep, now contains the addresses of 181 non-mechanical factories and 3,098 mechanical factories. The fall in the numbers of non-mechanical factories which has been so noticeable over the past few years now appears to have stopped. These factories are principally used for processes in which the work is traditionally done by hand, or in which it has been found impossible to produce machines to carry out this work. Examples of such factories are burling and mending premises, millinery workshops, etc. The number of mechanical factories represents an increase of 120 over the previous year's figures. There are also on the register 164 other premises in which Section 7 of the Factories Act (that is the Section which deals with the provision of sanitary accommodation) is enforced by the District Council. These premises consist in the main of works of building and engineering construction.

During the year 1,482 inspections of factories were made under the provisions of the Factories Act. There were 197 instances in which contraventions of the Act or other shortcomings were found during these inspections, and of these 140 were remedied. Further action is being taken to ensure compliance with the Act in regard to the remaining items. The number of written notices served to deal with these matters was 134. It was not found necessary to institute legal proceedings in any case this year.

The number of works of building and engineering construction, which at present stands at 164, represents a rise of 65 over the previous year's figures, and reflects very closely the increase in the amount of building which is being done in the city, and particularly the amount of private house construction. A proportion of the works which are notified consists of extensions to existing premises where adequate sanitary accommodation exists, and in such cases there is little need for inspections to be carried out. In fact, during the year 47 visits were paid, all of them to new building sites, and on two occasions written notices were required to obtain improved sanitary accommodation. In general, the accommodation provided is primitive, but is the best that can be devised under the conditions in which work is carried on. In the absence of a proper water carriage system of drainage, chemical closets, satisfactorily screened and provided with proper deodorising fluid, are required.

In Table II of the return to the Ministry of Labour and National Service, it will be noted that 7 reports of dirty premises were received from H.M. Inspectors. Three of these referred to bakehouses where mechanical power was employed. The cleanliness of such premises is dealt with by this Department under the provisions of the Food Hygiene Regulations, 1955, and the action taken does not therefore appear in column 4 of Table II but is included in the section of the Report which deals with Food Hygiene. The three instances mentioned in column 4 refer, therefore, only to non-mechanical factories other than food handling factories. Seven reports were received from H.M. Inspectors, but only 6 premises were found to be dirty. In one case the premises had been cleansed between the report from H.M. Inspector and the visit of the public health inspector.

In the table referring to other matters, which is printed on page 205, the number of bakehouses is quoted as 164. This number includes 2 non-mechanical and 162 mechanical bakehouses. It does not include a large number of small 'one man' or 'family' bakehouses which are not registered by H.M. Inspectors under the provisions of the Factories Act. There are now no basement bakehouses in the city which have certificates of suitability under the Factories Act, and no inspections under Section 54 were necessary.

INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH
(INCLUDING INSPECTIONS MADE BY PUBLIC HEALTH INSPECTORS)

Premises	Number on Register	Number of		
		Inspections	Written Notices	Occupiers Prosecuted
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	181	33	2	..
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	3,098	1,449	130	..
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	164	47	2	..
Total	3,443	1,529	134	..

CASES IN WHICH DEFECTS WERE FOUND

Particulars	No. of Cases in which defects were found				No. of cases in which prosecutions were instituted
			Referred		
	Found	Remedied	To H.M. Inspector	By H.M. Inspector	
Want of cleanliness (S. 1) ..	6	3	..	7	..
Overcrowding (S. 2)	..	..	..	1	..
Unreasonable temperature (S. 3)	2	2	..	..	..
Inadequate ventilation (S. 4) ..	5	4	..	..	..
Ineffective drainage of floors (S. 6)	..	..	..	..	..
Sanitary Conveniences (S. 7)—					
(a) Insufficient	6	7	..	8	..
(b) Unsuitable or defective ..	163	112	..	44	..
(c) Not separate for sexes ..	14	12	..	7	..
Other offences against the Act (not including offences relating to Outwork)	1	..	1	..	..
Total	197	140	1	67	..

The tables of work done in factories which are printed on page 204 and which give details of visits paid to factories and defects found and remedied do not give a complete picture of the work done by inspectors, as they relate only to those provisions of the Factories Acts which are delegated to District Councils. The inspectors deal with nuisances which may be abated by action under the Public Health Act, 1936, and in the larger food factories, e.g., bakehouses, sugar confectionery factories, pickle factories, and certain wholesale provision merchants, etc., they are also responsible for securing compliance with the requirements of the Food Hygiene Regulations, 1955. Figures in connection with this work are included in the table of work done by public health inspectors on page 223. Examples of complaints dealt with during the year are offensive smells from various trade processes, grit and dust from manufacturing processes and fumes from chemical works, etc. Some of the factories concerned in these complaints are registered with H.M. Inspector of Alkali, etc., Works, and in these cases H.M. Inspector has been most helpful.

In numerous cases, the abatement of nuisance from manufacturing trades and processes presents difficult problems which necessitate long experimentation and investigation before success is achieved, whilst constant surveillance and reminders are often necessary.

With ever-increasing mechanisation, complaints of noise and vibration continue to be received in greater numbers. The powers invested in the Local Authority by the Leeds Corporation Act, 1956, Section 134, are being used with success in the abatement of these statutory nuisances. A typical example of such complaints dealt with during the year referred to noise vibration from a shot blast and metal-spraying plant situated some 20 yards from one house. This plant worked 24 hours a day and the nuisance was very serious during the night hours. As a result of representations by this Department (and the service of an abatement notice) this complete plant is now in process of being removed from its present site to a new position in the works where no nuisance to houses can possibly be caused.

Nuisances other than those caused by processes carried on in factories, which public health inspectors are frequently called upon to deal with, are defects in the structure of factory buildings, e.g., leaking roofs, broken and leaking eaves spouts and rainwater pipes, and other matters which may affect the health and comfort of the workpeople. During the year 32 such complaints were dealt with.

During routine visits to factories, inspectors also visit canteens and messrooms to ensure they are in a satisfactory condition, with especial regard to the provisions of the Food Hygiene Regulations, 1955. Details of work in this connection are recorded in the section of the Report dealing with Food Hygiene. The Regulations have been in force for more than a year; canteen kitchens and messrooms are, in general, now of comparable standards with cafe kitchens, and compliance with standards is more easily attained than formerly.

The arrangements between the City Engineer's Department and the Health Department for the exchange of information as to the establishment of factories in the city continues to function satisfactorily. A copy of the list of changes in occupation of factories, which is received each month at this Department from H.M. Inspector is forwarded to the City Engineer. The City Engineer also approaches this Department for advice as to whether particular processes are suitable for establishment in various locations throughout the city.

Outworkers.—The number of outworkers in the August list totalled 1,009. 862 of these were concerned with the making of wearing apparel and 98 with textile weaving. These figures reflect quite clearly the high proportion of the industry of the city which is concerned with clothing and textiles. It has not been found necessary during the year to institute proceedings for the return of the lists of outworkers which must be made. The number of addresses of outworkers received from other authorities was 176, and the number sent from Leeds to other authorities was 227. During the year 724 inspections of outworkers' premises were made, but in no instance was work found to be carried on in unwholesome premises. Thirteen cases of notifiable diseases occurred in outworkers' premises during the year—seven of measles, three of scarlet fever and three of whooping cough.

Workplaces.—479 visits were made to workplaces, including offices, during the year. The number of defects found was small, conditions generally being reasonably good. All matters which were the subject of complaint were dealt with either by the service of notice or by informal action.

Shops.—The inspection of shops is carried out under the provisions of Sections 37 and 38 of the Shops Act, 1950, which has been delegated for administration to the Health Committee, other matters such as hours of employment and closing hours being dealt with by the Weights and Measures inspectors.

In 1957, 594 inspections of shops were made and 37 notices were served in respect of defects. Defects remedied were :—

Shops ventilated	1
Sufficient conveniences provided ..	1
Defective conveniences remedied ..	12
Lighting provided	1
Washing facilities provided	19
Other defects remedied	25

SANITATION

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,
Chief Public Health Inspector

Water.—During the year, 407 samples of drinking water were taken by the Department for bacteriological examination. Of these samples, 402 were taken from the Corporation's mains supply, 2 were samples of well water and 3 were samples of spring water. Only one of these samples, taken from a well, was unsatisfactory.

Water Supply (Report of Mr. K. L. Forster, General Manager and Engineer of the Waterworks Department).—The water supply of the city and its several parts during 1957 has been (a) satisfactory in quality and (b) satisfactory in quantity.

Bacteriological examinations of raw water arriving at Headingley Filtration Works were made during the year, and the water going into supply after filtration and chlorination was also classified. The following table shows the results of these examinations.

SUMMARY OF BACTERIOLOGICAL EXAMINATIONS

Raw Water Arriving at Headingley Filtration Works		No. of samples	Average Count
Probable No. of Coliform bacilli in 100 ml. water ..		307	90
Probable No. of B.Coli Type 1 in 100 ml. water ..		307	57
Anaerobes in 40 ml. water (Wilson and Blair's Test) ..		51	2
Agar Plate Count, 48 hours at 37°C. Colonies per ml. ..		45	34

WATER GOING INTO SUPPLY AFTER FILTRATION AND CHLORINATION				
(a) Water entering the Distribution System				
No. of samples	Ministry of Health Classification (1956)			
	Class 1	Class 2	Class 3	Class 4
683	99.7%	0.15%	Nil	0.15%

(b) Samples taken from Service Reservoirs and Consumers' Premises (excluding samples taken by Public Health Dept.)		
No. of Samples ..	Satisfactory	Unsatisfactory
1,012	98.9%	1.1%

During the year 174 samples of town's water from the public supply were subject to chemical analysis and the table which follows summarises the results of these analyses.

SUMMARY OF ANALYSES OF THE PUBLIC WATER SUPPLY FOR THE YEAR ENDED DECEMBER 31st, 1957. SUMMARY BASED ON 174 ANALYSES OF SAMPLES OF WATER FROM THE PUBLIC SUPPLY.

	Parts per million except where otherwise stated		
	Average	Maximum	Minimum
*Turbidity (Silica scale)	← Less than 2 →		
*Colour (Hazen Units)	20	45	5
*pH.	7.25	8.2	6.8
Free Carbon Dioxide	1.6	3.0	Nil
Alkalinity (Carbonate or temporary hardness) (in terms of CaCO_3)	19.0	28	14
Total Hardness (in terms of CaCO_3)	50.5	58	44
Non-Carbonate (Permanent) Hardness (in terms of CaCO_3)	31.5	44	22
Oxygen absorbed from Permanganate in 4 hours at 27°C.	2.00	3.50	0.75
Ammoniacal Nitrogen (in terms of N)	0.003	0.012	Nil
Albuminoid Nitrogen („ „ „ „)	0.044	0.089	0.023
Nitrite Nitrogen („ „ „ „)	Nil	Nil	Nil
Nitrate Nitrogen („ „ „ „)	0.40	0.70	0.20
Chlorine present as Chloride (in terms of Cl)	13.5	15	12
Silica (in terms of SiO_2)	7	9	5
Iron compounds (in terms of Fe)	Nil	0.1	Nil
Manganese „ („ „ „ Mn)	Nil	Nil	Nil
Lead „ („ „ „ Pb)	Nil	0.04	Nil
Total solids dried at 180°C.	96	100	88
*Electrical Conductivity—			
Micro-ohms/ CM_3 at 20°C.	135	160	120
*Residual Chlorine (on reaching consumer)	Nil/Trace	0.4	Nil

* Summary based on daily determinations on samples taken from Distribution Mains supplying all parts of the City and weekly determinations on samples from Service Reservoirs.

Plumbo-solvency.—Water leaving the storage reservoir at Eccup is treated with lime at the rate of approximately 5 to 6 p.p.m. with the object of producing a water which, after filtration and chlorination, is not plumbo-solvent.

Determinations are made daily of pH and weekly of alkalinity on samples of water from all mains leaving the filtration works. The determination of lead is included in the chemical analysis of samples which have been drawn through lead pipe. The maximum amount of lead found in a sample taken in the normal manner was 0.04 p.p.m.

Action in respect of any form of contamination.—In August, following a week during which the total rainfall was 3 inches, unsatisfactory samples were obtained from five of the service reservoirs (Harehills, Middleton, Farnley, Wortley and Bramley). The reservoirs were immediately treated with sodium hypochlorite solution. The treatment was successful in the case of the first four, but in the case of Bramley Service Reservoir further treatment was necessary before Class 1 samples were obtained.

Tinshill Service Reservoir required similar treatment in September, after which samples from all the service reservoirs were satisfactory for the remainder of the year.

Particulars of the number of dwelling-houses and the number of the population supplied from the public water mains.—(a) Number of dwelling-houses within the statutory area of supply (including houses attached to shops)—176,824; (b) Population supplied from the public water mains: (i) direct to houses—514,000 (estimated), (ii) by means of stand-pipes—none. (N.B.—These particulars relate to the statutory area of supply at 31st March, 1958.)

The number of cistern water-closets in use at 31st March, 1958, was 209,959.

Sewage Disposal (Report of Mr. D. Currie, City Engineer).—During 1957, 7 per cent. of the bacteria beds were out of action while repairs were in progress. The corresponding figure for 1956 was 10 per cent. The average analyses of final effluent at Knostrop Sewage Works from January 1st to December 31st, 1957, were :—

Oxygen absorbed in 4 hours	..	2.20	parts per 100,000
Suspended solids	.. .. .	3.7	„ „ „

Public Cleansing (Report of Mr. G. F. Mellor, Director of Public Cleansing).—Particulars of refuse collection and disposal during 1957 are as follows :—

			Tons
Household refuse and nightsoil collected	.. ..	157,721	
(a) dealt with at destructors	.. ..	65,463	
(b) disposed of at tips and for agricultural purposes..	.. ..	92,258	

The quantity of screened refuse dust sold as manure to farmers was 17,152 tons.

Dustbins and Ashpits.—The number of dustbins provided by the Cleansing Department and delivered to dwelling-houses in Leeds during the year was 12,472. The total number provided since the inception of the scheme in December, 1946, is 131,713.

During the year the Health Department secured the abolition of 78 ashpits and the Corporation approved grants-in-aid amounting to £399 3s. 4d. in connection with the abolition of these ashpits.

Keeping of Animals.—The number of pig-keepers in the city decreased to 205 and the number of pigs kept was 4,790.

Closet Accommodation.—During the year, five privy middens serving six houses were abolished and water-closets were provided. Grants amounting to £278 7s. were paid to the owners of the property concerned.

A total of 162 statutory notices was served under the provisions of Section 45 of the Public Health Act, 1936, in connection with closet accommodation. In the owners' default the water-closets appurtenant to 30 houses were repaired at a cost of £79 11s.

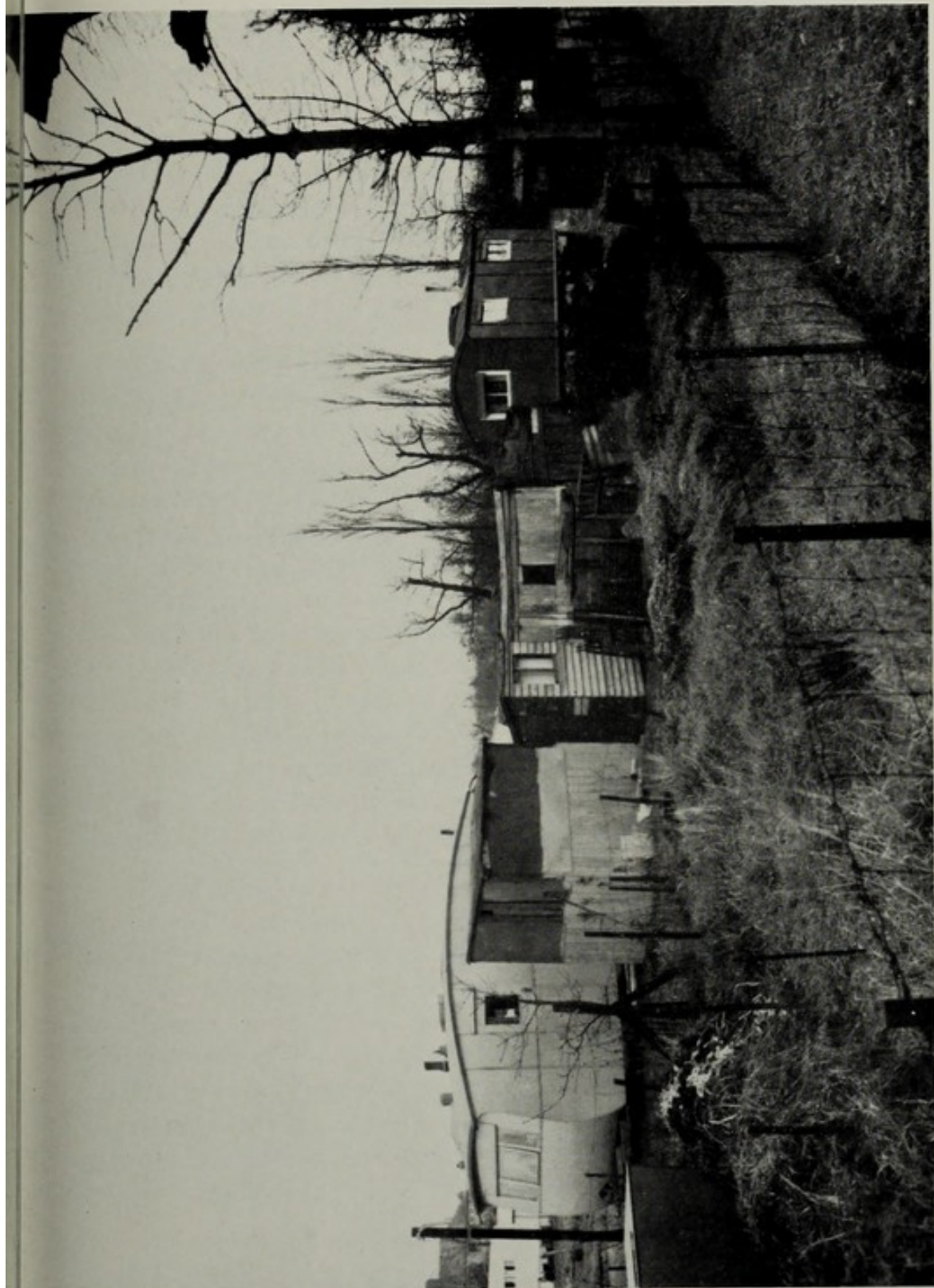
Offensive Trades.—The number of premises in the city where offensive trades are carried on is 110. During the year 60 visits of inspection were made.

Common Lodging Houses.—During the year 249 visits were made to common lodging houses.

Houses-let-in-Lodgings.—The total number of visits paid to houses of this type was 274. Eleven statutory notices were served in respect of contraventions of the Public Health Act, 1936.

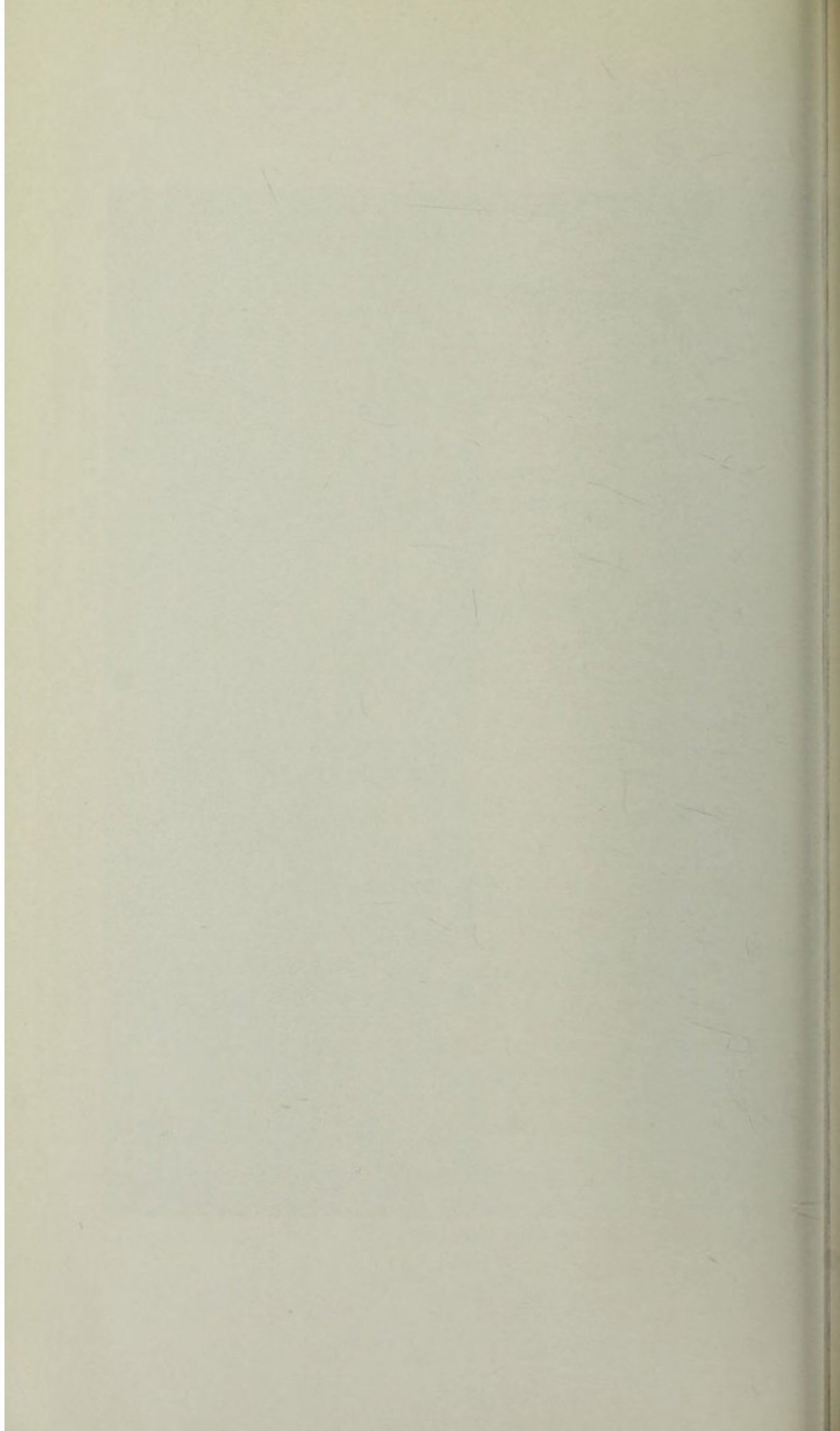
Cellar Dwellings and Underground Sleeping Rooms.—During the year 163 visits were paid to underground sleeping rooms.

Caravan Sites.—Action has been taken during the year for the purpose of regulating the use of moveable dwellings in the city and a number of unsatisfactory sites have been dealt with. In this connection the Council made an Order under Section 151 of the Leeds Corporation Act, 1956, prohibiting camping on land within the catchment area of Eccup Reservoir, and an application has been made to the Minister of Housing and Local Government for confirmation of the Order. The exact date when the site was first used



PORTION OF CARAVAN SITE AT NEW ADEL LANE, LEEDS, 16

Showing unsatisfactory conditions of ditch adjoining boundary fence, heaps of refuse and agglomeration of sheds and additions. Licence to use site for moveable dwellings refused on 20th November, 1957, and owner of land ordered to clear the site.



is not known as it was before the extension of the city boundaries to incorporate Eccup within the city. There are 123 moveable dwellings of various types on the site, used mainly at week-ends and holiday periods only. The majority of the dwellings are within the boundary of the gathering grounds to Eccup Reservoir and it was considered that, due to the lack of satisfactory amenities, the site constitutes a danger to the water supply of the city. Objections have been received by the Ministry of Housing and Local Government to the making of the Order and a Public Enquiry will be held in the near future.

During the year the owner of 4 acres of land at New Adel Lane, Far Headingley, Leeds, which had been used as a caravan site for a number of years was required by the Corporation to apply for a licence for the site. The number of moveable dwellings has gradually increased from 15 existing on the site in 1944 to 51 in 1957 when they comprised 38 proprietary trailer caravans, one wooden bungalow, two railway coaches, three converted motor vehicles and 7 other types (e.g. gypsy, home-made or horse-drawn, etc.). Conditions on the site were very unsatisfactory, especially during winter months when flooding and ponding occurred. No hard standings were provided for the caravans, water supplies were obtained from two stand-pipes which, in the majority of cases, were 200 to 300 ft. distant from the caravans, and there was no satisfactory drainage of foul waste water from the caravans. In consequence the licence was refused and the owner was instructed to clear the site.

During the year three additional applications for licences under the provisions of Section 147 of the Leeds Corporation Act, 1956, to use land as sites for moveable dwellings were received. One application was submitted by the licensee of the Grey Goose Hotel, Belle Isle Road, Leeds, to use the private car park at the rear of the premises as a site for a modern trailer-type caravan. The occupier of the caravan, employed by a firm of building contractors, was engaged on a building site nearby for a limited period and, in consequence, a licence was granted in respect of the site for a period of one month only.

An application for a licence to use land at White Laithe Farm, Coal Road, Seacroft, as a site for three moveable dwellings was received from the occupier of the farm premises which had previously

been within the area of an adjoining local authority. On 1st April, 1957, the city boundary was extended by virtue of Section 7 of the Leeds Corporation Act, 1956, and the site came within the administrative boundary of the Leeds County Borough Council. Under the provisions of Section 147 of the above Act, it was necessary for the occupier of the land to obtain a licence to use this land as a caravan site. Planning permission had been given in 1952 to erect three caravans on the site and had been extended for limited periods of one year; the final period of extension expired in November, 1957. In consequence a licence to use the site for three caravans was issued on 6th June, 1957, and continued in force until 10th November, 1957, to cover the unexpired period of planning permission previously granted. The applicant applied for renewal of the licence in November, 1957, which was refused on the grounds that conditions on the site rendered it, on health grounds, unsuitable for permanent caravan dwellings. Extension of planning permission was also refused by the Town Planning and Improvements Committee.

A further application was received from the occupier of Lane End Farm, Whitkirk, to use land adjoining as a site for nine moveable dwellings. In this case no hard standings were provided for the caravans, there were no proper facilities for the disposal of waste water and, as the site was considered unsuitable, the licence was refused.

An application for a licence in respect of a site at 51, Cardigan Lane, for eight moveable dwellings was granted, subject to the following conditions. :—

1. That this licence shall continue in force for a period up to 31st March, 1958.
2. That not more than eight moveable dwellings be allowed on the site at one time.
3. That the class of moveable dwellings which may be kept thereon shall be of the modern trailer type of proprietary design, in good condition and readily mobile.
4. That the caravans shall be situated at least 15 ft. apart.
5. That a proper supply of town's water, accessible at all times and properly protected against damage by frost, shall be maintained.

6. (a) That satisfactory water-closet accommodation shall be maintained for the caravan dwellers, such accommodation to be separate for the sexes, adequately screened and indicated.
 - (b) That a drain inlet shall be provided for the disposal of waste water by the caravan dwellers, such inlet to be in an approved position and indicated.
 - (c) That galvanised metal dustbins shall be provided in the ratio of one dustbin to two caravans, such dustbins to be maintained in good condition and provided with tight-fitting lids and placed on an approved impervious hard standing.
 - (d) That a suitable receptacle shall be provided for the storage of solid fuel in connection with each caravan using such type of fuel.
 - (e) That there shall be provided on the surface of each caravan site a suitable approved hard standing, the length and breadth of which shall exceed those of the caravans by 3 ft.
 - (f) That the land shall be provided with suitable approach roads to the hard standings and suitable paths from the hard standings to the accommodation provided by way of dustbins, water-closets and water supply.
7. That trees on the site be preserved.

Canal Boats.—The number of canal boats on the register at the end of the year was 123. Periodical visits of inspection were made to wharves and locks and a complete inspection was made of 481 boats.

Public Sewers.—During the year 974 public sewers affecting 3,091 houses or other premises were cleansed at a cost to the Department of £1,462 17s. Works of repair or maintenance were carried out to 132 defective public sewers affecting 423 houses or other premises and the cost of this work amounting to £985 4s. 4d. was recovered from the owners of the premises served by the sewers.

Drains.—It was necessary to carry out 2,127 drain tests, 169 of these being new drains relaid in place of those found defective. A large number of informal notices was served on owners of property

for drainage repairs and in 420 cases it was necessary to serve statutory notices under Section 39 of the Public Health Act, 1936.

The drains or other appliances of 76 houses were repaired or renewed by the Department in default as a matter of urgency at a cost of £357 17s. which was recovered from the owners concerned. The drains of 1,081 houses or other premises belonging to other Corporation Departments were repaired or renewed at a cost of £938 19s. 5d. which was recovered from the Departments concerned.

The cleansing and repair of drains serving 190 houses was undertaken by the Department under the provisions of Section 112, Leeds Corporation Act, 1956, at the owners' request, and the cost of this work, amounting to £416 6s., was recovered from the owners concerned. The services of the Department have been greatly appreciated and work in this connection is likely to increase when the service becomes more widely known.

Removal of Persons in need of Care and Attention (Section 47, National Assistance Act, 1948).—During the year seven cases of aged, infirm persons alleged to be living in insanitary surroundings, unable to devote to themselves and not receiving from other persons proper care and attention, were brought to the notice of the Department.

Certificates were issued by the Medical Officer of Health under Section 47 of the National Assistance Act, 1948, and the persons concerned were admitted to hospital.

Articles Exchanged for Rags.—During the year three persons were prosecuted for offences against Section 154 of the Public Health Act, 1936, which places restrictions on the exchanging of articles for rags. The defendants in each case were fined 20s.

Examination of Plans.—The arrangement whereby certain plans of new work submitted to the Building Surveyor's office are forwarded to this Department for comment continued during the year. 800 such plans were forwarded to the Department for the Medical Officer of Health's comments.

District Inspection and Investigation of Complaints.—The total number of houses surveyed and examined was 21,871. The number of complaints investigated during the year was 6,809 and 7,143 nuisances and housing defects were remedied.

The tables on pages 221 to 224 give details of the work done by Public Health Inspectors in 1957.

Notices.—The number of informal notices served in relation to Public Health Act matters was 2,799 and statutory notices served in this connection numbered 1,330.

Hairdressers and Barbers.—During the year, under powers contained in Section 244 of the Leeds Corporation Act, 1956, 404 persons carrying on the trade of hairdresser or barber and their premises in the city were registered. The Corporation made byelaws which came into force on 7th October, 1957, for the purpose of securing (a) the cleanliness of premises registered under Section 244 and of the instruments, towels, materials and equipment used, and (b) the cleanliness of persons employed in such premises in regard to both themselves and their clothing.

Legal Proceedings.—Public Health Act, 1936.—During the year 7 owners of dwelling-houses were summoned for non-compliance with abatement notices served in respect of nuisances arising from various defects of repair.

In two cases the defendants were fined £1 and 5s. respectively and in one case no fine was imposed but a nuisance order was made. In the four other cases the works required by the notices had been carried out subsequent to the service of the summons and the cases were withdrawn.

Rodent Control.—Mr. W. Pickles, Public Health Inspector in charge of Rodent Control, has reported details of the work of the rodent operatives for inclusion in this section of the Report.

Complaints.—During the year 1,873 complaints were received by the Rodent Control Section. Of this number, 987 referred to rats, 751 to mice, 124 to pigeons and there were 11 complaints of damage by rabbits.

The following table shows the number of complaints of rats and mice received during the year analysed according to months and types of premises affected.

1957	Rats					Mice				
	B	PD	LA	A	Total	B	PD	LA	A	Total
January	18	65	6	..	89	17	49	4	..	70
February	12	50	..	..	62	12	25	6	..	43
March ..	24	50	4	..	78	11	36	6	..	53
April ..	11	44	6	1	62	16	34	9	..	59
May ..	20	55	2	1	78	20	42	6	..	68
June ..	14	54	1	1	70	6	28	1	..	35
July ..	29	91	7	..	127	22	51	2	..	75
August ..	19	61	2	..	82	15	45	2	..	62
Sept. ..	23	55	1	1	80	12	41	4	..	57
Oct. ..	18	68	3	1	90	21	56	10	..	87
Nov. ..	21	72	4	..	97	20	54	4	..	78
Dec. ..	15	54	3	..	72	20	39	5	..	64
Total..	224	719	39	5	987	192	500	59	..	751

B—Business Premises
PD—Private Dwellings

LA—Local Authority's premises only
A—Agricultural or Horticultural Premises

Included in the above table under the headings of business premises and private dwellings are complaints of 13 Local Authority business premises and 131 Local Authority houses where there was some measure of rat infestation and 11 Local Authority business premises and 117 Local Authority houses where mice infestation was reported.

Inspections.—The total number of inspections for the year was 27,835. The number of inspections and visits made in connection with complaints received was 11,918 and the figure for inspection of Leeds Corporation sewer manholes was 15,917.

Sewer Baiting.—This work continued throughout the year in accordance with the Ministry's recommendations and, with the inclusion of new Corporation Housing Estates, the total number of baitable manholes within the city boundary is now 6,772.

After test baiting, maintenance treatments have been proceeded with in the case of manholes where takes have been recorded and in

the requisite number of manholes on either side. As the new recommendation of 1 : 4 : 9 baiting was only inaugurated on the second maintenance, the benefits from this method of sewer baiting cannot yet be fully assessed until the cycle has been completed.

The souring of the oatmeal base in the Warfarin mix has been overcome by the addition of preservatives and the introduction of technical oil.

Tests carried out by the Ministry using Sodium Fluoracetate as a direct poison have given results comparable with those obtained with Zinc Phosphide when using the pre-baiting method, but the former is an extremely dangerous poison, highly toxic to all animals, and no certain antidote is known. It is not likely, therefore, to be recommended for surface treatments.

Treatments.—During the year 1,096 new infestations were recorded. 543 premises were found to be seriously infested by mice and 553 premises were found to have some degree of rat infestation. Of these, 993 premises were treated by the Rodent Control Section of the Department.

Pigeons.—During the year 124 complaints were received from occupiers of private dwellings and business premises of nuisance from wild pigeons. The premises were inspected, and, in the majority of cases, action was taken. Other visits were made to premises where pigeons were deemed to be a public nuisance and the result of shooting, trapping and netting was 4,404 birds killed.

Some premises from which pigeons have been removed have now been renovated with great improvement to the structure.

Prevention of Damage by Pests Act, 1949.—Under the Prevention of Damage by Pests Act, 1949, the number of informal notices served for treatments and structural proofing was 14. During the year 36 premises were proofed against rodents and in this connection the helpful co-operation of the owners of the buildings and other sections of the Local Authority has been much appreciated.

Small proofing works are carried out by the Rodent Control staff at the time of servicing. Major rat-proofing works carried out by private contractors have been supervised by the Department in order to ensure that they were executed in a satisfactory manner.

General.—Major rat infestations in the city only very rarely occur but sparse and diffuse rat populations are more difficult to deal with and much time and labour is now spent for a small kill. However, if the rodent population is to be kept to a minimum to prevent the spread of disease, reduce food wastage and prevent damage to structure, this control work must continue.

Warfarin is still the main poison used for the clearance of rats and mice from premises but in certain premises treated for mice this method of poisoning has not produced the satisfactory results that ensued when it was first introduced in 1952: in many cases a final baiting with zinc phosphide or arsenic has been adopted. No estimated kill by Warfarin poisoning has been made but 2,004 dead rats and mice were collected and destroyed during the year.

Rodent Prevention.—Hygienic practices are of the greatest importance in preventing rat infestation. Many infestations can be prevented if (i) trouble is taken to cut down the number of possible places where rats or mice can lie-up and nest, (ii) food is kept in rat-proof containers, and (iii) bins for waste material are kept in good condition with tight-fitting lids, and cleared as often as may be necessary. This is especially applicable to canteens, cafes and restaurants and it has been found necessary repeatedly to stress this point to managers and supervisors of various premises.

WORK DONE BY PUBLIC HEALTH INSPECTORS, 1957.—contd.

ANALYSIS OF INSPECTIONS	North Div.	South Div.	East Div.	West Div.	Factories Div.	Housing Div.	(a) Canal Boats & Common Lodging Houses (b) Rodent	Food and Dairies	Tot
DISEASES OF ANIMALS ACTS.									
Visits paid to piggeries:—									
56. Inspection	..	..	..	..	..	..	..	655	6
57. Enquiries	..	..	..	..	..	..	..	25	
Visits paid to farms:—									
58. Warble Fly	..	..	..	..	..	..	..	105	1
59. T.B. Order—Disinfection	..	..	..	..	..	..	..	2	
60. Foot and mouth disease	..	..	..	..	..	..	..	..	
61. Anthrax	..	..	..	..	..	..	..	3	
Visits paid to:—									
62. Whitkirk Auction Mart	..	..	..	..	..	..	..	52	
63. Victoria Cattle Market	..	..	..	..	..	..	..	..	
64. Poultry Market and Shows	..	..	..	..	..	..	..	218	2
TRADES AND BUSINESSES.									
65. Factories with mechanical power	..	1	4	..	1,444	..	..	..	1,4
66. Factories without mechanical power	..	..	..	..	33	..	..	..	
67. Other premises, constructional work, etc.	..	..	1	..	46	..	..	..	
68. Workplaces	4	30	10	..	435	..	..	..	4
69. Shops	1	8	57	12	516	..	..	..	5
70. Outworkers	..	..	9	..	715	..	..	..	7
71. Offensive trades	9	8	39	4	..	..	..	..	
72. Visits for enquiry	23	80	60	59	332	..	..	..	5
SMOKE ABATEMENT.									
73. Smoke observations	7	107	8	8	142	..	..	..	2
74. Grit deposit records	..	..	..	..	224	..	..	..	2
75. Boiler plant	..	8	..	2	1,041	..	..	..	1,0
76. Visits for enquiry	..	6	1	4	10,562	..	..	..	10,5
GENERAL.									
77. Rodent infestations	36	81	65	19	..	..	*(b)27,634	..	27,8
78. Farms	..	47	..	..	..	..	..	..	
79. Stables	24	68	3	24	..	..	..	..	1
80. Pig-styes	37	159	48	81	..	..	..	..	3
81. Poultry and other animals	26	48	105	41	..	..	..	..	2
82. Water supply	111	119	121	185	3	..	..	..	5
83. Infirm and diseased persons	..	..	..	..	..	..	..	..	
84. Watercourses and ditches	34	23	8	5	..	..	..	..	
85. Culverts	..	..	5	1	..	..	..	..	
86. Other nuisances	31	28	41	4	..	..	..	..	
87. Public conveniences	175	105	191	195	881	..	..	..	1,5
88. Visits for enquiry	288	470	202	296	17	2	..	..	1,2
89. No access visits	1,190	1,327	959	818	217	828	..	..	5,3
90. Other visits (not included in above)	70	90	88	32	173	73	..	..	5
REPAIRS AND IMPROVEMENTS.									
91. Roofs, valley gutters, flashings, etc.	154	280	357	205	..	..	..	..	9
92. Chimney stacks, flues, pots, etc.	17	78	75	42	..	..	..	..	2
93. Eaves spouts	78	172	175	173	1	..	..	..	5
94. Fallpipes	78	117	171	60	1	..	..	..	4
95. Walls, brickwork, pointing	12	40	51	76	..	..	..	..	17
96. Damp-proof courses provided	..	..	..	1	..	..	..	..	
97. Dampness otherwise remedied	6	23	29	21	..	..	..	..	7
98. Wallplaster	15	33	45	54	..	..	..	..	14
99. Ceilings	2	42	40	24	1	..	..	..	10
100. Floors	2	21	18	11	..	..	..	..	5
101. Windows, frames, cords, etc.	11	114	51	50	..	..	..	..	22
102. Doors, door-frames	3	20	12	36	..	..	..	..	7
103. Ovens, fire-ranges, grates, etc.	9	42	22	28	..	..	..	..	10
104. Washing boilers, setpots, etc.	..	..	1	1	..	..	..	..	
105. Sinks, lavatory basins, etc.	9	20	25	8	..	..	..	..	6
106. Waste pipes	21	22	25	45	..	..	..	..	11
107. Water supply provided	..	5	14	1	..	..	..	..	2

* Includes 15,917 for sewer baiting

PREVENTION OF ATMOSPHERIC POLLUTION

BY

J. H. WYATT,

Deputy Chief Public Health Inspector

Routine investigations of the degree of pollution of the atmosphere in Leeds have continued during 1957. Facts and figures about this have been derived from the several atmospheric pollution stations within the city. There are seven of these operated by the City Council, each with a standard deposit gauge for the measurement of solid deposits and a lead peroxide instrument for the estimation of the amount of sulphur compounds in the air. These stations are situated at Hunslet, Headingley, Temple Newsam, Market Buildings, Armley Park, St. James's Hospital and Burley Park. Their approximate positions are shown on the map of the city which will be found opposite page 226. There is also a smoke filter and volumetric sulphur dioxide apparatus in the City Analyst's Laboratory at No. 12, Market Buildings.

In July, 1957, four new smoke filters and sulphur dioxide volumetric instruments were installed in the central area of the city in order to assess probable improvements in atmospheric pollution following the declaration of the central area as a Smoke Control Area. These instruments are situated at (i) the Department of Preventive Medicine and Public Health (Leeds University), 32, Hyde Terrace, Leeds, 2, (ii) the Public Health Department Day Nursery, Blenheim Lodge, Blackman Lane, Leeds, 2, (iii) the Y.W.C.A. Hostel, Lovell Street, Leeds, 7, and (iv) the Maternity and Child Welfare Clinic and Blood Transfusion Centre, Park Square, Leeds, 1.

Apart from the apparatus operated by the City Council, the Central Electricity Authority has twelve deposit gauges and fifteen lead peroxide instruments in positions chosen to monitor emissions from the two power stations, Kirkstall and Skelton Grange. Eleven of these are shown on the map of the city previously mentioned.

The National Coal Board also has a smoke filter and a sulphur dioxide instrument together with a volumetric sulphur dioxide instrument at Hyde Park.

Most of the city and its environs is, therefore, covered by instruments of various kinds at 28 points. It has long been felt, however, that some records of atmospheric pollution in the north of the city would be helpful and arrangements have now been made, with the kind permission of the Board of Governors of the United Leeds Hospitals, to site a deposit gauge and lead peroxide instrument in the grounds of Roundhay Hall.

In addition to all the above instruments, the City Council also operates two deposit gauges for experimental purposes. These are sited near the Kirkstall Forge in a position designed to record grit emissions from these works, and on the roof of a building at the West Yorkshire Foundries, Ltd., in Sayner Lane, so as to measure the solid deposits emitted from that foundry. In both cases complaints have been received about excessive emissions from these premises.

The monthly examination of the Council's deposit gauges and lead peroxide instruments, and the daily testing of the smoke filters and volumetric sulphur dioxide indicators are carried out by Mr. R. A. Dalley, the City Analyst, and I must place on record an appreciation of the great help he has given us in this respect and his advice and assistance in the efficient operation and maintenance of the equipment.

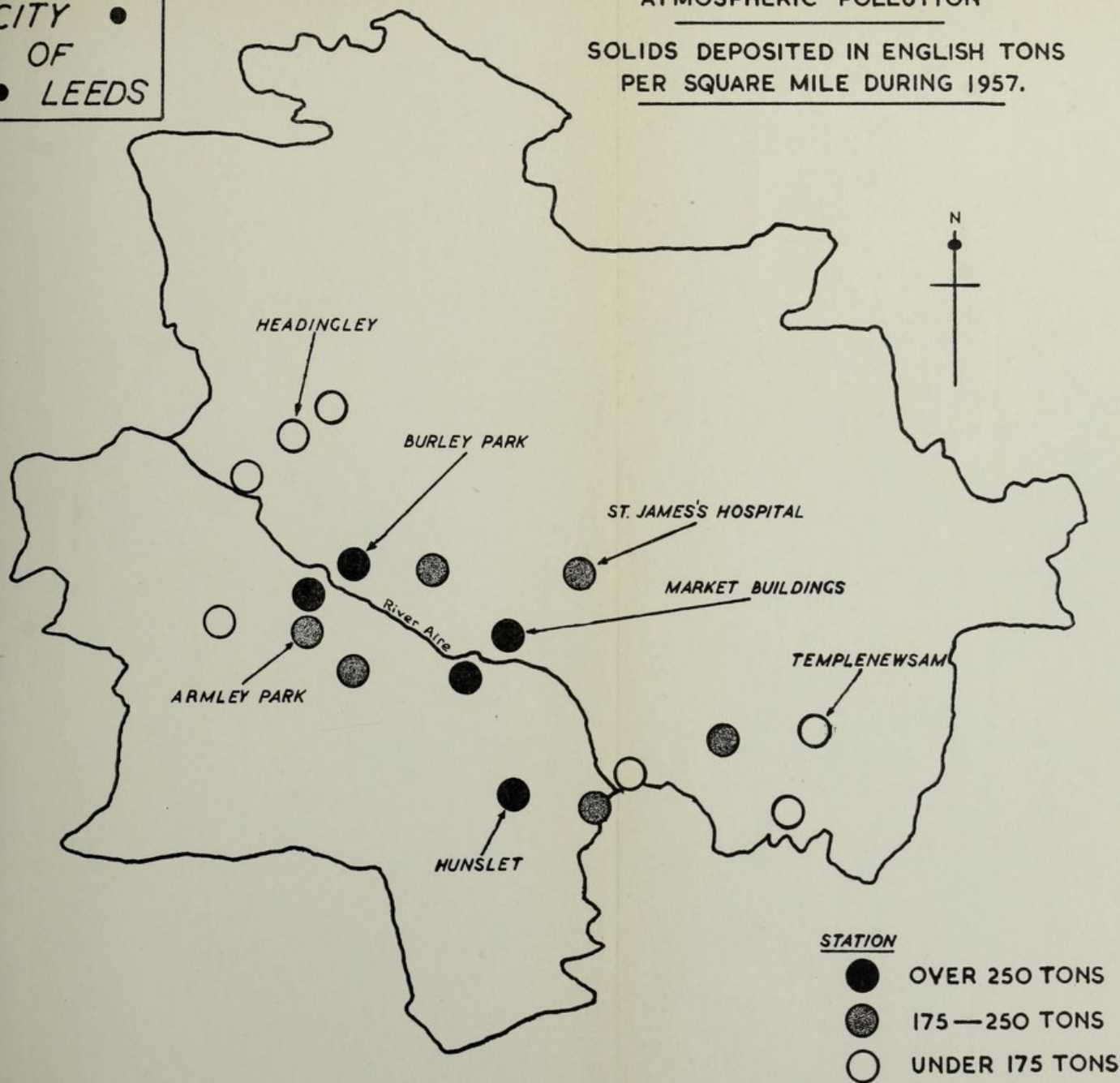
Standard Deposit Gauges.—The table on page 236 shows the monthly deposit of solids from the atmosphere in tons per square mile for the years 1956 and 1957. The station with the highest monthly average was once again Hunslet with 32·13 tons per square mile and the one with the lowest Headingley with 10·46 tons per square mile as against Templenewsam's figure in 1956 of 10·09 tons.

The table on page 234 sets out the records from 1926 to 1957 of the deposits of solids from the atmosphere in tons per square mile at the seven stations situated in various parts of the city and the map (previously referred to) illustrating the degree of pollution revealed by these and other stations in the city during 1957 appears opposite.

CITY •
OF
• LEEDS

ATMOSPHERIC POLLUTION

SOLIDS DEPOSITED IN ENGLISH TONS
PER SQUARE MILE DURING 1957.



2. 1941-1942
 3. 1943-1944
 4. 1945-1946
 5. 1947-1948
 6. 1949-1950
 7. 1951-1952
 8. 1953-1954
 9. 1955-1956
 10. 1957-1958
 11. 1959-1960
 12. 1961-1962
 13. 1963-1964
 14. 1965-1966
 15. 1967-1968
 16. 1969-1970
 17. 1971-1972
 18. 1973-1974
 19. 1975-1976
 20. 1977-1978
 21. 1979-1980
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 33. 2003-2004
 34. 2005-2006
 35. 2007-2008
 36. 2009-2010
 37. 2011-2012
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 39. 2015-2016
 40. 2017-2018
 41. 2019-2020
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An examination of the deposit figures for the thirty-two year period, 1926 to 1957, leads one to the conclusion that the degree of atmospheric pollution in the city has changed very little in that period, in spite of the great amount of work devoted to smoke abatement during that time. It is abundantly clear that the smoke abatement legislation in force in that period was not strong enough and it is to be hoped that the Clean Air Act which now replaces it will prove more effective.

Estimate of Atmospheric Pollution by the Lead Peroxide Method.—

The table on page 237 gives the estimation of sulphur compounds in the atmosphere in the years 1956 and 1957. The station showing the highest monthly average was again Hunslet with 4.12 milligrammes of SO_3 and the one with the lowest was once again Headingley with 2.42 milligrammes. The monthly average is shown graphically on page 235.

Concentration of Smoke and Sulphur Dioxide by the Smoke Filter and Volumetric Method.—There is, as previously stated, a smoke filter and volumetric sulphur dioxide apparatus in the Public Health Department Annexe at 12, Market Buildings, and another in the National Coal Board's Laboratory in Raglan Road, Leeds, both of which have been in operation for some years.

We now have four additional similar installations in the central part of the city. There were provided at the request of the Fuel Research Station of the Department of Scientific and Industrial Research, in order to obtain some idea of the improvement, if any, in the degree of atmospheric pollution created by the establishment of the Central Smoke Control Area. They have been operating since 1st August, 1957. The information obtained from these various instruments is recorded in the two tables on pages 232 and 233.

The Clean Air Act, 1956.—The Clean Air Act, 1956, was passed on 5th July, 1956, and was delegated by the City Council to the Health Committee for administrative purposes. This is an Act which will undoubtedly play an increasingly important part in the duties of the public health inspector and, even with certain sections only in force, the staff has been fully occupied with these new duties. The major part of the work has, in fact, been carried out by the inspectors in the Factories Division of the Department. The first

parts of the Act came into force on 31st December, 1956 (the first appointed day) and were concerned with :—

- (i) The installation of new furnaces and prior approval.
- (ii) The heights of chimneys.
- (iii) Smoke Control Areas.
- (iv) The control of Alkali, etc. Works.
- (v) Colliery spoilbanks.
- (vi) The amendment of building bye-laws.

The Installation of New Furnaces and Prior Approval of Furnaces.—Section 3 of the Clean Air Act introduces a most important provision inasmuch as new furnaces which are installed in buildings are required to be capable of operating continuously without emitting smoke while burning fuel of a type for which they were designed. The furnaces involved are generally industrial furnaces and other large furnaces such as may be found in hotels and blocks of flats. Small domestic appliances which have a heating capacity of less than 55,000 B.Th.U's. per hour are not covered by these provisions. The Act provides that formal notification must be given to the Local Authority when such new furnaces are to be installed and also that plans and specifications may be submitted to the Local Authority for approval so far as Section 3 of the Act is concerned. If a furnace is approved, it is deemed to be capable of continuous operation without emitting smoke when burning the correct fuel.

In 1957 we received 31 notifications of intention to install new furnaces and included in these were 17 applications for prior approval. 15 of these applications were approved during the year; they included 4 large steam-raising plants, 9 central heating systems, a battery of coke-fired non-ferrous metal melting crucible furnaces and an incinerator and waste heat boiler.

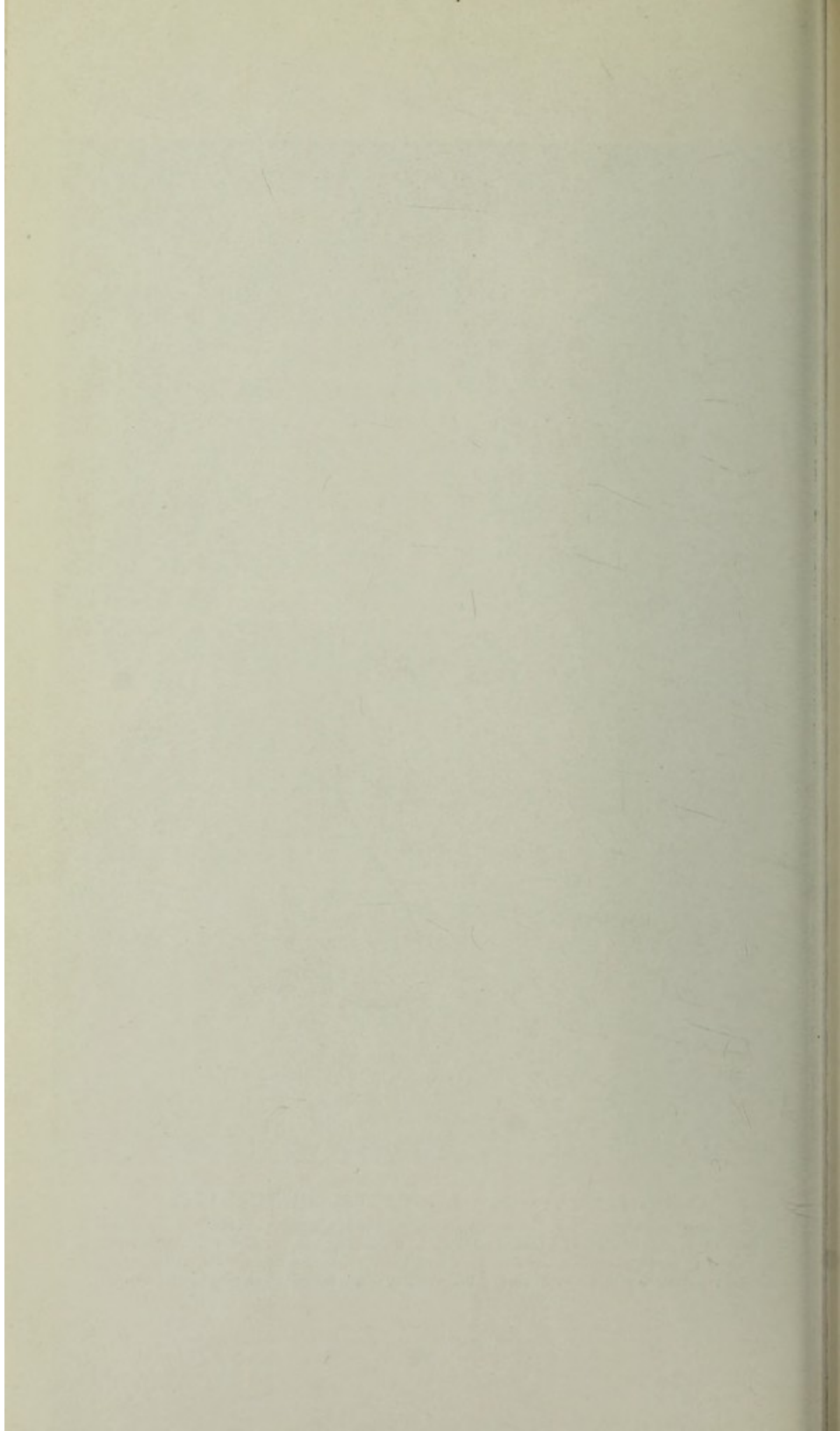
A typical example of the type of plant involved in these requests for prior approval is illustrated opposite.

Heights of Chimneys.—Section 10 of the Clean Air Act gives to the Local Authority power to reject plans of new buildings, except those intended for use as residences, shops or offices, if they are not satisfied that the height of any chimney shown on the plans will be



CLEAN AIR ACT — PRIOR APPROVAL OF FURNACES

Industrial Boiler Plant for Process Steam, comprising two-pass Economic Boiler with mechanical stokers and induced draught, fully instrumented and with automatic control. Application for approval submitted to the Sub-Health (Sanitation, Food and Drugs,) Committee July, 1957, and approved subject to the fitting of a Smoke Alarm and the provision of grit sampling holes in chimney flue.



sufficient to prevent nuisance from smoke, grit, dust or gases. This Section is, in Leeds, supplemented by the provisions of Section 120 of the Leeds Corporation Act, 1956, which extends the power of rejection of plans to any new building, whatever its use, if the height of the chimney shown is likely to be insufficient to prevent nuisance.

In 1957 we examined and commented upon 57 plans of industrial and commercial buildings on which proposals for new chimneys appeared. We have secured increases in the proposed heights of chimneys shown on these plans ranging from 5 to 40 feet.

Smoke Control Areas.—The Act now gives power to Local Authorities to create Smoke Control Areas in which, subject to any exemptions or limitations which may be in force, if smoke is emitted from a chimney of any building, the occupier is guilty of an offence. The only defence provided by the Act in the event of smoke emissions in a Smoke Control Area is that they occurred while "authorised fuels" were being burned. The "authorised fuels" in this case are anthracite, briquetted fuels carbonised in the process of manufacture, coke, electricity, gas, low temperature carbonisation fuels and low volatile steam coals.

The Minister has also made an Order which provides that fireplaces designed to burn liquid fuel, e.g. oil, and which are properly installed, maintained and operated, are exempted from the provisions of the part of the Act dealing with Smoke Control Areas.

There is provision in the Act for a contribution by the Local Authority of 7/10ths of the cost of alterations which are necessary in private houses to make the fuel-burning appliances suitable for burning authorised fuels.

The City Council has decided, in principle, to proceed in the first instance with the making of a Smoke Control Order for a very large area in the centre of the city, amounting in all to something like 1,100 acres.

This area was chosen because it was considered to be large enough to ensure that very substantial reductions in smoke emissions would ensue. The proposed boundaries are well defined and give a reasonably "solid" area. The following are included in the proposed Central Smoke Control Area:—The main Civic Buildings, the General Infirmary, the new College of Technology,

the University precinct and the commercial centre of Leeds together with a contiguous representative section of industrial and domestic premises: there are also several large cleared districts and other areas which will, in due course, be cleared by action under the Housing Acts.

The preliminary work in this connection began in March and was not completed by the end of the year but some 10,235 visits were paid to premises of all types in the area to find out the type of fuel-burning appliances installed, the type and quantity of fuel burned and the methods of stoking used in certain instances. Most of these visits were paid by the probationer inspectors in the Factories Division.

In addition to the Central Area, the Health Committee also proposed that six areas in housing estates should also be declared Smoke Control Areas. These areas were at Roman Avenue, Beckett Park, Butcher Hill, Ireland Wood and Tinshill Lane. Final decisions on these have not yet been made.

Alkali, etc. Works.—The Clean Air Act exempts to some degree from the control of the Local Authority premises which are registered under the Alkali, etc. Works' Regulation Act, 1906, and others which may be subsequently scheduled by the Minister and declared to be the responsibility of H.M. Alkali Works Inspectors. A public enquiry into additional processes which it has been suggested should be so scheduled was held in June, 1957, but the Report upon this has not yet been issued; it is not known what additional processes, if any, will be removed from the control of the Local Authority and handed to the Alkali Inspectors.

Colliery Spoilbanks.—The Act now provides that the owner of any mine or quarry must employ all practicable means for preventing the combustion of refuse deposited from the mine or quarry, and for preventing or minimising the emission of smoke or fumes from the refuse. During the year complaints were received about a nuisance caused by smoke and fumes from a burning colliery spoilbank in the southern part of the city. Approaches were made to the owners of the spoilbank and action subsequently taken by them to control the fire has resulted in a considerable reduction in the nuisance from this source. The nuisance has not yet been completely cured and the matter is still under review.

Building Bye-Laws.—The Clean Air Act empowers the Local Authority to amend their building bye-laws so as to require that new buildings must have arrangements for heating or cooking which are properly designed for burning gas, electricity, coke or anthracite, or oil. The Leeds City Council has now made such Bye-Laws which came into operation on 1st November, 1957. The Building Surveyor's office now approve all plans subject to compliance with this particular bye-law. The appliances accepted are those which appear on the list prepared in consultation with the Ministry of Power and issued jointly by the Coal Utilisation Council and the Solid Smokeless Fuels Federation. Advice as to whether or not a particular appliance is in fact satisfactory is tendered by this Department's inspectors.

General.—The work of the public health inspectors in connection with smoke abatement during 1957 was as follows :—

Smoke observations	..	..	..	..	272
Grit deposit records	..	..	..	..	224
Visits to boiler plants	..	..	..	..	1,051
Visits for other enquiries	..	..	..	..	10,573

The large number of grit deposit records was due to investigation of complaints of grit emissions from two iron foundries. These investigations still continue. The number of visits to boiler plants and for other enquiries reflect the enormous amount of work necessary before the declaration of Smoke Control Areas.

SMOKE FILTER APPARATUS.
Concentration of Smoke in Milligrammes per 100 cubic metres.

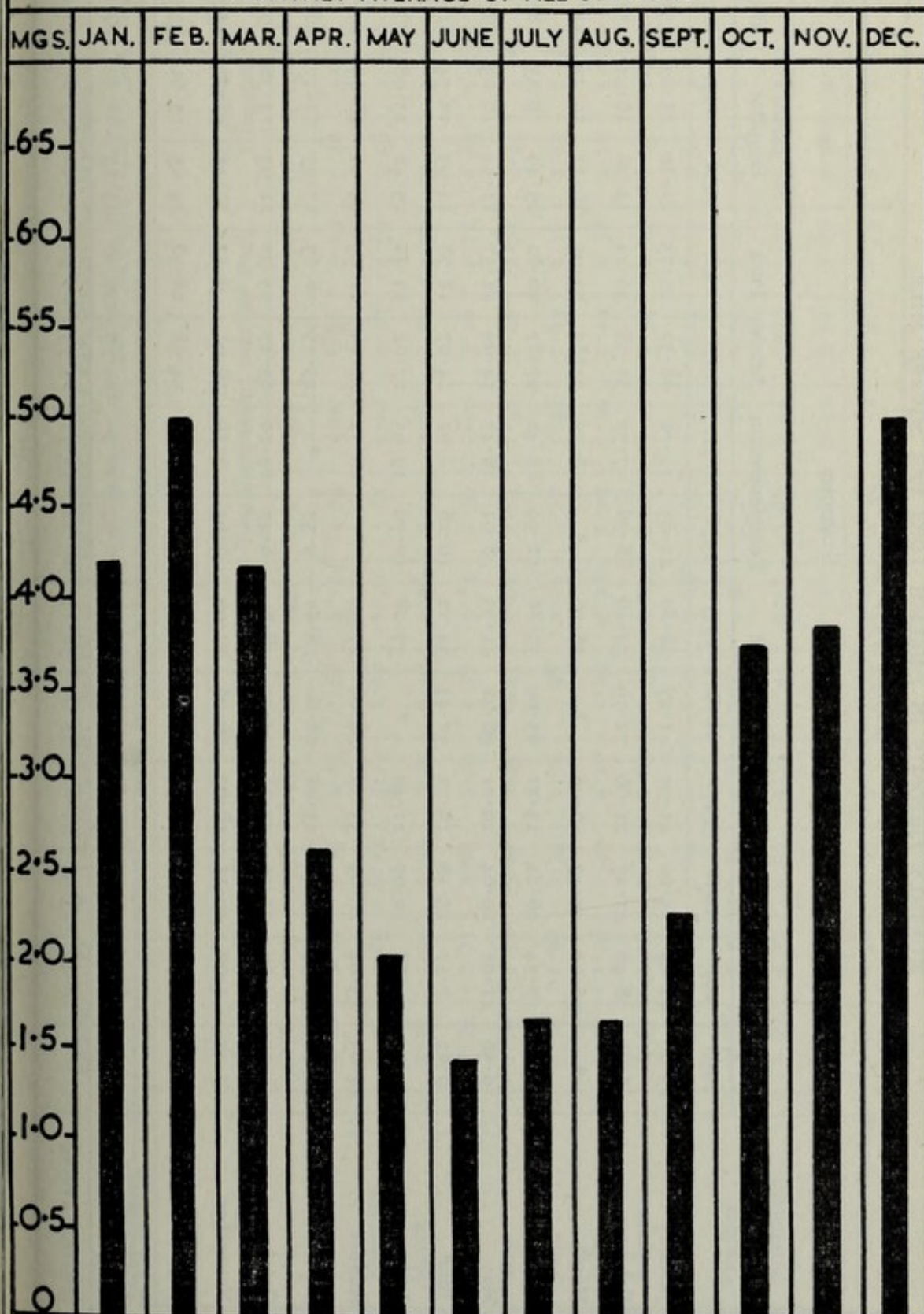
1957	MONTHLY AVERAGE						HIGHEST DAILY AVERAGE					
	Market Buildings	Blenheim	Hyde Terrace	Park Square	Y.W.C.A.	Hyde Park	Market Buildings	Blenheim	Hyde Terrace	Park Square	Y.W.C.A.	Hyde Park
January	98	..	..	..	..	23	145	..	..	..	..	48
February	123	..	..	..	..	31	193	..	..	..	..	65
March ..	107	..	..	..	..	30	222	..	..	..	..	63
April ..	74	..	..	..	..	14	145	..	..	..	..	50
May ..	35	..	..	..	..	16	56	..	..	..	..	38
June ..	28	..	..	..	..	9	44	..	..	..	..	27
July ..	3	..	..	..	..	11	5	..	..	..	..	35
August	34	23	23	24	24	13	78	49	60	54	53	40
September	41	36	37	37	36	17	66	75	68	65	68	40
October	129	86	97	93	85	20	235	180	213	218	185	63
November	119	89	93	92	94	31	244	171	203	216	201	76
December	148	106	118	108	108	31	532	325	326	342	310	194

SULPHUR DIOXIDE VOLUMETRIC APPARATUS.
Concentration of Sulphur Dioxide in parts per 100 Million of Air.

1957	MONTHLY AVERAGE						HIGHEST DAILY AVERAGE					
	Market Buildings	Blenheim	Hyde Terrace	Park Square	Y.W.C.A.	Hyde Park	Market Buildings	Blenheim	Hyde Terrace	Park Square	Y.W.C.A.	Hyde Park
January	16	..	..	..	..	12	28	..	..	..	..	41
February	21	..	..	..	..	16	40	..	..	..	..	29
March ..	16	..	..	..	..	16	32	..	..	..	..	29
April ..	11	..	..	..	..	6	21	..	..	..	..	17
May ..	8	..	..	..	..	5	14	..	..	..	..	10
June ..	6	..	..	..	..	1	10	..	..	..	..	5
July ..	6	..	..	..	..	2	10	..	..	..	..	7
August	7	4	5	4	6	3	13	12	14	12	14	9
September	8	7	7	6	9	5	14	12	13	16	15	13
October	17	14	15	15	15	11	40	39	46	43	39	34
November	15	12	13	15	15	10	30	25	26	29	28	20
December	25	20	24	24	24	18	97	94	99	99	94	87

SULPHUR EMISSION — 1957.

AMOUNT OF SO_2 IN MILLIGRAMMES PER DAY PER 100 SQUARE CENTIMETRES
MONTHLY AVERAGE OF ALL STATIONS



STANDARD DEPOSIT GAUGES.
MONTHLY DEPOSITS IN ENGLISH TONS PER SQUARE MILE.
YEARS 1956 AND 1957.

Period.	STATIONS											
	Headingley		City Centre		Hunslet		Templenewsam		Armley Park		St. James's Hospital	
	1956	1957	1956	1957	1956	1957	1956	1957	1956	1957	1956	1957
January ..	15.90	12.84	35.00	21.07	41.27	28.80	12.03	10.70	28.52	20.75	21.20	15.67
February ..	8.87	8.48	21.27	21.66	72.79	34.46	8.98	7.32	37.98	30.24	14.96	16.91
March ..	*	16.01	23.43	26.98	*	28.06	*	8.70	25.63	23.07	16.71	19.22
April ..	12.37	7.54	26.81	13.21	25.90	31.86	12.59	5.40	27.87	10.82	25.49	9.55
May ..	9.56	11.01	19.64	20.21	36.41	41.75	8.91	18.47	14.90	21.57	11.54	16.03
June ..	9.81	7.57	25.16	16.71	32.44	34.22	10.28	8.67	24.67	18.78	14.93	12.74
July ..	10.03	12.88	20.67	21.49	*	35.28	10.76	19.95	17.02	22.42	15.41	23.08
August ..	14.03	13.64	20.63	33.29	24.08	27.51	*	28.52	17.45	20.93	14.56	18.25
September ..	12.12	8.37	19.48	23.08	28.60	28.81	9.35	*	25.55	28.65	13.23	14.47
October ..	8.73	9.67	21.50	22.38	32.71	28.80	6.47	13.10	13.47	13.92	11.93	14.56
November ..	7.47	4.90	19.15	16.97	26.96	33.09	6.64	5.16	16.91	9.53	10.34	11.51
December ..	20.92	12.55	34.48	27.22	38.28	32.99	14.96	14.31	34.98	18.38	24.85	15.61
Total deposit for year ..	129.81	125.46	287.22	264.27	359.44	385.63	100.97	140.30	284.95	239.06	195.15	188.00
Monthly average	11.80	10.46	23.93	22.02	35.94	32.14	10.10	12.75	23.75	19.92	16.26	15.67
											26.64	22.39

* Gauge tampered with

PUBLIC HEALTH INSPECTORIAL STAFF

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,
Chief Public Health Inspector

Mr. W. F. Saxton, Deputy Chief Public Health Inspector since August, 1949, retired on the 24th September, 1957, after 42 years' service in the Public Health Department. To him I extend sincere thanks and appreciation for his valued assistance.

Mr. J. H. Wyatt, Supervisory Public Health Inspector, Factories Division, was promoted to the post of Deputy Chief Public Health Inspector with effect from the 25th September, 1957.

The Department started the year with a staff of 45 inspectors and there were 12 vacancies. During the year 2 inspectors retired on age limit and 4 inspectors were appointed. Thus, with an establishment of 57 inspectors, there were 10 vacancies at the end of the year.

The scheme for the training of student public health inspectors established by the Leeds City Council for the training of 15 students continued to function satisfactorily during the year. Practical training was provided in all aspects of the Department's work. Theoretical training was arranged by the Leeds College of Technology.

There has been no difficulty in filling student vacancies as they occurred, and the candidates coming forward for appointment as student public health inspectors have been of a very good type.

During the year two student inspectors were successful in passing the qualifying examination of the Public Health Inspectors' Education Board, and they were appointed public health inspectors with effect from 3rd June, 1957.

Report of the City Analyst

MUNICIPAL LABORATORY

BY

R. A. DALLEY, F.R.I.C.

City Analyst

The total number of samples received for analysis during 1957 was 6,982. This is the highest number of samples analysed in any year since the laboratory was established in 1928 and represents a 56 per cent. increase compared with the figure for 1956.

A notable acquisition during the year has been the purchase of a combined spectrophotometer and fluorimeter. This is an expensive instrument but no laboratory dealing with the enforcement of food and drugs legislation can be considered fully equipped without some such instrument. With it the laboratory has been able, for the first time, to carry out Vitamin A determinations and the instrument has also been in regular use for carrying out many other determinations with a greater speed and accuracy than was previously possible.

A further useful development has been the commencement of regular analyses of fuel oil for the Transport Department. In the past these samples have been sent to a firm of consultants outside Yorkshire, but on the grounds of both convenience and economy it is more satisfactory that they should be analysed in the city's own laboratory.

It will be obvious that the expansion in both the number and variety of samples has thrown a greatly increased burden of work on the staff. In these circumstances it is therefore a particular pleasure to express to my Deputy (Mr. L. A. Perkin) and all members of the staff my sincere appreciation of their loyal support throughout the year.

The effective enforcement of the various Acts and Orders relating to food and drugs is only possible with the close co-operation of all concerned; in this respect I am glad to express to the Senior Sampling Officer, Mr. H. Long, my thanks for his helpful co-operation.

The following is a summary of the analyses made during 1957 :—

Samples submitted by the Public Health Department :—

Food and Drug samples	3,281
Milks for bacteriological examination ..	1,126
Ice-cream for bacteriological examination ..	71
Fertilisers and Feeding Stuffs	18
Atmospheric Pollution :	
Rain Gauges	101
Lead Peroxide cylinders	84
Daily Smoke and Sulphur Dioxide determinations	1,704
Dust samples	159
Miscellaneous samples	14
	6,558

Samples submitted by other Departments :—

Care of Children Department	1
Central Purchasing Department	13
Civic Catering Department	3
City Architect's Department	2
City Coroner	53
City Engineer's Department	1
Education Department	1
Highways Department	1
Police Headquarters	55
Transport Department	26
Waterworks Department	12
Weights and Measures Department	4
	172

Samples received from other sources :—

Craven District Coroner	7
Leeds " B " Group Hospital Management Committee	5
Leeds General Infirmary	2
Rothwell Urban District Council	3
Wakefield Corporation	235
	252
Total ..	6,982

FOOD AND DRUGS

The table on pages 253 to 257 summarises the samples taken under the Food and Drugs Act, 1955.

The percentage of samples found to be adulterated or otherwise unsatisfactory was 3·7 per cent. as compared with 1·9 per cent. for 1956.

MILK :—

The average composition of the 2,922 samples submitted was as follows, the corresponding figures for the last two years being given for comparison :—

		1957	1956	1955	Minimum require- ment
Non-fatty solids	..	8·71%	8·77%	8·71%	8·50%
Fat	.. ..	3·71%	3·67%	3·66%	3·00%
Total solids	..	12·42%	12·44%	12·37%	11·50%

The adulteration rate was 2·9 per cent. as against 1·4 per cent. in 1956 and 2·3 per cent. in 1955.

Of the 85 unsatisfactory samples, 47 contained added water, 31 were fat deficient and 7 showed both added water and fat deficiency.

The highest amount of added water found was 19·3 per cent. and the greatest fat deficiency 38·0 per cent.

A further 311 milks had non-fatty solids of less than 8·5 per cent. but in each case the freezing point test showed that the deficiency was due to natural causes and not to added water.

Channel Islands Milk.—This milk, for which a higher price is charged, is required to contain not less than 4 per cent. fat, as compared with 3 per cent. for ordinary milk. 11 samples were received during the year and all were satisfactory, their average fat content being 4·9 per cent. (limits 4·2 to 6·25 per cent.).

FOODS OTHER THAN MILK :—

The number of such samples increased from 135 in 1956 to 359 in the year under review. Of these, 37 (10·3 per cent.) were unsatisfactory compared with 10·4 per cent. last year. Details of the more interesting cases of adulteration or irregularity will be found in the following paragraphs, whilst the table on page 189 lists the results of those cases in which legal proceedings were instituted.

Sausages.—Of 43 samples received during the year all but two had meat contents above the accepted standards of 50 per cent. for beef and 65 per cent. for pork sausages. The average meat contents were 59 per cent. in the case of beef sausages (29 samples) and 67 per cent. for pork (8 samples). The two unsatisfactory samples were a beef sausage (*No. 249/L*) which contained only 44 per cent. meat, and a pork sausage (*No. 333/L*) with a meat content of only 55 per cent. Two samples (including one of those just mentioned) contained sulphur dioxide preservative without declaration of the presence of same at the time of sale.

Chicken Cutlets (*No. 757/B*) also contravened the Preservative Regulations in that they contained 70 parts per million of sulphur dioxide preservative.

Canned Meat Products.—Twelve samples were reported against during the year all because of low meat contents. They were made up of Pork Luncheon Meat (5 samples), Braised Steak (3), Beef Steak with Gravy (3), Beef and Vegetables (1). Under the Meat Products (1952) Order, minimum meat contents were laid down for all these products, but since the revocation of the Order their meat contents have been steadily falling. Pork Luncheon Meat, for example, was required to contain not less than 90 per cent. meat, but four of the samples referred to above contained less than 70 per cent. Canned Braised Steak was required under the Order to have a meat content of not less than 95 per cent., but the three samples received during the year (all of the same manufacture) each contained less than 65 per cent.

The standards referred to (together with others) were propounded at a time when meat rationing was in force, and now meat is freely available it is unsatisfactory that many canned meat products

should show this marked decline in meat content. In the absence of legal standards it is difficult for Local Authorities to take effective action against the manufacturers.

Canned and Bottled Chicken Preparations.—Five of these, variously described as Minced Chicken, Real Minced Chicken and Chicken Fillets, were reported against because they did not consist solely of chicken as implied by their description, but of a mixture of chicken and extraneous water. The amount of added water varied between 23 and 37 per cent., and in each case agar or gelatine had been added to cause the water to jellify. The various manufacturers agreed that in future they would describe their products as "Minced Chicken in Jelly", and one having a particularly low chicken content agreed to increase it.

Chicken Fingers.—(*No. 884/B*).—These consisted of seasoned mashed potato, rolled in breadcrumbs and fried. They contained no chicken whatsoever, whereas in my opinion an article sold under this name should contain not less than 52 per cent. chicken meat.

Malt Vinegar (*No. 325/B Informal*) was a complaint sample received from a lady who doubted whether she had in fact been supplied with malt vinegar. The complaint was certainly justified for the sample consisted of a concentrated solution of a red dye in acetic acid. The strength of the acid was 28·8 per cent., compared with the 4 to 5 per cent. of a normal vinegar, and was such that it might have produced severe burning if taken into the mouth. Following enquiries made by the Sampling Officer it transpired that the article was sold in error, and was actually intended for use, by the firm concerned, in the preparation of salmon paste.

Canned Dressed Salmon (*No. 483/B*) contained not more than 73 per cent. salmon, whereas in my opinion an article described as Dressed Salmon should contain at least 95 per cent. salmon. The remaining 27 per cent. consisted mainly of potato together with small amounts of flour, egg yolk and salt.

The offence was slightly mitigated by the fact that the presence of potato was declared (in very small type) on the back of the label, but this was more than cancelled by the picture on the front of the label which depicted an appetising looking middle-cut of red salmon.

Flour.—During the year, the first samples of flour were received since the passing of the Flour (Composition) Regulations, 1956. These Regulations require all flour to contain iron, Vitamin B₁, and nicotinic acid, in not less than certain specified amounts, and all except wholemeal flour to contain a specified amount of added calcium. The object of the Regulations is to require millers to replace those nutrients which (in order to provide the white flour which the public demands) are removed during milling.

One of the 5 samples analysed (*No. 1000/J*) was found to be deficient in iron to the extent of 12 per cent.

Parkin Mixture (*No. 764/J*) was reported against because the label did not comply with the Code of Practice agreed between the Food Manufacturers' Federation and the Association of Public Analysts. The offence was not very serious, but in the consumer's interest it is desirable that articles of food should bear unambiguous and fully informative labels.

DRUGS

The number of drug samples showed an increase from 12 in 1956 to 69 in the year under review. Included amongst these were 16 Vitamin A preparations, which it was possible to examine as a result of the purchase of the spectrophotometer referred to in the introduction to this Report. 15 of these samples were satisfactory but one sample of **Halibut Oil** (*No. 887/B*) contained only 28,500 I.U's of Vitamin A compared with the 40,000 I.U's claimed to be present. It is surprising that the Vitamin content was not even lower in view of the fact that on referring the code number on the bottle to the manufacturer it was discovered that the oil was nine years old.

Protein Food.—(*No. 186/B*).—The protein content of the food was stated on the label to be 90.0 per cent., but in fact was only 84.0 per cent. It seemed likely that the deficiency was due to the product having absorbed moisture during storage, for the moisture content was 10.5 per cent. instead of the 4.0 per cent. stated.

Iodised Throat Lozenges (No. 537 and 571/B) were from the same source, and both were grossly deficient in the two principal ingredients, iodine and phenol. The actual deficiencies amounted to 63 per cent. in the case of the iodine and 100 per cent. in the case of the phenol, and were such that the lozenges no longer had any appreciable antiseptic properties.

BACTERIOLOGICAL WORK

1,126 Milks and 71 Ice-creams were submitted to the required Tests, the results being shown in the table below.

The Methylene Blue Test measures the keeping quality of the milk and the Phosphatase Test the efficiency of pasteurisation. The Turbidity Test, which is only carried out on sterilised milk, is designed to show whether or not it has been sufficiently heated.

MILK

Designation	Number examined	Unsatisfactory by			Percentage reported unsatisfactory
		Methylene Blue test	Phosphatase test	Turbidity test	
T.T. Raw ..	427	12	..	..	2.8
Sterilised ..	100	..	..	..	..
Pasteurised :—					
Dairies ..	151	..	..	..	..
Schools ..	121	..	..	..	..
Day Nurseries	73	..	..	..	..
T.T. Pasteurised :—					
Dairies ..	214	..	1	..	0.5
Schools ..	32	..	..	..	..
Day Nurseries	8	..	..	..	..
Total ..	1,126	12	1	..	1.2

ICE-CREAM

Grade	Time taken to reduce Methylene Blue at 37°C	Number	Percentage	Quality
1.	4½ hours or more ..	57	80.3	Good
2.	2½ to 4 hours	5	7.0	Satisfactory
3.	½ to 2 hours	8	11.3	Unsatisfactory
4.	Nil	1	1.4	Very unsatisfactory
		71	100.0	

FERTILISERS AND FEEDING STUFFS

The 18 samples submitted comprised 17 fertilisers and one feeding stuff. Of these, 7 fertilisers were unsatisfactory in one respect or another, details being shown in the following table.

No. of sample	Description	Offence
2/B	Tomato Fertiliser	1.5 per cent. deficient in soluble phosphoric acid
3/B	Tomato Base Fertiliser ..	2.4 per cent. deficient in nitrogen, 6.0 per cent. excess potash
5/B	Rose Manure	0.7 per cent. deficient in soluble phosphoric acid
8/B	John Innes Base Fertiliser..	5.0 per cent. deficient in soluble phosphoric acid, 1.8 per cent. deficient in potash, contained 10.7 per cent. chalk
9/B	Chrysanthemum Fertiliser	1.2 per cent. deficient in nitrogen, 1.8 per cent. deficient in soluble phosphoric acid, 1.5 per cent. deficient in potash
10/B	John Innes Base Fertiliser..	6.4 per cent. deficient in soluble phosphoric acid, 5.4 per cent. deficient in potash, contained 9.5 per cent. chalk
14/B	Kingcentrate	No Statutory Statement

Under the Fertilisers and Feeding Stuffs Act the purchaser of any fertiliser or feeding stuff is entitled to have the article analysed by the Agricultural Analyst. The **John Innes Base** (No. 10/B) was such a sample taken at the request of a purchaser who doubted whether it had been correctly compounded. Analysis proved the sample to be markedly deficient in soluble phosphoric acid and potash. In addition it contained 9.5 per cent. of chalk, which should not have been present, and was sold without a Statutory Statement of composition. This is believed to be the first occasion in Leeds on which a member of the public has exercised the right to have a purchase analysed, and his request certainly proved to be justified.

A formal sample of **John Innes Base** (No. 8/B) obtained from the same firm who supplied the above complainant was equally unsatisfactory, whilst a sample of **Chrysanthemum Fertiliser** (No. 9/B), also from the same source, was deficient in all three of the active ingredients, nitrogen, soluble phosphoric acid and potash.

Legal proceedings against the firm concerned were only partially successful owing to a technical irregularity in that a copy of the Analyst's Certificate had not been served with the Summons.

MISCELLANEOUS SAMPLES SUBMITTED BY THE PUBLIC HEALTH DEPARTMENT

Eight waters taken from flooded cellars were analysed in order to determine their origin, attempts to elucidate this by other means having proved unsuccessful.

Three beck waters were analysed, the results showing gross sewage contamination in one case and moderate contamination in another, whilst the third was reasonably clean.

A sample of imported apples was submitted suspected of being contaminated with excessive quantities of lead and arsenic. The apples were found to contain 0.4 parts per million of arsenic and 0.6 parts per million of lead, which figures, whilst confirming that the apples had been sprayed with lead arsenate, were well below the recommended limits for arsenic and lead in foodstuffs (1.0 part per million and 2.0 parts per million respectively).

A loaf of brown bread, the subject of a complaint, was found to contain dirty dough.

A sample consisting of several slices of cooked ham each showing numerous areas of objectionable black discolouration, was examined, and the discolouration proved to be due to the presence of iron. Investigation showed that this had arisen as a result of the slices having been left for several days on an old baking tray before being cooked. The original tinned surface of the tray had worn away in many places and the iron thereby exposed had diffused into the ham.

ATMOSPHERIC POLLUTION

The measurement of atmospheric pollution in the city, using deposit gauges and lead peroxide candles, has continued at the same seven stations as in previous years, the results being shown in the table below. The table also includes results obtained from temporary deposit gauges set up to investigate the position at two sites where there have been complaints of particularly bad pollution.

The decrease in the overall averages suggests that there has been a slight improvement in the atmospheric pollution problem in Leeds during the year. How far this is correct, or how far it is due to climatic variations, only time can tell.

SITE	DEPOSIT GAUGES		LEAD PEROXIDE CANDLES	
	Average monthly deposit in tons per sq. mile		Average daily sulphur pollution as mgrms. of SO ₂ per 100 sq. cms. of fabric exposed	
	1957	1956	1957	1956
Headingley	10.4	11.8	2.4	2.6
Market Buildings	22.2	23.9	3.6	4.2
Hunslet	32.1	35.9	4.1	4.5
Temple Newsam	12.5	10.1	3.0	3.1
Armley Park	19.4	23.7	2.8	3.3
St. James's Hospital	16.1	16.2	3.0	3.8
Burley Park	22.4	26.6	2.8	3.4
Kirkstall (Temporary)	18.3	17.2	..	..
Sayner Lane „	45.3	..	..	..
Average of all permanent sites ..	19.3	21.2	3.1	3.6

The daily measurement of Smoke and Sulphur Dioxide in the atmosphere has also been continued using the apparatus installed in the laboratory, which is continuously sampling the air outside Market Buildings. Additional apparatus for such daily determinations was set up at the beginning of August at four sites within the proposed Central Smoke Control Area. These results are summarised in the following table.

STATION	SMOKE		SULPHUR DIOXIDE	
	Milligrams per cubic metre		Parts per million	
	Daily Average		Daily Average	
	1957	1956	1957	1956
Market Buildings	0.80	0.64	0.13	0.14
Blenheim* ..	0.68	..	0.11	..
Hyde Terrace* ..	0.74	..	0.13	..
Park Square* ..	0.71	..	0.13	..
Y.W.C.A.* ..	0.69	..	0.13	..

* Station operating since 1st August, 1957.

The remaining atmospheric pollution investigations consisted of 159 samples of dust taken in connection with surveys being made in the vicinity of two factories suspected of emitting an unreasonable amount of grit from their chimneys.

SAMPLES RECEIVED FROM OTHER CORPORATION DEPARTMENTS

The laboratory carries out chemical analyses not only for the Public Health Department but also for any other Corporation Department requiring its help. Twelve such Departments have availed themselves of this service during the year.

Care of Children Department.—A sample of milk taken from a delivery to Thorpe Arch Grange School was analysed and found to be of satisfactory composition.

Central Purchasing Department.—Eight samples of sausages taken from routine deliveries to the School Meals Service were analysed. Seven complied with specification, but one contained only 54 per cent. meat instead of the 65 per cent. required. The supplier agreed a mistake had been made with that day's delivery and adjusted his account accordingly.

Two samples of fish cakes were analysed for determination of fish content.

Of two samples of full-cream milk powder submitted, one proved to be satisfactory, but the other consisted of skimmed milk powder with 26 per cent. added vegetable fat.

A sample of toilet soap was analysed and found not to conform with the standards laid down in the appropriate British Standard Specification.

Civic Catering Department.—Three ice-creams were analysed in connection with the placing of a contract for this commodity.

City Architect's Department.—One sample of cement was analysed and found to comply with specification; a length of iron pipe was examined and an opinion given as to the cause of the corrosion which had taken place.

City Coroner.—53 specimens were analysed in connection with 13 deaths. In one case the results were negative thus excluding the possibility of poisoning as a cause of death. In each of the other 12 cases quantities of poisons exceeding the respective fatal doses were isolated. The actual poisons involved were aspirin (3 cases), amytal (2 cases), phenobarbitone, seconal, soneryl (2 cases), nicotine, strychnine, and potassium cyanide. Eleven of the cases were suicides and one (the death of a 3 month old baby) was due to the over-prescription of aspirin.

City Engineer's Department.—One sample of lime mortar was analysed and found to consist of 1 part lime to 6 parts sand, compared with the Building Bye-law requirement of 1 part lime to not more than 4 parts sand.

Education Department.—A tea pot and contents together with a sample of tea used were submitted in connection with a complaint of unpleasant tasting tea. The dry tea was perfectly normal, but after brewing in the tea-pot it contained 60 parts per million of synthetic detergent. The inside of the tea-pot was thoroughly washed until chemical tests showed it was entirely free from synthetic detergent and thereafter a satisfactory brew resulted.

Highways Department.—A sample of water was analysed.

Police Headquarters.—55 samples of alleged intoxicating liquor were analysed for determination of alcohol strength.

Transport Department.—The commencement of fuel oil analysis for the Transport Department has already been referred to in the introduction. The work was started in September and 26 samples were analysed before the end of the year. As would be expected, the methods and apparatus required for testing petroleum products differ considerably from those normally used in a laboratory specialising mainly in food and drug analysis, and I am very grateful to members of the staff of the Fuel Department at Leeds University for the technical advice which they gave in connection with the commencement of this work.

Waterworks Department.—The usual monthly analysis of the City water was carried out.

Weights and Measures Department.—Four samples of canned beer were analysed.

SAMPLES RECEIVED FROM OTHER SOURCES

Craven District Coroner.—During the year the Health Committee approved a request from the Department of Forensic Medicine at Leeds University that this laboratory should be permitted to assist them by carrying out analyses for H.M. Coroners outside the Leeds area, as has been done for many years for the Leeds City Coroner.

Seven specimens were analysed in connection with two deaths. In one case no poisons were present, in the other a fatal dose of the barbiturate tuinal was discovered.

Leeds Group "B" Hospital Management Committee.—Two samples of Canned Baked Beans, two of orange squash, and one of sausages were analysed in connection with the placing of contracts.

Leeds General Infirmary.—One urine was examined for determination of cadmium content.

Several tins of Condensed Milk, representative of a stock held by the Infirmary, were submitted for a report on their condition. The contents of the tins were fit for consumption, but the quality had deteriorated as a result of prolonged storage, and it was recommended that the stock be used without delay.

FOOD AND DRUGS ACT, 1955.
SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1957.

Samples.	No. examined.			No. unsatisfactory			Per-centage unsatisfactory
	Formal	Informal	Total	Formal	Informal	Total	
FOODS (3,212)							
Almonds, ground ..	4	3	7	..	..	..	..
Beef and vegetables (Canned)	1	..	1	1	..	1	100
Beef, sliced braised ..	1	..	1	..	..	..	..
Beef, corned	1	..	1	..	..	..	..
Beef loaf, (canned) ..	2	..	2	..	..	..	..
Beer	2	..	2	..	..	..	..
Biscuits	..	1	1	..	..	..	..
Brawn (one canned) ..	3	..	3	..	..	..	..
Bread	..	1	1	..	..	..	..
Butter	4	..	4	..	..	..	..
Cake and pudding mixtures	8	1	9	1	..	1	11.1
Cheese	1	..	1	..	..	..	..
Cheese and onion spread ..	1	..	1	..	..	..	..
Chicken cutlets	1	..	1	1	..	1	100
Chicken fingers	1	..	1	1	..	1	100
Chicken, sliced supreme	1	..	1	..	..	..	..
Chicken preparations, (canned and bottled) ..	8	2	10	4	1	5	50
Chocolate	1	..	1	..	..	..	..
Chocolate cake covering ..	2	..	2	..	..	..	..
Condiment, non-brewed	1	..	1	..	..	..	..
Coconut, desiccated ..	2	..	2	..	..	..	..
Cornflour	2	..	2	..	..	..	..
Crab meat (canned) ..	1	..	1	..	..	..	..
Cream, imitation ..	1	..	1	..	..	..	..
Cream, sterilised ..	1	..	1	..	..	..	..
Custard powder	1	..	1	..	..	..	..
Dripping, beef	1	..	1	..	..	..	..
Fish cakes	4	..	4	1	..	1	25
Fish canned	2	..	2	..	..	..	..
Fish paste	1	2	3	..	..	..	..
Flour, plain	4	1	5	1	..	1	20
Flour, self-raising ..	2	..	2	..	..	..	..
Frizets	1	..	1	..	..	..	..
Fruit, canned	2	..	2	..	..	..	..
Fruit, dried	2	..	2	..	..	..	..
Carried forward ..	70	11	81	10	1	11	..

FOOD AND DRUGS ACT, 1955.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1957—continued.

Samples.	No. examined.			No. unsatisfactory			Percentage unsatisfactory
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	70	11	81	10	1	11	..
Fruit juice	3	..	3	..	..	..	..
Fruit pectin	1	..	1	..	..	..	..
Gherkins, pickled ..	1	..	1	..	..	..	..
Herbs	..	1	1	..	..	..	..
Horseradish Relish ..	1	..	1	..	..	..	..
Ice-cream	4	..	4	..	..	..	..
Iced Lollie	..	1	1	..	..	..	..
Jelly crystals	1	..	1	..	..	..	..
Lard and cooking fat ..	7	..	7	..	..	..	..
Lemon pie filling ..	1	..	1	..	..	..	..
Liver croquettes ..	1	..	1	..	..	..	..
Luncheon meat (canned)	10	1	11	5	..	5	45
Maggi seasoning	1	..	1	..	..	..	..
Margarine	5	..	5	..	..	..	..
Mayonnaise	1	..	1	..	..	..	..
Marzipan	2	..	2	..	..	..	..
Meal of meat and vegetables	..	1	1	..	..	..	..
Meat loaf (canned) ..	1	..	1	..	..	..	..
Meat paste	6	..	6	..	..	..	..
Meat pudding (canned) ..	1	..	1	..	..	..	..
Milk	2,909	2	2,911	85	..	85	2
Milk, Jersey	11	..	11	..	..	..	..
Milk, dried	..	2	2	..	..	..	..
Mincemeat	1	..	1	..	..	..	..
Minced steak (canned) ..	..	1	1	..	..	..	..
Mushroom ketchup ..	1	..	1	..	..	..	..
Nescafé	..	1	1	..	..	..	..
Nut mix, ground	..	2	2	..	..	..	..
Olive oil	1	..	1	..	..	..	..
Pastry mix	1	..	1	..	..	..	..
Peas (canned)	1	..	1	..	..	..	..
Pepper	3	..	3	..	..	..	..
Pickles	1	..	1	..	..	..	..
Polony	1	..	1	..	..	..	..
Pork (canned)	2	..	2	..	..	..	..
Pork and stuffing (canned)	3	..	3	..	..	..	..
Puff pastry	1	..	1	..	..	..	..
Carried forward ..	3,053	23	3,076	100	1	101	..

FOOD AND DRUGS ACT, 1955.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1957—continued

Samples	No. examined			No. unsatisfactory			Per centage unsatisfactory
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	3,053	23	3,076	100	1	101	..
Preserves	1	1	2	..	..	..	..
Ravioli (canned) ..	1	..	1	..	..	..	..
Rennet, Essence of ..	1	..	1	..	..	..	..
Rice, creamed	1	..	1	..	..	..	..
Rice, ground	1	..	1	..	..	..	..
Sage and onion stuffing	1	..	1	..	..	..	..
Salmon and potato salad	1	..	1	..	..	..	..
Salmon, smoked ..	1	..	1	..	..	..	..
Salmon, cream of (canned)	1	..	1	..	..	..	..
Salmon, dressed (canned)	2	..	2	2	..	2	100
Salmon paste	2	..	2	..	..	..	..
Sausage	43	..	43	3	..	3	7.0
Sardines (canned) ..	1	..	1	..	..	..	..
Semolina	1	..	1	..	..	..	..
Sherry trifle (canned) ..	1	..	1	..	..	..	..
Soft drinks	22	1	23	..	1	1	4.3
Soup powder	2	..	2	..	..	..	..
Spice, mixed	1	..	1	..	..	..	..
Spirits and liqueurs ..	4	1	5	..	1	1	20.0
Steak with gravy (canned)	4	3	7	3	..	3	42.9
Steak, stewed (canned) ..	2	4	6	..	..	..	..
Steak, braised (canned)	2	1	3	2	1	3	100
Steak and onion roll (canned)	..	1	1	..	..	..	..
Sugar, icing	1	..	1	..	..	..	..
Sugar, coloured	1	..	1	..	..	..	..
Sweets	3	1	4	..	..	..	..
Tapioca	1	..	1	..	..	..	..
Tea	6	..	6	..	..	..	..
Tea bags	1	..	1	..	..	..	..
Tomato ketchup	..	2	2	..	1	1	50
Tongue (canned) ..	1	..	1	..	..	..	..
Vienna steak (canned) ..	1	..	1	..	..	..	..
Vinegar	5	1	6	..	1	1	16.7
Weaning Food	1	..	1	..	..	..	..
Wine	3	..	3	..	..	..	..
Carried forward ..	3,173	39	3,212	110	6	116	..

FOOD AND DRUGS ACT, 1955.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1957—continued

Samples	No. examined			No. unsatisfactory			Per centag unsatisfactory
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	3,173	39	3,212	110	6	116	..
DRUGS (69)							
Almond Oil	1	..	1	..	..	..	..
Baxen tablets	1	..	1	..	..	..	..
Bronchial mixture ..	1	..	1	..	..	..	..
Camphorated Oil ..	1	..	1	..	..	..	..
Cascara Sagrada tablets..	1	..	1	..	..	..	..
Castor Oil	1	..	1	..	..	..	..
Catarrh pastilles ..	1	..	1	..	..	..	..
Children's cooling powders	1	..	1	..	..	..	..
Codis tablets	1	..	1	..	..	..	..
Cojene tablets	1	..	1	..	..	..	..
Cough mixture	2	..	2	..	..	..	..
Cough linctus	1	..	1	..	..	..	..
Cough syrup	1	..	1	..	..	..	..
Cough pastilles	1	..	1	..	..	..	..
Cold and influenza tablets	1	..	1	..	..	..	..
Compound juniper pills..	1	..	1	..	..	..	..
Dyspepsia tablets ..	1	..	1	..	..	..	..
Energoids	1	..	1	..	..	..	..
Friars Balsam	1	..	1	..	..	..	..
Glucose tablets	2	..	2	..	..	..	..
Glycerin	1	..	1	..	..	..	..
Glycerin, lemon and honey	1	..	1	..	..	..	..
Glycerin, lemon and ipecacuanha	1	..	1	..	..	..	..
Herbal slimming tablets	1	..	1	..	..	..	..
Hemotabs	1	..	1	..	..	..	..
Halibut Oil	2	..	2	1	..	1	50
Halibut Liver Oil Capsules	2	5	7	..	..	..	..
Haliborange tablets ..	1	..	1	..	..	..	..
Haliborange	1	..	1	..	..	..	..
Iodised Throat Lozenges	2	..	2	2	..	2	100
Iron and Yeast tonic tablets	1	..	1	..	..	..	..
Indian Brandee	1	1	2	1	1	2	100
Carried forward ..	3,210	45	3,255	114	7	121	..

FOOD AND DRUGS ACT, 1955.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1957—continued

Samples	No. examined.			No. unsatisfactory			Per centage unsatis- factory
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	3,210	45	3,255	114	7	121	..
Kapana tablets ..	1	..	1	..	..	..	..
Liquid paraffin ..	2	..	2	..	..	..	..
Malt and Codliver Oil ..	1	..	1	..	..	..	..
Metatone ..	1	..	1	..	..	..	..
Minadex Vitamin A and D and Iron ..	1	..	1	..	..	..	..
Perry's Infants Powders	3	..	3	..	..	..	..
Persomnia tablets ..	1	..	1	..	..	..	..
Protein food ..	1	..	1	1	..	1	100
Rose hip syrup ..	2	..	2	..	..	..	..
Sal Volatile ..	1	..	1	..	..	..	..
Slimming tablets ..	1	..	1	..	..	..	..
Supavite capsules ..	1	..	1	..	..	..	..
Syrup of hypophos- phites ..	1	..	1	..	..	..	..
Tonic and nerve mixture	1	..	1	..	..	..	..
Tonic wine ..	2	..	2	..	..	..	..
Travel sickness tablets ..	1	..	1	..	..	..	..
Virol ..	1	..	1	..	..	..	..
Vitamin tablets ..	1	..	1	..	..	..	..
Vitamin and mineral cap- sules ..	1	..	1	..	..	..	..
Vital restorers for men ..	1	..	1	..	..	..	..
Wheat germ oil capsules	1	..	1	..	..	..	..
TOTAL FOOD AND DRUGS ..	3,236	45	3,281	115	7	122	3.7

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