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CITY OF BIRMINGHAM

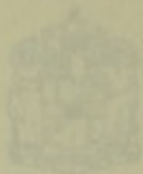
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REPORT OF THE  
MEDICAL OFFICER  
OF HEALTH

FOR THE YEAR

1956





CITY OF BIRMINGHAM

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REPORT OF THE  
MEDICAL OFFICER  
OF HEALTH

FOR THE YEAR

1926

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# MEMBERS OF THE HEALTH COMMITTEE

## Municipal Year, 1956-57

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- Chairman* ALDERMAN G. CORBYN BARROW  
(Chairman of Staff Sub-Committee and Staff Discipline Sub-Committee).
- THE LORD MAYOR (ALDERMAN E. W. APPS, J.P.).
- ALDERMAN W. T. BOWEN, J.P.
- ALDERMAN MRS. N. HYDE, O.B.E., J.P.  
(Chairman of Health Education Sub-Committee).
- ALDERMAN MRS. A. LONGDEN, J.P.  
(Chairman of Finance and General Purposes Sub-Committee).
- COUNCILLOR J. M. BAILEY.
- COUNCILLOR E. L. BENNETT.
- COUNCILLOR MRS. A. BILLINGTON, J.P.
- COUNCILLOR MRS. M. A. BROWN.  
(Chairman of Maternity and Child Welfare Sub-Committee).
- COUNCILLOR MRS. J. COLE.
- COUNCILLOR MRS. M. A. M. COOKE.
- COUNCILLOR F. F. GRIFFIN.
- COUNCILLOR F. G WILLIAMS, J.P.
- COUNCILLOR MRS. F. E. HAMMOND.
- COUNCILLOR W. A. N. JONES.
- COUNCILLOR W. J. LYGO.
- COUNCILLOR MRS. H. L. RADFORD.  
(Chairman of Mental Health Sub-Committee).
- COUNCILLOR W. F. SMITH.  
(Chairman of Tuberculosis (Domiciliary and After-care) Sub-Committee).
- COUNCILLOR A. T. WALKER.
- COUNCILLOR J. T. WEBSTER.
- COUNCILLOR N. WHITEHOUSE.
- COUNCILLOR H. V. WOLLASTON.
- COUNCILLOR MRS. A. F. WOOD, C.B.E., J.P.

## SUB-COMMITTEES OF THE HEALTH COMMITTEE

### *Finance and General Purposes Sub-Committee*

*Chairman*—ALDERMAN MRS. A. LONGDEN.

ALDERMEN G. CORBYN BARROW, W. T. BOWEN, MRS. N. HYDE.

COUNCILLORS J. M. BAILEY, E. L. BENNETT, MRS. M. A. M. COOKE, F. F. GRIFFIN, MRS. F. E. HAMMOND, MRS. H. L. RADFORD, W. F. SMITH, A. T. WALKER, J. T. WEBSTER, H. V. WOLLASTON, MRS. A. F. WOOD.

#### RESPONSIBILITIES :

Public Health Acts ; Prevention of Damage by Pests Act ; Milk and Dairies legislation ; Food and Drugs Acts ; Housing Acts (part) ; National Health Service Act (Section 21, Health Centres; Section 26, Vaccination and Immunisation ; Section 27, Ambulance Service; Section 28, Prevention of Illness, Care and After-Care); Rag Flock and other Filling Materials Act ; Heating Appliances (Fireguards) Act and other miscellaneous enactments not within the scope of personal services.

### *Maternity and Child Welfare Sub-Committee*

*Chairman*—COUNCILLOR MRS. M. A. BROWN.

ALDERMEN G. CORBYN BARROW, MRS. N. HYDE.

COUNCILLORS J. M. BAILEY, MRS. A. BILLINGTON, MRS. J. COLE, MRS. M. A. M. COOKE, F. F. GRIFFIN, F. GWILLIAMS, MRS. F. E. HAMMOND, W. A. N. JONES, W. J. LYGO, MRS. H. L. RADFORD, W. F. SMITH, A. T. WALKER, N. WHITEHOUSE.

#### RESPONSIBILITIES :

The Public Health Act in so far as it relates to the inspection of Nursing Homes ; The National Health Service Act [Section 22, Care of Mothers and Young Children , Section 23, Midwifery ; Section 24, Health Visiting ; Section 25, Home Nursing ; Section 28, Prevention of Illness, Care and After-Care (Care of the Aged) ; Section 29; Domestic Help] and all matters relating to Maternity and Child Welfare contained in other enactments.

### *Mental Health Sub-Committee*

*Chairman*—COUNCILLOR MRS. H. L. RADFORD.

ALDERMEN G. CORBYN BARROW, W. T. BOWEN.

COUNCILLORS E. L. BENNETT, MRS. A. BILLINGTON, MRS. J. COLE, F. F. GRIFFIN, MRS. F. E. HAMMOND, W. A. N. JONES, W. J. LYGO, W. F. SMITH, H. V. WOLLASTON, MRS. A. F. WOOD.

#### RESPONSIBILITIES :

The National Health Service Act, Section 28 (Prevention of Illness, Care and After-Care related to Mental Health) and Section 51.

The above Committees meet monthly.

### *\*Health Education Sub-Committee*

*Chairman*—ALDERMAN MRS. N. HYDE.

ALDERMAN G. CORBYN BARROW.

COUNCILLORS J. M. BAILEY, E. L. BENNETT, MRS. M. A. BROWN, F. GWILLIAMS, MRS. H. L. RADFORD, W. F. SMITH, N. WHITEHOUSE, MRS. A. F. WOOD.

RESPONSIBILITIES :

The National Health Service Act, Section 28 (Prevention of Illness, Care and After-Care, as related to Health Education).

\**Tuberculosis (Domiciliary and After-Care) Sub-Committee*

Chairman—COUNCILLOR W. F. SMITH.

ALDERMEN G. CORBYN BARROW, MRS. A. LONGDEN.

COUNCILLORS MRS. A. BILLINGTON, MRS. M. A. M. COOKE, F. F. GRIFFIN, MRS. H. L. RADFORD, A. T. WALKER, J. T. WEBSTER, N. WHITEHOUSE, MRS. A. F. WOOD.

RESPONSIBILITIES :

The Public Health Act so far as it relates to Tuberculosis control ; The National Health Service Act, Section 28 (Prevention of Illness, Care and After-Care, as related to Tuberculosis).

\**Staff Sub-Committee*

Chairman—ALDERMAN G. CORBYN BARROW.

ALDERMAN MRS. A. LONGDEN.

COUNCILLORS MRS. M. A. BROWN, W. F. SMITH.

\**Staff Discipline Sub-Committee*

Chairman—ALDERMAN G. CORBYN BARROW.

ALDERMEN MRS. N. HYDE, MRS. A. LONGDEN.

COUNCILLORS MRS. M. A. BROWN, MRS. H. L. RADFORD, W. F. SMITH.

\*These Committees meet at the call of the Chairmen.

OTHER COMMITTEES OF THE CITY COUNCIL CONCERNED WITH MATTERS OF PUBLIC HEALTH AND THE SOCIAL SERVICES

Baths Committee (provision of bathing establishments).

Children's Committee (care of deprived children and adoption).

Finance Committee and also the General Purposes Committee (financial provisions of the various enactments).

Fire Brigade Committee (Ambulance Service on an agency basis).

House Building Committee (erection of houses).

Housing Management Committee (slum clearance and management of municipal houses).

Markets and Fairs Committee (regulation, control and management of markets and fairs and also the supervision of food factories and food shops other than premises where food is prepared for consumption on the premises).

Public Works Committee (*inter alia* in charge of all works in connection with public drains and sewers, paving surfacing and maintenance of streets and roads, the lighting and cleansing of highways, etc.).

Salvage Committee (refuse disposal).

Water Committee (provision of the City's water supply).

Welfare Committee (provision of services under the National Assistance Acts, 1948 and 1951).

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# STAFF OF THE PUBLIC HEALTH DEPARTMENT AS AT 31st DECEMBER, 1956

## *Medical Officer of Health :*

MATTHEW BURN, M.C., M.M., F.R.C.P. (Edin.), D.P.H., D.T.M. & H.

## *Deputy Medical Officer of Health :*

E. L. M. MILLAR, M.Sc., M.D., Ch.B., D.P.H.

## *Secretary-Accountant :*

C. C. BATEMAN, A.C.A., F.C.C.S.

## *Administrative Medical Officer of Health for Maternity and Child Welfare :*

JEAN M. MACKINTOSH, M.D., Ch.B., D.P.H., D.P.A.

## *Administrative Medical Officer of Health for General Purposes :*

W. R. MARTINE, O.B.E., T.D., M.D., Ch.B., D.P.H.

## *Administrative Medical Officer of Health for Mental Health :*

W. NICOL, M.B., Ch.B., D.P.H.

## *Assistant Administrative Medical Officer of Health for Diphtheria Immunisation :*

VERA FELLOWES, M.B., Ch.B.

## *Assistant Administrative Medical Officer of Health for General Purposes :*

J. F. McCOURT, M.B., B.Ch., B.A.O., L.M., D.P.H.

## *Medical Officer for B.C.G. Vaccination :*

W. L. GORDON, B.M., B.Ch.

## *Medical Officer for Staff Welfare :*

J. J. LANDON, M.A., M.B., B.Chir. (Camb.), M.R.C.S. (Eng.), L.R.C.P. (Lond.)

## *Chief Public Health Inspector :*

E. N. WAKELIN, F.R.S.H., M.A.P.H.I.

## *Chief Housing Inspector :*

D. J. E. LAMB, M.C., T.D., F.A.P.H.I.

## *Chief Smoke Inspector :*

G. W. FARQUHARSON, M.A.P.H.I.

## *City Analyst :*

H. H. BAGNALL, B.Sc., F.R.I.C.

## SECRETARIAL AND ACCOUNTANCY

### *Secretary-Accountant :*

C. C. BATEMAN, A.C.A., F.C.C.S.

### *Assistant-Secretary :*

E. S. EYRE.

*Administrative Assistant :*

W. G. DEELEY.

*Deputy Accountant :*

L. H. FERRER.

*Assistant Accountant :*

L. C. PRYNN, A.C.A.

*Staff Officer :*

L. G. TREVITT.

*Statistics Clerk :*

L. RAWLINGS, F.C.I.S.

*Steward :*

L. H. LEA.

*Steward for Home Nursing :*

S. L. GILLMAN.

*Assessment Officer :*

H. B. COLEMAN.

*General :*

Clerical Staff ..... 99

*Miscellaneous Staff :*

Bacchus Road Garage—

Chauffeurs, Drivers, and Mechanics ..... 11

Bacchus Road Laundry—

Laundry Assistants ..... 38

Engineering Staff ..... 3

Central Stores—

Storekeeper ..... 1

Stores Assistants ..... 6

Caretakers ..... 3

Cleaners (full and part-time) ..... 26

Porters ..... 2

Night Watchmen ..... 2

#### MATERNITY AND CHILD WELFARE

*Administrative Medical Officer of Health for Maternity and Child Welfare :*

JEAN M. MACKINTOSH, M.D., Ch.B., D.P.H., D.P.A.

*Deputy to Administrative Medical Officer of Health for Maternity and Child Welfare :*

B. HATHERLEY, M.B., Ch.B., M.M.S.A.

*Medical Superintendent for Nurseries and Deprived Children :*

M. C. O'BRIEN, M.B., Ch.B., D.P.H., M.M.S.A.

*Assistant Administrative Medical Officers for Maternity and Child Welfare :*

E. M. RING, M.D., B.Ch., B.A.O., D.P.H. (*Resigned 31/8/56*).

D. A. CRAIGMILE, M.D., B.S., D.Obst.R.C.O.G., C.P.H.

E. M. SEFTON, M.R.C.S., L.R.C.P., D.C.H., L.M., D.P.H. (*Appointed 1/1/57*).

*Assistant Medical Officers for Maternity and Child Welfare :*

E. BADENOCH, M.D., Ch.B.

B. G. BAILEY, M.B., Ch.B., D.Obst.R.C.O.G.

M. C. MACKIE, M.B.E., M.B., Ch.B., D.Obst.R.C.O.G.

M. McINTOSH, M.B., B.Ch., B.A.O.

M. I. MCKINLAY, M.B., Ch.B., D.P.H.

J. E. PRESTON, M.B., Ch.B.

M. AULD, M.B., Ch.B., D.P.H.

M. F. THORNTON, M.B., B.Ch., B.A.O., D.P.H.

B. HUMPHRIES, M.B., Ch.B., D.Obst. R.C.O.G.

E. F. P. EMBLEM, M.R.C.S., L.R.C.P., M.B., B.S.

M. D. E. ALDOUS, M.B., Ch.B., M.R.C.S., L.R.C.P., D.Obst.R.C.O.G.

C. PRESTOE, M.B., Ch.B., M.R.C.S., L.R.C.P.

U. R. WICKENS, M.B., Ch.B., D.Obst. R.C.O.G., L.M.

M. M. COUGHLAN-JONES, M.B., B.Ch., B.A.O., L.M., D.Obst.R.C.O.G.

M. G. MACLAREN, M.B., Ch.B., D.P.H.

D. F. MAHON, M.B., B.Ch., B.A.O., D.P.H., B.Sc. (Public Health), L.M.

Part-time Assistant Medical Officers: ..... 29

*Senior Dental Officer :*

MR. F. J. HASTILOW, L.D.S.

*Assistant Dental Officers :*

MR. D. W. PRICE, L.D.S. (Part-time).

MR. C. E. TEALL, L.D.S. (Part-time).

MR. J. C. CROSSLEY, L.D.S. (Part-time).

MR. S. E. WIGLEY, L.D.S. (Part-time).

MR. M. FIELD, L.D.S. (Part-time).

MRS. M. WADE, L.D.S. (Part-time).

MR. M. R. L. THORNTON, B.D.S. (Part-time).

MRS. G. E. M. TEALL, L.D.S. (Part time).

MR. A. N. GROSART, L.D.S., R.C.S. (Part time).

MR. W. N. NOBLE, L.D.S., R.C.S. (Part-time).

MR. G. K. L. DRAYCOTT, L.D.S., B.D.S., R.C.S. (Part-time).

MISS M. E. CORBETT, L.D.S., B.D.S., R.C.S. (Part-time).

MR. D. A. STOKES, L.D.S., B.D.S., R.C.S. (Part-time).

MR. J. KITCHEN, L.D.S., B.D.S. (Part-time).

Dental Hygienists ..... 1

Dental Nurses ..... 2

„ „ (Part-time) ..... 6

*Health Visitors :*

*Superintendent of Health Visitors :*

MISS I. H. SINNETT, S.R.N., S.C.M., H.V.Cert., D.N. (Lond.).

*Deputy Superintendent of Health Visitors :*

MISS M. G. MILNER, S.R.N., S.C.M., H.V.Cert.

*Health Visitor Tutor :*

MISS L. M. WOOD, S.R.N., S.C.M., H.V.Cert., H.V.Tutor's Cert.

Assistant Health Visitor Tutor .....	1
Superintendents of Infant Welfare Centres .....	47
Senior Health Visitors .....	4
Health Visitors .....	51
Health Visitors (Part-time) .....	10
Pupil Health Visitors .....	20
Clinic Nurse .....	1
Clinic Nurses (Part-time) .....	17
Physiotherapists (Part-time) .....	2
Chiropodist (Part-time) .....	1
Nurses—Care of the Aged (Part-time) .....	2

*Midwives :*

*Supervisors of Midwives :*

MRS. W. A. MASTERS, S.R.N., S.C.M., S.R.F.N.

MISS B. COOPER, S.R.N., S.C.M., H.V.Cert..

MISS M. E. COX, S.R.N., S.C.M., M.T.D.

Municipal Midwives .....	96
Maternity Nurses .....	14

*Health Education :*

*Organisers :*

G. G. TAYLOR.

MRS. M. POTTER, S.R.N., S.C.M., H.V.Cert.

Assistant Lecturers for Health Education .....	4
Artists .....	2

*Day Nurseries :*

*Supervisor of Day Nurseries :*

MISS D. E. MALLEY, S.R.N., S.C.M., H.V.Cert.

Assistant Supervisor of Day Nurseries .....	1
---------------------------------------------	---

*Day and 24-hour Nurseries' Staff :*

Matrons .....	24
Deputy Matrons .....	20
Superintendent of Wardens .....	1
Wardens .....	22
Staff Nursery Nurses .....	97
State Enrolled Assistant Nurses .....	1
Nursery Assistants .....	41
Student Nursery Nurses .....	106

*Home Nursing Service :*

*Chief Nursing Superintendent :*

MISS I. H. MORRIS, S.R.N., S.C.M., H.V.Cert., Queen's Nurse

Superintendents of District Nurses' Homes .....	11
Nursing Staff .....	143

Nursing Staff, (Part-time) .....	26
Student District Nurses .....	9

*Domestic Help :*

*Organiser :*

MISS J. M. PEARSON, S.R.N., S.C.M., H.V.Cert.

Assistant Organiser .....	1
District Organisers—Domestic Help Service .....	8
Domestic Helps .....	80
Domestic Helps (Part-time) .....	737

*John Foster Vince Memorial Home (Mother and Baby Home) :*

*Matron :*

MISS G. LOCKHART-SMITH, S.R.N., S.C.M.

Other Nursing Staff .....	3
Domestic Staff .....	3

<i>Clerical Staff</i> .....	25
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*Miscellaneous Staff :*

Clinic and Distribution Clerks (Welfare Foods), (Part-time) .....	82
Distribution Clerks (Whole-time) .....	9
Care of the Aged—Night Watchers .....	24
Home Nursing Domestic Staff (Full and part-time) .....	35
Home Nursing Attendants .....	15
Caretakers .....	51
Curator .....	1
Cleaners (Full and part-time) .....	112
Cooks, Cook-housekeepers and Assistants .....	36
Gardeners (Full and part-time) .....	9
Porters .....	1
Seamstresses .....	3
Storekeepers .....	1
Van drivers .....	3

**DIPHTHERIA IMMUNISATION**

*Assistant Administrative Medical Officer of Health for Diphtheria Immunisation :*

VERA FELLOWES, M.B., Ch.B.

Nursing Staff .....	1
Nursing Staff (Part-time) .....	5
Clerical Staff .....	8

**MENTAL HEALTH**

*Administrative Medical Officer of Health for Mental Health :*

W. NICOL, M.B., Ch.B., D.P.H.

**MENTAL DEFICIENCY.**

*Chief Inspector :*

T. H. MIDDLETON.

*Senior Inspector and Petitioning Officer:*

F. R. C. BATEMAN.

Inspector (Male) .....	1
Inspectors (Female) .....	2
Clerical Staff .....	6

PSYCHIATRIC SOCIAL SERVICE.

*Senior Psychiatric Social Worker :*

T. G. RANKIN, B.A. Hons. (Oxon.), B.A. Hons. (Lond.), (Psychology)  
Mental Health Cert.

Psychiatric Social Worker (Parent Guidance Clinic) .....	1
Social Workers .....	7
Clerical Staff .....	3

LUNACY AND MENTAL TREATMENT.

*Chief Authorised Officer :*

J. W. GREEN.

*Deputy Chief Authorised Officer :*

W. CRIPPS

Duly Authorised Officers .....	5
Clerical Staff .....	2

TUBERCULOSIS.

(*Prevention and After Care*).

*Medical Director (Part-time) :*

V. H. SPRINGETT, M.D., M.R.C.P.

*Medical Officers (Part-time) :*

H. J. T. ROSS, M.R.C.P. (Edin.).

J. MORRISON-SMITH, M.B., Ch.B., M.R.C.P. (Edin.), D.P.H., D.T.M. & H.

J. SUMNER, M.C., M.D. (Durham).

H. E. THOMAS, M.D., M.R.C.P.

G. R. W. N. LUNTZ, M.R.C.P. (Lond.)

M. HEMMING, M.B., B.Chir., M.R.C.S., L.R.C.P. (Lond.).

D. C. WADDY, M.B., Ch.B.

Tuberculosis Visitors .....	16
Domiciliary Diversional Therapists .....	2
Clerical Staff .....	9

*B.C.G. Clinic*

W. L. GORDON, B.M., B.Ch.

Nursing Staff .....	1
Clerical Staff .....	6

*Residential Nursery for Child Contacts of Tuberculosis—Skills*

*Matron :*

MISS K. W. JAMES, S.R.N.

Other Nursing Staff .....	20
Domestic Staff (Full and Part-time) .....	17
Gardener-Handyman .....	1

## STAFF WELFARE SURGERIES.

*Medical Officer for Staff Welfare :*

J. J. LONDON, M.A., M.B., B.Chir. (Camb.), M.R.C.S. (Eng.), L.R.C.P.(Lond.).

Nursing Staff .....	1
"    " (Part-time) .....	2

### PUBLIC HEALTH INSPECTORS

*Chief Public Health Inspector :*

E. N. WAKELIN, F.R.S.H., M.A.P.H.I.

*Deputy Chief Public Health Inspector :*

F. C. SCHONBECK, M.R.S.H., M.A.P.H.I.

Divisional Public Health Inspectors .....	2
Enforcement Officer .....	1
District Public Health Inspectors .....	10
Assistant District Public Health Inspectors .....	12
Public Health Inspectors .....	19
Pupil Public Health Inspectors .....	37
Milk and Dairies Inspectors .....	5
Milk Samplers .....	2
Rodent Officers .....	3
Water and Canal Boats Inspector .....	1
Shops Act Inspectors .....	4
Food and Drugs Sampling Officers .....	5
Clerical Staff .....	20
<i>Miscellaneous Staff :</i>	
Disinfecting Staff .....	8
Rodent Control Staff .....	31
Bath Attendants .....	2
"    " (Part-time) .....	2
Summer Lane Mortuary—Caretakers .....	1

Inspection of Cowsheds and Dairies, and of Meat and other Foods is carried out by the Veterinary and Food Inspection Department on behalf of the Health Committee.

*Chief Veterinary Officer :*

C. G. ALLEN, M.R.C.V.S., D.V.S.M., F.R.S.H.

### HOUSING INSPECTORS

*Chief Housing Inspector :*

D. J. E. LAMB, M.C., T.D., F.A.P.H.I.

*Deputy Chief Housing Inspector :*

L. V. AMBLER, M.A.P.H.I.

Divisional Housing Inspectors .....	2
District Housing Inspectors .....	5
Assistant District Housing Inspectors .....	6
Housing Inspectors .....	1
Housing Assistants .....	1
Clerical Staff .....	19



## SMOKE INSPECTORS

*Chief Smoke Inspector :*

G. W. FARQUHARSON, M.A.P.H.I.

*Deputy Chief Smoke Inspector :*

S. C. BEAUMONT, M.A.P.H.I.

Smoke Inspectors.....	.....	7
Clerical Staff .....	.....	2

## ANALYTICAL LABORATORY.

*City Analyst :*

H. H. BAGNALL, B.Sc., F.R.I.C.

*Deputy City Analyst :*

A. H. COOMBES, B.Sc., F.R.I.C.

Research Chemist .....	.....	1
Assistant Analysts .....	.....	5
Laboratory Assistants .....	.....	5
Clerical Staff .....	.....	2

## WORKS DEPARTMENT.

*Manager :*

C. K. SMITH.

Assistant Manager .....	.....	1
Administrative Assistant .....	.....	1
Clerk of Works .....	.....	1
General Foreman .....	.....	1
Clerical Staff .....	.....	7
Tradesmen .....	.....	42

PUBLIC HEALTH DEPARTMENT,  
THE COUNCIL HOUSE,  
BIRMINGHAM, 3.

*September, 1957*

*To the Chairman and Members  
Health Committee.*

It is with pleasure that I present to you my report on the health of the City for the year 1956.

VITAL STATISTICS

The home population estimated by the Registrar General as at 30th June was 1,110,800. There has thus been a gradual decline since 1952, when the estimated population was 1,119,000, in spite of an excess of more than 30,000 live births over deaths since that year. From experience gained by local authority staffs it is apparent that there is considerable movement of families between this and areas many miles away and, as mentioned later in the report, there is an extensive " spilling over the boundary " of people.

The birth rate was 16·6 per thousand population, a slight increase over the average for the previous five years (1951—55) of 16·4 per thousand population. The stillbirth rate was 23·0 per thousand total live and still births and the infant mortality rate in Birmingham was 24·6 per thousand live births.

The maternal mortality rate was 0·48 per thousand live and still births. In 1955 the rate was 0·27, in 1954 and 1953 it was 0·59 and 0·58 respectively.

The crude death rate for 1956 per thousand population was 10·9 ; the average for the previous five years (1951—55) was 10·8. The total number of deaths in 1956 was 12,082. On page 28 a table shows the principal killing diseases during the past seven years and it is interesting to observe that during 1956, 85 per cent of all the deaths were from heart disease, cancer, cerebral haemorrhage, pneumonia-bronchitis-influenza, arterio-sclerosis and circulatory disease, senility, violence and suicide.

Cancer produced, during the year under review, a new record in deaths from this disease—2,315. The death rate was 2·08 for 1956 as against 1·97 being the average for the previous five years (1951—55). Attention is, however, directed to a statement later made that the steady increase is largely explained by the increasing number of persons in the

older age groups in which cancer most usually occurs. As to the increasing number of aged persons in the City, a comparison of the years 1931 and 1951, census years, is made on page 80. The observation made by Dr. Millar in "Vital Statistics" is worthy of note that if cancer of the lung and bronchus is due to breathing polluted air or to smoking, it is interesting to note that there has been no significant increase in deaths from cancer of the upper respiratory tract.

Leukaemia caused 55 deaths, the highest yet recorded. This disease does not appear to affect greatly the under twenty-fives but becomes more apparent as age advances.

The death rate from tuberculosis, all forms, per thousand population is again reduced to 0.15. For the previous five years the rates were—1955—0.20, 1954—0.21, 1953—0.25, 1952—0.27, 1951—0.38. The number of deaths has dropped from 418 in 1951 to 161 in 1956. Respiratory tuberculosis accounted for 150 deaths, non-respiratory tuberculosis for 11 deaths during 1956. There has been a decline in the number of deaths now for nine consecutive years. The greatest decline in mortality appears in the younger age groups. There were two deaths in children under fourteen years of age and six in the age group of 15—24 years.

#### GENERAL EPIDEMIOLOGY

In January, 1956, the Ministry of Health made an announcement with regard to poliomyelitis vaccination and dealt with, at that time, the vaccination of children in the age group 1947—54. In that age group there were some 145,000 Birmingham children of which number, parents of 43,527 children requested vaccination. Only two batches of vaccine had been made available to the City during May and June but by the end of June when vaccination was suspended for the Summer months, 3,286 children had received a full course of two injections and 1,439 had received only one injection. A further batch of vaccine was received in December and injections were resumed at that time, since when the scheme of immunisation has gradually been gathering momentum.

Diphtheria accounted for one case, an unimmunised child of two years of age. So far as diphtheria immunisation is concerned it is disconcerting to find that even today, with the value of immunisation widely recognised, there is a year by year discrepancy approaching 2,000 between the number of births and the children immunised.

Dysentery showed a large increase during 1956 when there were 1,258 notified cases, the greatest number recorded in any year since notification began in 1919. Detailed enquiries by the staff of the Department are carried out to determine the paths of spread and whether or not infection is transmitted by food. The enquiries so made provide an opportunity of giving advice on personal and environmental hygiene. This is especially important in the light of the fact that for every clinical case notified there may be carriers of dysentery organisms who may show no signs or symptoms of the disease.

The number of notified cases of food poisoning showed a decrease over that of 1955, 354 notified cases occurring during 1956.

The notifications of pneumonia amounted to 632, a new low record. It should be noted that 24 per cent. of these cases were over sixty-five years of age. Of the 517 deaths attributed to pneumonia, 337 of these occurred over the age of sixty-five. As only acute primary and acute influenzal pneumonias are notifiable, the deaths, which are mostly from broncho-pneumonia, are not related to the notifications.

It is pleasing to record the low incidence of poliomyelitis in the City. This was also the case throughout the country. Of 57 notifications received only 7 were confirmed, 6 cases were paralytic and 1 non-paralytic.

Primary smallpox vaccinations under one year expressed as a percentage of live births occurring during the year showed a further increase—43.5 per cent. and compared very favourably with the percentage for England and Wales which was 38.4. There has been a gradual increase since 1952 when this percentage was 36.6 in Birmingham.

There was only one case of typhoid fever. This was in a woman aged twenty-six years who had been in Jordan and was probably infected there. The patient recovered.

Whooping cough accounted for the deaths of 8 children. Of the 4,563 patients notified 9.5 per cent. were under one year of age and 62.5 per cent. were under five years of age.

The activities of the Analytical Laboratory continue and the pressure of work has been well maintained due, to a large extent, to the ever increasing legislation in connection with food and drugs and to the expansion made in the use of physical instruments, e.g., the ultra-violet and visual spectrophotometers for the testing of vitamins, trace metals, etc. Progress has been made in the scheme mentioned last year whereby the important modern drugs of the British Pharmacopoeia, including scheduled poisons, have been sampled. This scheme was introduced with the co-operation of the Local Committee of the Pharmaceutical Society and it is a pleasure to record that, with very few exceptions, through the effective co-operation of the profession as a whole, access has been given to the great majority of the dispensing departments of the 330 pharmacists in the City. No fewer than 750 specimens were obtained for examination and reports on the important group of drugs, the barbiturate family and on penicillin solution tablets and oral tablets were presented to the Committee. Results of the analysis and comments on each sample received were sent to the pharmacist concerned who, it is understood, would take appropriate action on any adverse reports of quality, thus the aim to ensure that the supply of drugs to the citizens of Birmingham is of the highest possible quality, has been undertaken on an amicable basis by members of the staff of the Laboratory with the pharmaceutical profession.

## PERSONAL HEALTH SERVICES

I would draw particular attention to the general comments made at the beginning of that section of this report dealing with the Personal Health Services. Initially, a review is made of the activities of the Department in providing care to that most necessitous section of the community, the aged and infirm. Utilising the census years of 1931 and 1951 as the only factual basis for comparison in population, it will be observed that since 1931 there has been an increase in the number of persons of sixty years and over of 3·8 per cent—53,239 persons, and in the age group, 45 and over, the increase is greater still—5·2 per cent., 87,171 persons. Without any material expansion in staff, but rather by an adaption of the available staff, in line with the general trend since the inception of the National Health Service Act, it has been possible to achieve a gradual improvement in assisting this group of the community who might otherwise be left to fend for themselves as best they can.

The number of visits paid to households by all sections of the staff in personal contact with the community has increased, thus giving an indication of where assistance is most urgently required. There is in consequence a tendency from all sections of the community to more readily approach the Department for advice and assistance.

Continuing with the general comments on the Personal Health Services and dealing with the Maternity and Child Welfare Services it is recorded that there was a new low record in the death rate among babies between the ages of four weeks and one year; elsewhere the record was not so satisfactory. The stillbirth rate was approximately the same as in 1955 while the death rate under four weeks of age rose, this in spite of the fact that a still higher proportion of mothers were booked for hospital delivery. The increase in the illegitimate birth rate continues, throwing a heavy burden of work on the Department. In 1956 the rate was 61·9 per thousand live births as compared with 53·2 in 1955. Although the death rate is much higher among illegitimate infants than among legitimate infants, it is satisfactory to note that the illegitimate infant death rate in 1956 was slightly less than in 1955, see table on page 90.

Progress has been made in the early ascertainment of deafness in young children.

Two additional maternity and child welfare centres were opened during the year, a continuance of the policy of utilising houses on Corporation housing estates as welfare centres. This arrangement has the effect of providing maternity and child welfare centres on housing estates as they develop and overcomes the necessity for mothers and their children to travel long distances to the nearest established maternity and child welfare centre. It is considered that parents appreciate greatly the availability of the centres near their own homes and it is

encouraging to note that although the proportion of infants attending centres in 1952 fell to 71 per cent., this decline has been rectified and this year 74 per cent. of the children under one year, 66 per cent of the children between one and two years, 40 per cent. between two and three years, 30 per cent. between three and four years and 25 per cent. between four and five years, attended the centres.

In the field of mental health the general expansion of the services noted in previous reports has been maintained. An interesting feature is the large increase in the number of referrals from hospitals to the Psychiatric Social Service ; indeed the case work of two of the large mental hospitals in the City is carried out by this section of the Department. Co-operation with other social agencies is continuing, this particularly so in the case of the N.S.P.C.C. where medical staff of the Department continue to be at the disposal of officers of this Society. Departmentally there is a greater understanding between the psychiatric social workers and other workers particularly health visitors, each making their contribution to difficult problems of mutual concern, the health visitor playing the role of the basic social worker having at her disposal advice in certain specialities. This arrangement is, as yet, only on an experimental level but in keeping with opinions nationally expressed.

There has been a marked decrease in the number of mental deficiency cases on licence. In those coming under the Lunacy Act, the duties of the duly authorised officers have been increased still further by arranging for them to take on the after-care of those discharged from hospital under Section 72 of the Lunacy Act and the older type of patient.

The ambulance service showed a further increase in the number of patients conveyed during the year ; a total of 344,608 patients, surpassing that of 1955 by 1,264. The number of patients dealt with by the Hospital Removal Service was 330,416, an increase of 1,855 over that of 1955. Reference to the table of comparative annual totals of cases carried according to classification, conveys the impression that there is a period of stabilisation in the number of cases falling to the lot of the hospital removal ambulances. For the past three years, 1954—56, the numbers conveyed have been 326,971, 328,561 and 330,416.

I wish to record appreciation for the most amiable and efficient manner in which this service has been maintained by Mr. A. W. Paramor, Chief Officer of the Fire and Ambulance Service and his staff in association in matters of policy with officers of the Department.

Facilities for the Prevention of Illness, Care and After-Care cover a diversity of activities of the Department in dealing with care of the aged,

the loan of fireguards, domiciliary laundry service, recuperative convalescent care, etc. There has been general expansion of this type of work.

The number of lectures given in connection with the health education programme has increased and reached the new high level of 4,301 ; 2,363 in schools, 669 to youth organisations and 1,269 to adult organisations. Activities in industry have continued, as have the general course for men and women prisoners and the special course for women convicted of child neglect held in Winson Green Prison. Here again there has been a more ready approach, not only to personnel of the Department during their visits, but centrally to the administrative staff at the Head Office on matters which may be of concern in the life of the individual.

Year by year the number of cremations is rising. Since 1952, when the appointment of the Medical Officer for Staff Welfare was made and this medical officer became Medical Referee, 18,771 bodies have been cremated. The number of cremations at Municipal Crematoria has increased from 3,403 in 1953 to 4,761 in 1956.

#### ENVIRONMENTAL SERVICES

Staff welfare surgery attendances followed closely the pattern of previous years and numbered 5,672 in 1956 as against 5,676 in 1955.

With the operation of the Food Hygiene Regulations, 1955, in January this year an intensive survey of all food premises began with the object of assisting the food trader in meeting his obligations. The public health inspector, in addition to his many other duties, has, therefore, devoted a considerable amount of time in endeavouring to achieve the new standards laid down by the Regulations.

In July of this year the City of Birmingham (Smokeless Areas) No. 1 Order became operative and prohibited the emission of smoke from two defined areas, one in the centre of the City and the other on the periphery where industrial development is to take place. From observations made it is apparent that occupiers have endeavoured to comply with the requirements of the Order and in some cases considerable expense has been incurred in the adaptation of fittings and appliances to comply with legislation.

Housing continues to be a major problem and the rate of house building was less than that achieved in 1955. The gravity of the situation cannot be over emphasised and, unfortunately, no immediate improvement seems likely. Considerable progress was made in the slum clearance programme but as virtually no new houses were available to replace condemned dwellings, action with a view to immediate demolition or closure was restricted to those cases where, owing to some critical condition or combination of circumstances, there was no reasonable alternative to actual demolition with consequent rehousing. During the year there were 4,627 houses included in clearance areas and 70 houses were individually represented for demolition or closure.

It seems a feature of present day life in the Department to receive colonial and foreign visitors. During the past year the numbers have increased and have been referred to us either through the Ministry of Health, the British Council or voluntary organisations and, in many instances, by individual approach.

I should like to express my appreciation once more for the co-operation received from Dr. Cohen, Principal School Medical Officer, general practitioners in the City and to colleagues of the Regional Hospital Board, United Birmingham Hospitals, Local Medical Committee and the Executive Council.

It has been a pleasure to observe the co-operation so willingly given to me throughout the year by members of the staff of the Department and for which I thank them. I wish personally to express my appreciation to the various contributors to the report and especially to the editing team under my Deputy, Dr. E. L. M. Millar—my Personal Assistant, Mr. W. G. Deeley and his colleague on my personal staff, Mr. B. M. Chance, who are responsible for the pattern which this report takes, for continuity and for detailed examination of the various contributions.

I am also indebted to those other contributors, who, while not members of the staff, so readily agreed to provide material for this report.

Finally, to the members of the Health Committee I again say " Thank you " for the help extended to me during the year.

MATTHEW BURN,

*Medical Officer of Health.*



## BIRMINGHAM

The census population for the City of Birmingham recorded in 1951 was 1,112,685. The estimated population in 1956 was 1,110,800. The area of the City remained unaltered at 51,147 acres, i.e., 80 square miles. The highest point of the City (roadway) is at Quinton on the western boundary, 736 feet and the lowest point is on the eastern boundary at Chester Road, 267 feet. In the centre of the City the Cathedral gardens are 459 feet above sea level. The sub-soil east of a line from New Oscott to Lickey Hills is chiefly marl and sand ; west of this line is a belt of sandstones ; further west still is gravel and sand. This is a relatively modern city and enjoys world-wide reputation as a centre of industry and of progressive local government, regarded as the capital of the Midlands and the second city of Britain. Situated in the heart of the Midlands it is served by the main services of the air, road, rail and canal systems, and is 108 miles from London. The continuous succession of towns on the north and west comprise the " Black Country " of Staffordshire with its coal-mining, iron-mining and metal working industries. Rural stretches of Worcestershire and Warwickshire lie to the south and east.

The City is renowned for its diversity of trades, which number some 1,500, and in consequence derives its title " Workshop of the World."

### Climatology

The interesting details which follow on the weather during 1956 have been compiled by Mr. A. L. Kelley, Director of the Meteorological Observatory (at Edgbaston) of the Birmingham and Midland Institute. Six observations are carried out per day at 6 a.m., 9 a.m., 12 noon, 3 p.m., 6 p.m. and 9 p.m.

Possibly the most outstanding features of the weather of 1956 were, the severe cold spell in February, the dry Spring with a sunny May, the dull wet Summer with frequent thunderstorms, the very dry autumn which helped to retrieve the sodden harvest, the mild early December with the dense fogs prior to Christmas and then the worst Christmas day snowfall of the century and the subsequent rapid thaw with floods.

**Temperature.** When thinking of the burst pipes of February and the shivering wet summer holidays and the white Christmas, it may be something of a shock to realise that the mean temperature for the year, 47.9 deg. F., was only 0.9 deg. below average. February, April, June and August were months with mean temperatures substantially below normal whilst in May, September and December it was appreciably warmer than usual. Other months were near average.

The highest shade temperature recorded was 77 deg. on the 25th July and the lowest 16 deg. on the 2nd February. For the second time only in seventy years the temperature in August failed to reach 70 deg.

**Rainfall.** After a dry start January finished with a total more than one inch above normal but the next four months gave amounts well below the average which, following on the dry summer and autumn of 1955, created serious water shortages in some districts. June rainfall was only slightly above normal but, during the next three months, the excesses practically balanced the earlier deficiencies, August alone having a total of 2.24 in excess of its average. Very dry conditions followed in October, November and early December, but the rain and snow of the second half of December partially restored the balance again. The total for the year was 27.09 inches, which is 1.365 inches below average. There were 179 rainy days. (Days with 0.01 inches or more).

**Sunshine.** The year's total of 1,218.3 hours shows a deficiency of 84.1 hours. Nearly one hundred hours were lost over June, July and August. Amounts in March, May and October were appreciably above normal. The sunniest day was July 25th with 14.6 hours.

**Wind.** There were more than three times the amount of winds with a westerly component as with an easterly component. The number of hours when winds blew from between N.N.E. and E. was 1,554; from between E.S.E. and S. 1,526 hours; from between S.S.W. and W. 3,239 hours and from between W.N.W. and N. 2,326 hours. There were 139 hours of calm.

The mean hourly speed was 8.8 m.p.h. which is about one m.p.h. below normal. Gale force winds were recorded on the 1st March whilst the maximum gust velocity for the year, 75 m.p.h., was registered during an isolated squall on the 14th December.

**Thunder.** There were 17 days on which thunder was noted which is five more than average. The most severe storm in the Birmingham area occurred on the 27th July. Thunder was recorded on six days in August and on four days in June and July.

**Snow.** Snow or sleet occurred on 32 days against a normal of 22. Half this total was accredited to February alone. The ground was covered with snow at 9 a.m. on 31 days compared with an average of nine. Here again 21 were recorded in February. The maximum depth of snow at any time during the year was about 7½ inches on the morning of the 26th December.

**Fog.** Visibilities of less than 1,100 yards were noted on 68 days but on only eight days was the fog dense enough to seriously affect road traffic. The fogs of the week before Christmas were about the worst.

**Frosts.** Air frosts occurred on 57 days and ground frosts on 77.

COMPARISON OF MEAN TEMPERATURE, RAINFALL AND SUNSHINE  
OF 1956 WITH AVERAGES FOR THE PAST 65 YEARS

Month	Shade Temperature °F.		Rainfall Ins.		Sunshine Hrs.	
	Monthly averages	Averages past	Monthly Totals	Averages past	Monthly Totals	Averages past
	1956	65 years	1956	65 years	1956	65 years
January ...	38.8	38.4	3.61	2.50	60.4	42.5
February...	31.7	38.9	0.515	1.95	53.0	58.3
March ...	42.7	41.9	1.045	1.96	121.3	96.8
April ...	44.3	46.4	1.54	1.99	121.3	135.3
May ...	53.9	52.2	0.575	2.38	216.8	171.3
June ...	55.6	57.5	2.09	2.04	133.1	176.1
July ...	60.3	60.8	3.835	2.51	144.4	168.6
August ...	56.3	60.2	4.98	2.74	124.4	158.4
September	57.3	56.1	2.88	2.06	76.2	122.9
October ...	49.1	49.5	1.64	2.77	99.7	85.7
November	42.9	43.2	0.875	2.82	44.4	48.9
December	41.8	39.9	3.50	2.73	23.3	37.3
Year ...	47.9	48.8	27.085	28.45	1218.3	1302.1

WINDS FOR THE YEAR

NUMBER OF HOURS DURING WHICH WIND BLEW FROM 8 MAIN COMPASS POINTS.

N	NE	E	SE	S	SW	W	NW	Calm
803	914	694	820	803	1755	1530	1326	139

## VITAL STATISTICS

### Summary of Statistics for the year 1956

Area—51,147 acres, i.e., 80 sq. miles.

Population—Census 1951 : (Final)		1,112,685
Home population, estimated by Registrar-General as at 30th June. (Civilians plus H.M. Forces stationed in the area).	1952	1,119,000
	1953	1,118,500
	1954	1,117,700
	1955	1,111,700
	1956	1,110,800

It appears from these estimates that the decline in the City's population is continuing and this in spite of an excess of live births over deaths of 6,396. From work among children of school and pre-school age it is clear that there is considerable movement of families between this and other areas many miles away. There is too an extensive " spilling over the boundary " of people who derive their livelihood from Birmingham and decide to establish themselves as owner-occupiers of new houses which are being erected in their hundreds in areas contiguous with Birmingham.

The Registrar-General's estimated mid-year home population has been used for all relevant purposes throughout this report, and, in addition, where rates are based on less than twenty instances, these rates are printed in italics.

Figures for births and deaths have been compiled locally and therefore do not necessarily agree with those published by the Registrar-General. Whilst there is close similarity between the figures for legitimate births there is disparity in relation to the illegitimate. This is probably because a number of Birmingham women having illegitimate births go outside the City for their confinement and these births are not all recorded in our figures. The result is that our illegitimate births tend to be at least 5% below the real figure and for 1956, were actually 7.4% below.

	1954	1955	1956
<b>Live Births</b> (a) Born in the City .....	17,803	17,360	18,022
(b) Born outside the City .....	477	413	456
Total .....	18,280	17,773	18,478

Legitimate—17,335. Illegitimate—1,143 (6.2% of total live births).

Live Birth Rate 16.6 per 1,000 population.

### Stillbirths

Total 434. 267 (61·5%) of these were premature.

Stillbirth rate per 1,000 total live and still births 23·0.

### Maternal Mortality

Five deaths were not associated and a further seven were associated with notifiable births.

Rate per 1,000 live and still births 0·48.

### Infant Mortality

	<i>Total deaths under 1 year of age</i>	<i>Deaths under 1 year per 1,000 live births</i>
Legitimate ... ..	412	23·7
Illegitimate ... ..	43	37·6
Legitimate and Illegitimate	455	24·6

Neonatal death rate 17·6 per 1,000 live births (293 legitimate, 33 illegitimate).

### Deaths

1956 crude death rate per 1,000 population was 10·9 (12,082 deaths). The average for each of the two previous five year periods was 10·8. In the past seven years the principal killing diseases have caused the following deaths:—

	<i>Heart disease</i>	<i>Cancer</i>	<i>Cerebral haemorrhage</i>	<i>Pneumonia Bronchitis Influenza</i>	<i>Arterio- sclerosis and Circulatory disease</i>	<i>Senility</i>	<i>Violence and Suicide</i>
1950	3,599	2,106	1,429	1,409	455	246	460
1951	3,876	2,021	1,529	1,905	287	248	499
1952	3,403	2,130	1,504	1,196	412	270	468
1953	3,379	2,237	1,567	1,525	395	380	451
1954	3,384	2,295	1,710	1,234	427	441	452
1955	3,630	2,295	1,755	1,442	418	658	527
1956	3,322	2,315	1,628	1,402	463	592	544
% of all deaths in 1956	27·5	19·2	13·5	11·6	3·8	4·9	4·6

Deaths from those diseases in 1956 accounted for 85% of all the deaths, as compared with 84%, 84% and 86% in each of the previous three years.

## Area Comparability Factors

Births 0.94

Deaths 1.08

Death rates among males are higher than among females at all ages and the very young and the old die more readily than those in their prime. The death rate of a locality therefore depends not only upon the healthiness of its environment but also upon the age and sex composition of its population. For comparison of death rates of one locality with another and with the country as a whole, it is therefore necessary to eliminate the age and sex element and this is done by multiplying the crude death rate by a "comparability factor." The Birmingham death rate "comparability factor" of 1.08, being greater than one, indicates that the sex and age composition of the population in itself tends to produce a low crude death rate.

For the purposes of comparison the Adjusted Birth Rate is 15.63 and the Adjusted Death Rate is 11.75. Comparability factors should be borne in mind when studying the table of Crude Rates on page 36.

## Bronchitis and Pneumonia

The first quarter of the year is consistently the one in which by far the most deaths occur from bronchitis and pneumonia and the fourth quarter contains the next highest number of deaths.

### QUARTERLY DEATHS FROM BRONCHITIS AND PNEUMONIA

	<i>First Quarter</i>	<i>Second Quarter</i>	<i>Third Quarter</i>	<i>Fourth Quarter</i>	<i>Total</i>
1950	539	235	130	423	1,327
1951	884	281	156	298	1,619
1952	404	231	137	385	1,157
1953	743	229	121	268	1,361
1954	523	255	144	281	1,203
1955	640	258	128	333	1,359
1956	588	269	160	347	1,364

Atmospheric pollution is known to increase the deaths from this type of disease, its prejudicial effect being most obvious in times of "smog." Again in 1956, however, no association between such weather conditions and deaths from bronchitis and pneumonia was demonstrable in Birmingham but there commonly is a higher death rate from such diseases in smoky areas. An indication of where these are is given by the charts on page 326, and 327 which also demonstrates the much greater atmospheric pollution in the winter months—the time when most deaths occur.

The Report for 1954 showed on page 28 the areas of the City with the heaviest incidence of deaths from bronchitis and pneumonia, information from the Census being used to eliminate the effects of different age and sex distribution among the wards. Such information obtained in 1951 can hardly be applied to 1956 but the map opposite demonstrates the areas where many deaths from bronchitis and pneumonia have occurred.

### **Cancer**

Almost every year produces a new record for number of deaths from this disease, so high a number as 2,315, being the deaths in 1956, has not been recorded previously. The steady increase is largely explained by the increasing number of persons in the older age groups in which cancer most usually occurs. (See table, page 38). The graph on page 31 shows this slow rise in deaths from cancer of the stomach and breast and a more stable situation in relation to death from intestinal cancer.

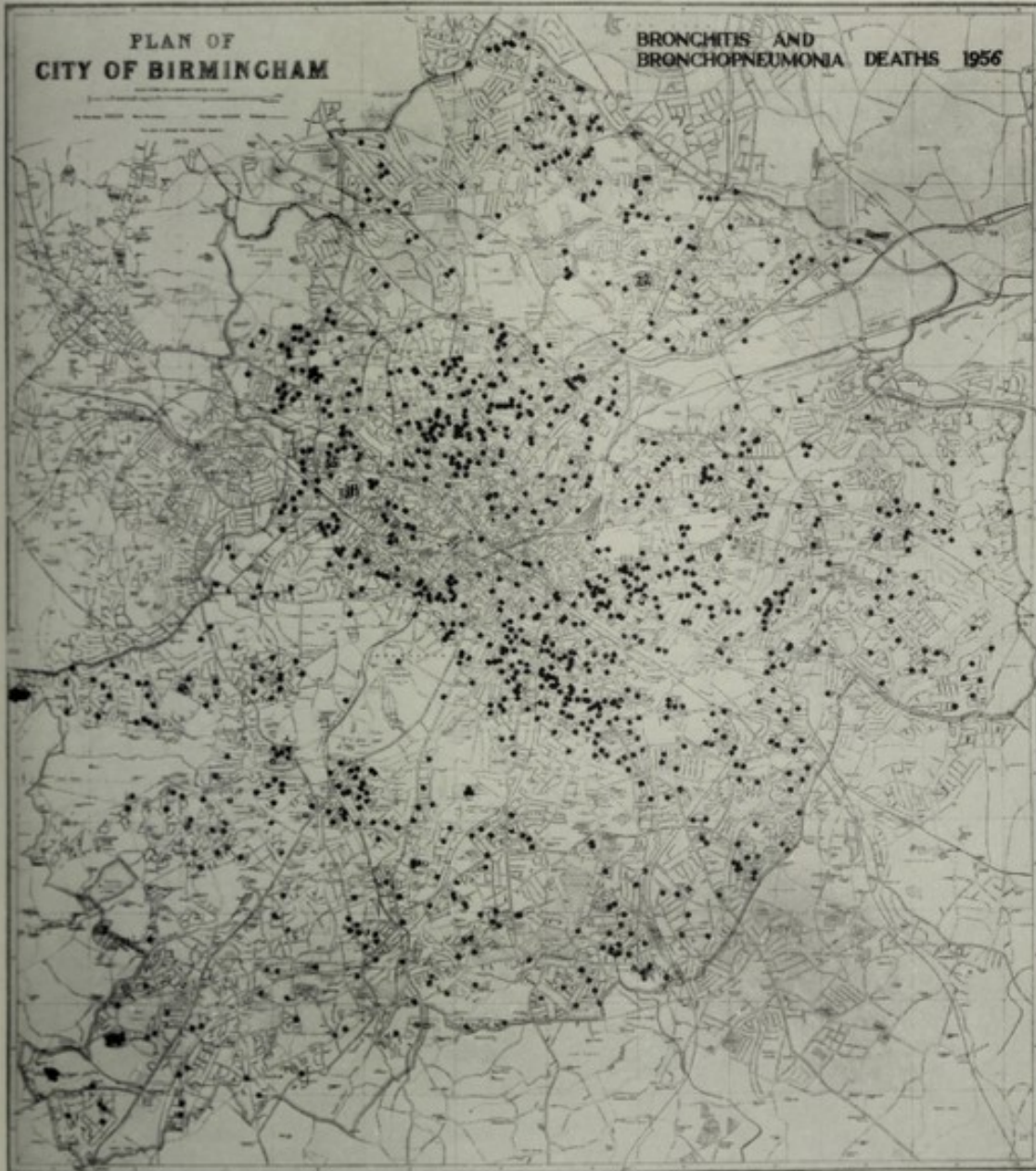
There are, however, two forms of cancer which are becoming more common—cancer of the lungs in men, and leukaemia.

LUNG CANCER again claimed a record number of victims, 495 as compared with 492 in the previous year. The graph shows the rapid rise in deaths from this disease the present yearly deaths being  $2\frac{3}{4}$  times the number of only 15 years ago. Of the victims in 1956, 432 were men and 63 women. While the increase in deaths among men has been phenomenal, women have also suffered an increase as the following figures show.

If cancer of the lung and bronchus is due to breathing polluted air or to smoking, it is interesting to note that there has been no significant increase in deaths from cancer of the upper respiratory tract.

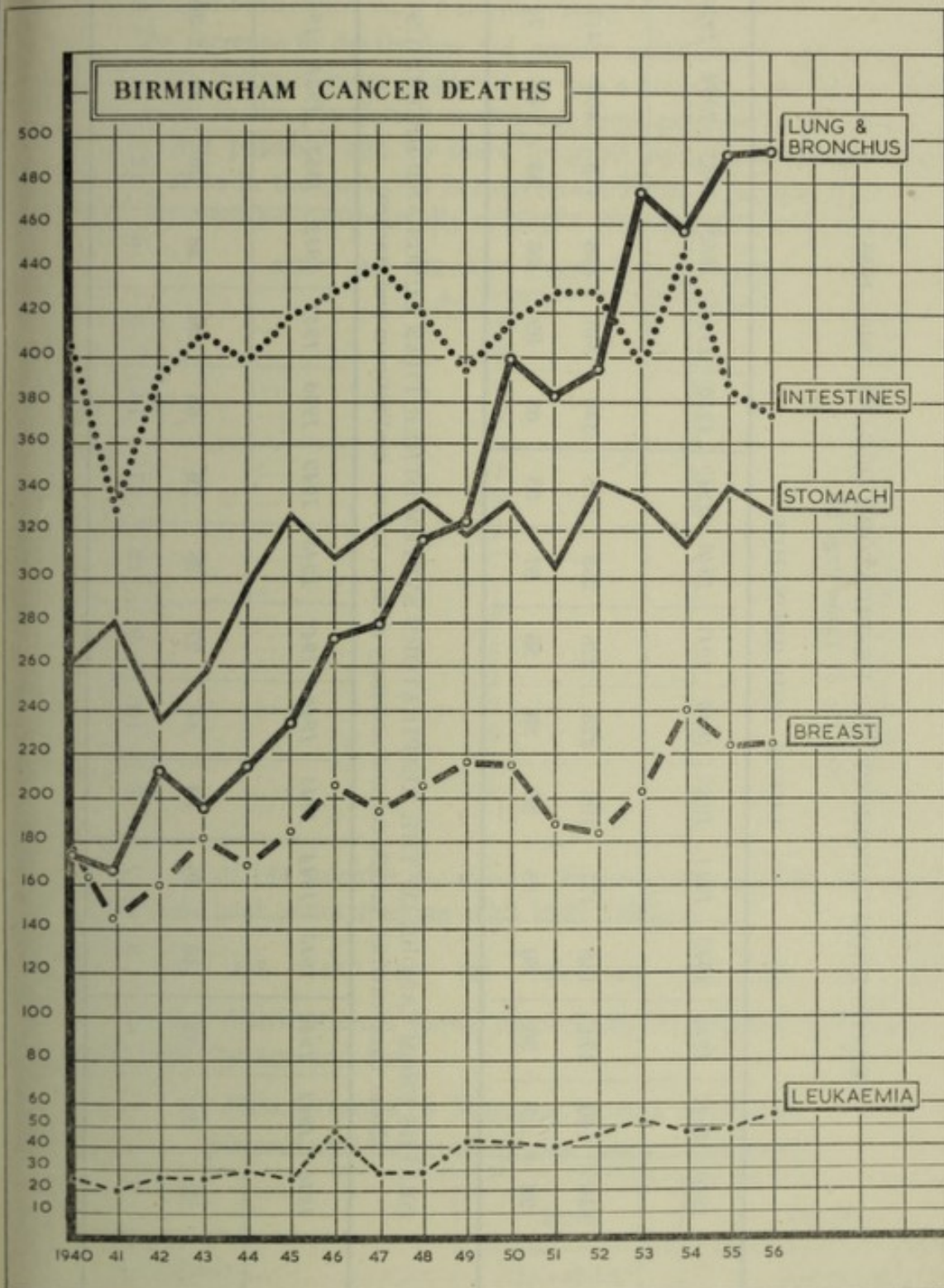
PLAN OF  
CITY OF BIRMINGHAM

BRONCHITIS AND  
BRONCHOPNEUMONIA DEATHS 1956









DEATHS FROM CANCER OF THE RESPIRATORY ORGANS, 1940—1956  
No. 13c of Table Page 38.

LUNGS AND BRONCHUS

	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Males ...	146	140	174	148	177	196	228	228	258	275	336	345	338	413	409	417	432
Females ...	28	27	36	36	33	35	36	56	61	53	63	39	56	63	49	75	63

DEATHS FROM CANCER OF THE RESPIRATORY SYSTEM OTHER THAN LUNGS AND BRONCHUS  
(Nose, nasal cavities, middle ear and accessory sinuses, larynx, mediastinum and trachea)

	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Males ...	22	39	32	46	30	19	44	27	28	26	35	26	23	20	39	30	15
Females ...	7	3	6	8	7	7	10	9	12	7	16	8	6	12	4	6	8

LEUKAEMIA caused 55 deaths which was also a record. The graph on page 31 shows a definite tendency for deaths from this disease to increase but it still remains uncommon. Males are only slightly more affected and both sexes show a similar rise over the years.

The increase in deaths has not greatly affected the age group 0-25 years, but becomes more apparent as age advances. No doubt this is due partly to the population containing more persons in the higher age groups and possibly also to more frequent recognition of the disease latterly than in the past. It is therefore difficult to be sure that the increase in recorded deaths really reflects a true increase in incidence.

AGES AT DEATH FROM LEUKAEMIA

	0-14 yrs.	15-24 yrs.	25 yrs. +
1940 ... ..	7	—	19
1941 ... ..	5	2	14
1942 ... ..	4	2	21
1943 ... ..	6	1	19
1944 ... ..	5	3	21
1945 ... ..	4	2	20
1946 ... ..	9	3	36
1947 ... ..	7	—	21
1948 ... ..	7	3	18
1949 ... ..	7	5	31
1950 ... ..	6	—	36
1951 ... ..	11	1	28
1952 ... ..	7	5	34
1953 ... ..	7	2	43
1954 ... ..	10	5	32
1955 ... ..	7	3	38
1956 ... ..	8	5	42

**Suicide**

A total of 144 suicides occurred in Birmingham in 1956, the annual numbers in past years starting with 1945 being :—

(1945)											(1956)
100	122	115	142	136	130	129	120	132	150	132	144

The age distribution is shown numerically on page 34, and below as percentages by age and sex.

PERCENTAGES OF SUICIDES BY AGE AND SEX.

(Percentages for previous nine years in brackets).

	Males	Females
5-24 yrs. ... ..	— (2.95)	5.17 (3.01)
25-44 yrs. ... ..	23.25 (25.18)	18.96 (20.86)
45-64 yrs. ... ..	44.19 (41.63)	48.28 (44.95)
65 yrs. upwards ... ..	32.56 (30.24)	27.59 (31.18)
	100.00	100.00

This information should be considered in the light of the census populations of each age group.

The suicide rates per 1,000 population per year during the period 1947-1955 inclusive were :—

<i>Age Group</i>	<i>Males</i>		<i>Females</i>	
	<i>Av. suicides per year</i>	<i>Rate per 1,000 popn.</i>	<i>Av. suicides per year</i>	<i>Rate per 1,000 popn.</i>
15—24 ... ..	2.3	0.035	1.4	0.019
25—44 ... ..	19.9	0.113	10.8	0.062
45—64 ... ..	32.9	0.280	23.3	0.172
65 and upwards	23.9	0.586	16.1	0.257

The methods used by those who committed suicide in 1956 are shown below by age and sex. Coal gas poisoning is by far the commonest, accounting for 63% of all the deaths. Analgesics, the next commonest, caused 12%.

#### AGES AT DEATH

<i>Causes of Death</i>	<i>Sex</i>	<i>5—</i>	<i>15—</i>	<i>25—</i>	<i>45—</i>	<i>65—</i>	<i>75—</i>	<i>All ages</i>
Analgesic and soporific substances	M.			1	7		1	9
	F.			2	1	4	1	8
Other poisons	M.			2	2	2		6
	F.			1	1			2
Domestic coal gas	M.			12	19	11	9	51
	F.	1	1	6	23	8	1	40
Other gases	M.				2			2
	F.				1			1
Hanging and strangulation	M.			1	4	1	1	7
	F.		1	1	1			3
Drowning	M.			1	2		1	4
	F.			1		1	1	3
Firearms and explosives	M.							
	F.							
Cutting and piercing	M.				1		1	2
	F.				1			1
Jumping from high place	M.				1	1		2
	F.							
Unspecified	M.			3				3
	F.							
TOTAL	M.			20	38	15	13	86
	F.	1	2	11	28	13	3	58

Examination of the ward distribution of suicides during the nine years 1947 to 1955 shows Sparkbrook to have the highest average annual rate per 1,000 population, being 0·17 as compared with the City average of 0·12. Of the 38 wards into which Birmingham is divided, 17 had rates above the City average. These comprised two of the five Central Wards, six of the twelve Middle Ring Wards and nine of the twenty-one Outer Wards. The ward with the lowest average during the period was Washwood Heath with an average of 0·07 suicides per year per 1,000 population.

The occupations of the men were recorded and they were found to be distributed among the social classes as follows during the past ten years.

	1947	1948	1949	1950	1951	1952	1953	1954	1955	*Av. yrly. rate/ 1,000 1947- 1955	1956	*Av. yrly rate/ 1,000 1956
CLASS I												
Professional	1	3	2	1	3	2	2	—	4	0·24	1	0·12
CLASS II												
Intermediate	9	8	9	9	9	15	9	12	8	0·22	8	0·18
CLASS III												
Skilled	34	45	41	36	45	36	35	49	44	0·18	42	0·18
CLASS IV												
Partly skilled	9	12	11	16	5	6	5	12	8	0·17	16	0·30
CLASS V												
Unskilled	15	15	16	16	11	19	20	14	15	0·31	19	0·38

\* Based on 1951 Census figures.

The Registrar-General has given information derived from the Census as to the social class distribution of occupied and retired males aged 15 and over in four groups of wards. The percentage distribution of the social classes in each of these four areas is :—

*Percentage of occupied males in social class.*

	I	II	III	IV	V
Central Area of City ...	0·8	6·5	55·3	18·1	19·3
Northern Segment of City ...	2·3	12·8	62·6	12·1	10·2
Eastern Segment of City ...	2·0	12·5	61·7	13·5	10·3
Southern Segment of City	4·3	16·9	57·8	11·5	9·5

The Southern Segment has the highest proportion of the professional and managerial classes and the smallest proportion of unskilled classes. In the Central Area the opposite is the case.

In the nine year period 1947–1955 the unskilled labourer class had the highest suicide rate among men, 0·31 per 1,000 per year. It was this same class which showed the highest rates in each of three of the above four areas of the City—Central (0·37), Northern (0·27) and Eastern (0·27). Even in the Southern Sector Social Class V was only surpassed by Class I, the average yearly suicide rates being 0·22 and 0·35 per 1,000 population respectively.

CRUDE RATES

Year	BIRTH RATE			STILLBIRTH RATE per 1,000 total births			INFANT MORT. RATE			DEATH RATE		
	B'ham	Great Towns	Eng. and Wales	B'ham	Great Towns	Eng. and Wales	B'ham	Great Towns	Eng. and Wales	B'ham	Great Towns	Eng. and Wales
1901	31.4		27.2 <i>is mean for 1901—</i>	—	—	—	176		151	17.5		16.5
1911	26.1		24.4	—	—	—	150		130	15.0		14.4
1921	24.1		22.4	35			83		83	11.3		12.3
1931	16.9		15.8	39		41	71		66	11.7		12.3
1936	15.8		14.8	35		40	62		59	11.3		12.3
1941	16.8	14.7	13.9	29		35	69	71	60	13.2	14.9	13.4
1942	19.3	17.3	15.6	28		33	56	59	51	11.8	13.3	12.3
1943	20.9	18.6	16.2	27		30	55	58	49	12.1	14.2	13.4
1944	22.8	20.3	17.7	25		28	42	52	45	11.3	13.7	12.7
1945	20.2	19.1	15.9	25		28	49	54	46	11.2	13.5	12.4
1946	22.5	22.2	19.2	25		27	40	46	43	11.3	12.7	12.4
1947	22.2	23.3	20.5	24		24	41	47	41	11.1	13.0	12.4
1948	19.5	20.0	17.9	22		23	32	39	34	9.8	11.6	11.4
1949	18.1	18.7	16.9	22		23	31	37	32	10.7	12.5	11.4
1950	16.8	17.6	15.8	23		23	30	34	30	10.9	12.3	11.4
1951	16.5	17.3	15.5	22		23	30	34	30	11.4	13.4	12.4
1952	16.4	16.9	15.3	20	25	23	27	31	28	10.2	12.1	11.4
1953	16.6	17.0	15.5	23	25	22	26	31	27	10.6	12.2	11.4
1954	16.4	15.2	15.2	22	23	24	24	25	25	10.6	11.1	11.4
1955	16.0	14.9	15.0	23	23	23	24	25	25	11.3	11.6	11.4
1956	16.6	15.6	15.6	23	23	23	25	24	24	10.9	11.6	11.4

\* As from January, 1952, there are 160 County Boroughs and Great Towns, including London, instead of the 126 previously referred to.

BIRTH, DEATH AND INFANT MORTALITY RATES IN WARDS, 1956

WARDS	Estimated Population	BIRTHS		TOTAL DEATHS		INFANT DEATHS	
		Number	Rate per 1,000 population	Number	Rate per 1,000 population	Number	Rate per 1,000 births
St. Paul's .....	24,700	581	23.5	194	7.9	15	25.8
Duddeston .....	25,300	575	22.7	230	9.1	12	20.9
Deritend .....	22,400	504	22.5	228	10.2	12	23.8
Market Hall .....	20,400	555	27.2	198	9.7	15	27.0
Ladywood .....	20,800	470	22.6	182	8.8	22	46.8
Totals and Average Rates of Central Wards .....	113,600	2,685	23.6	1,032	9.1	76	28.3
Lozells .....	30,800	669	21.7	310	10.1	14	20.9
Aston .....	27,000	531	19.7	247	9.1	17	32.0
Gravelly Hill .....	28,000	455	16.3	259	9.3	8	17.6
Washwood Heath .....	34,600	514	14.9	250	7.2	10	19.5
Saltley .....	30,200	544	18.0	283	9.4	21	38.6
Small Heath .....	29,700	500	16.8	334	11.2	26	52.0
Sparkbrook .....	24,400	561	23.0	293	12.0	12	21.4
Balsall Heath .....	24,800	501	20.2	280	11.3	8	16.0
Edgbaston .....	24,900	359	14.4	326	13.1	12	33.4
Rotton Park .....	22,500	390	17.3	1,394	62.0	13	33.3
All Saints .....	24,600	438	17.8	350	14.2	15	34.2
Soho .....	24,400	454	18.6	287	11.8	11	24.2
Totals and Average Rates of Middle Ring Wards .....	325,900	5,916	18.2	4,613	14.2	167	28.2
Stechford .....	51,800	816	15.8	324	6.3	18	22.1
Sheldon .....	45,900	780	17.0	211	4.6	14	17.9
Hardley .....	24,900	330	13.2	224	9.0	6	18.2
Cocks Green .....	21,000	296	14.1	199	9.5	10	33.8
Fox Hollies .....	22,300	263	11.8	238	10.7	9	34.2
Sparkhill .....	25,100	392	15.6	326	13.0	15	38.3
Mill Green .....	25,600	241	9.4	262	10.2	3	12.4
Springfield .....	26,200	342	13.0	256	9.8	12	35.1
Brandwood .....	37,100	552	14.9	336	9.1	8	14.5
Roseley and King's Heath .....	29,100	540	18.6	372	12.8	7	13.0
Welly Oak .....	30,500	399	13.1	376	12.3	9	22.6
King's Norton .....	28,300	407	14.4	314	11.1	11	27.0
Northfield .....	44,600	667	15.0	472	10.6	10	15.0
Veoley .....	36,400	602	16.5	238	6.5	11	18.3
Harborne .....	34,700	419	12.1	403	11.6	5	11.9
Handwell .....	25,400	376	14.8	248	9.8	6	15.9
Handsworth .....	25,900	520	20.1	307	11.9	13	25.0
Ferry Barr .....	37,400	471	12.6	238	6.4	6	12.7
Kingstanding .....	38,400	617	16.1	265	6.9	14	22.7
Stockland Green .....	29,800	413	13.9	450	15.1	12	29.1
Drington .....	30,900	431	13.9	369	11.9	13	30.2
Totals and Average Rates of Outer Ring Wards .....	671,300	9,874	14.7	6,428	9.6	212	21.5
Ward of Domicile not known .....		3		9			
Totals and Average Rates for Whole City .....	1,110,800	18,478	16.6	12,082	10.9	455	24.6



**CAUSES OF DEATH AT DIFFERENT AGE PERIODS DURING 1956**

**AGES AT DEATH**

No.	Causes of Death	Sex	AGES AT DEATH									All Ages	Causes of Death	Sex	AGES AT DEATH									All Ages																
			0-	1-	2-	5-	15-	25-	45-	65-	75-				0-	1-	2-	5-	15-	25-	45-	65-	75-																	
1	Typhoid & Paratyphoid Fever...	M.																																						
1A	Smallpox	M.																																						
2	Measles	M.																																						
3	Scarlet Fever	M.																																						
4	Whooping Cough	M.																																						
5	Diphtheria	F.	4																																					
6	Influenza	M.																																						
6A	Poliovirus inc.	M.																																						
7	Polio Encephalitis	M.																																						
7	Acute In'tious encephalitis incl. Enc'alitis Lethargica	F.																																						
8	Meningococcal Infections inc. Cerebrospinal Fever	M.	1	1																																				
9	Tuberculosis of Respiratory System	M.																																						
10A	Tubercular Meningitis	M.																																						
10B	Tuberculosis of the Abdomen	M.																																						
10C	Tuberculosis of Spinal Column	M.																																						
10D	Tuberculosis of Joints	M.																																						
10E	Disseminated Tuberculosis	M.																																						
10F	Tuberculosis of Glands and other parts	M.																																						
11	Syphilis	M.																																						
12	General Paralysis of Insane, Tabes Dorsalis	M.																																						
13A	Cancer of Buccal Cavity & Pharynx	M.																																						
13B	" Digestive Organs	M.																																						
13C	" Peritoneum	M.																																						
13C	" Respiratory Organs	M.																																						
13D	" Genital Organs	M.																																						
13E	" Breast	M.																																						
13F	" Urinary Organs	M.																																						
13G	" Skin	M.																																						
13H	" Other Organs	M.																																						

DEATH-RATES PER 1,000 OF POPULATION FROM

YEAR	Population Estimated to middle of each year	Birth-rate	Death-rate	Infant Mortality rate per 1,000 Births	DEATH-RATES PER 1,000 LIVE BIRTHS																	
					Enteric Fever	Smallpox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Tuberculosis		Cancer	Diseases of Nervous System	Diseases of Circulatory System	Diseases of Respiratory System	Diseases of Digestive System	Diseases of Genito-Urinary System	Suicides	Other Violence	Congenital Debility, Malformations, etc. (under 1)
1918	870,000	19.4	15.2	99	.01	.32	.18	2.50	1.35	.25	1.02	1.18	1.76	.85	.96	.40	.07	.35	38.7	18.5	1.72	1.31
1919	910,000	20.9	13.0	84	.05	.06	.14	1.15	1.10	.18	1.01	1.07	1.73	2.67	.66	.35	.11	.34	40.0	9.9	1.19	1.45
1920	910,000	27.6	12.6	83	.12	.20	.22	.46	.93	.17	1.12	1.06	1.72	2.46	.82	.32	.11	.34	35.2	9.5	2.03	1.56
1921	919,683	24.1	11.3	83	.04	.23	.16	.88	1.18	.22	1.03	1.17	1.79	2.54	.88	.39	.06	.36	39.4	14.3	1.58	1.48
1922	927,844	21.5	12.1	86	.09	.10	.13	.15	.97	.16	1.12	0.98	1.84	2.02	.93	.38	.10	.26	36.6	16.6	1.17	1.67
1923	936,079	20.4	11.0	72	.00	.05	.10	.28	.92	.16	1.18	1.04	1.85	2.38	.66	.37	.12	.26	37.4	8.5	1.26	1.76
1924	944,386	19.2	11.6	83	.02	.19	.10	.39	.97	.13	1.30	1.00	1.91	2.15	.70	.39	.14	.35	31.3	10.9	1.78	1.73
1925	952,766	18.8	11.7	78	.00	.23	.10	.39	.98	.16	1.27	1.00	1.97	2.12	.70	.37	.10	.31	37.2	2.01	1.90	1.90
1926	961,222	18.7	11.3	73	.00	.19	.12	.27	.94	.12	1.26	1.07	2.12	1.88	.73	.38	.11	.30	35.3	11.3	1.96	2.19
1927	969,752	17.8	11.8	75	.00	.07	.08	.41	.89	.17	1.36	0.95	2.28	1.89	.70	.41	.15	.36	35.1	11.5	1.45	2.14
1928	976,500	17.6	10.9	65	.04	.17	.07	.13	.86	.13	1.35	0.94	2.41	1.56	.67	.48	.16	.40	31.6	9.3	1.86	1.97
1929	981,000	17.1	13.5	79	.00	.13	.09	.13	.94	.15	1.34	0.98	2.76	2.26	.76	.53	.16	.42	35.4	13.9	1.55	2.44
1930	982,000	17.7	10.8	60	.06	.11	.09	.13	.90	.13	1.35	0.88	2.43	1.78	.69	.45	.15	.40	30.6	7.6	1.55	1.84
1931	1,011,300	16.9	11.7	71	.18	.09	.05	.27	.92	.14	1.46	0.77	2.90	1.61	.62	.45	.15	.38	33.0	10.7	1.74	2.05
1932	1,017,500	16.3	11.3	67	.00	.13	.03	.36	.83	.11	1.45	0.87	2.73	1.47	.62	.45	.15	.38	34.6	8.7	1.64	2.17
1933	1,023,500	14.7	11.0	66	.08	.02	.03	.44	.85	.11	1.43	0.70	2.94	1.32	.61	.40	.17	.39	33.6	7.7	1.68	2.05
1934	1,028,000	15.3	11.0	68	.02	.11	.08	.18	.71	.08	1.43	0.76	3.04	1.26	.67	.44	.16	.39	33.7	7.8	1.66	2.06
1935	1,033,000	15.4	10.9	64	.05	.06	.08	.15	.71	.08	1.43	0.76	3.04	1.26	.67	.44	.16	.39	35.0	8.7	1.85	1.98
1936	1,038,000	15.8	11.3	62	.04	.10	.06	.13	.71	.07	1.57	0.69	3.43	1.22	.62	.45	.12	.38	32.8	5.4	1.53	2.14
1937	1,042,000	16.3	11.7	60	.07	.03	.08	.40	.72	.08	1.62	0.73	3.45	1.18	.61	.43	.15	.39	33.1	5.1	0.77	2.30
1938	1,048,000	16.6	11.4	61	.01	.03	.07	.15	.70	.08	1.59	0.61	3.45	1.18	.61	.43	.15	.39	33.1	5.1	0.77	2.30
1939	1,055,000	16.6	11.4	60	.02	.05	.05	.16	.77	.07	1.55	0.67	3.65	1.16	.45	.39	.15	.36	29.1	13.7	0.86	1.72
1940	1,020,000	16.9	14.3	70	.00	.07	.05	.22	.77	.07	1.61	1.31	3.31	2.21	.55	.46	.14	.42	28.2	12.1	0.58	1.63
1941	950,000	16.8	13.2	69	.01	.06	.06	.21	.73	.07	1.59	0.80	3.45	1.43	.58	.44	.14	.38	30.3	9.8	0.87	1.99
1942	965,000	19.3	11.8	56	.02	.05	.05	.10	.77	.09	1.77	1.30	3.10	1.94	.72	.45	.12	.44	26.4	11.3	0.82	1.75
1943	965,000	20.9	12.1	55	.01	.06	.04	.34	.71	.07	1.83	1.34	3.02	1.73	.64	.43	.11	.37	29.4	9.8	1.13	1.29
1944	990,000	22.8	11.3	42	.00	.03	.02	.11	.70	.09	1.75	1.29	3.15	1.40	.43	.42	.08	.32	21.7	6.0	0.62	0.75
1945	990,000	19.9	11.2	50	.03	.03	.02	.06	.68	.07	1.84	1.33	3.14	1.44	.44	.41	.10	.27	22.3	7.8	0.51	0.96
1946	Average	19.9	11.9	54	.00	.06	.04	.15	.73	.08	1.78	1.31	3.10	1.60	.54	.43	.10	.34	25.0	8.8	0.77	1.14
1947	1,017,100	22.5	11.3	40	.01	.03	.01	.11	.61	.05	1.90	1.32	3.36	1.37	.44	.36	.12	.30	20.9	6.1	0.73	0.74
1948	1,076,300	22.2	11.1	41	.02	.03	.00	.08	.64	.05	1.83	1.34	3.34	1.48	.36	.34	.11	.27	20.6	7.1	0.29	0.71
1949	1,096,100	19.5	9.8	32	.01	.03	.00	.03	.59	.04	1.82	1.10	3.00	1.10	.32	.33	.13	.27	17.8	3.2	0.09	0.42
1950	1,106,800	18.1	10.7	31	.01	.02	.00	.19	.54	.05	1.75	1.25	3.52	1.34	.35	.29	.12	.27	18.3	3.2	0.05	0.45
1951	1,117,900	16.8	10.9	30	.01	.02	.00	.07	.43	.03	1.88	1.40	3.67	1.30	.35	.28	.12	.30	18.9	2.2	0.36	0.48
1952	Average	19.8	10.8	35	.00	.03	.00	.10	.66	.05	1.84	1.28	3.38	1.52	.36	.32	.12	.28	19.3	4.4	0.19	0.56
1953	1,110,900	16.5	11.4	30	.00	.01	.00	.26	.35	.03	1.82	1.49	3.79	1.54	.42	.25	.12	.33	18.2	1.6	0.27	0.49
1954	1,119,000	16.4	10.2	27	.00	.01	.00	.03	.25	.02	1.90	1.46	3.46	1.12	.39	.22	.11	.31	17.5	1.3	0.38	0.44
1955	1,118,500	16.6	10.6	26	.02	.01	.15	.24	.24	.01	2.00	1.51	3.40	1.29	.36	.24	.12	.28	18.0	1.1	0.11	0.48
1956	1,117,700	16.4	10.6	24	.00	.00	.03	.08	.19	.01	2.05	1.64	3.44	1.15	.40	.25	.13	.27	16.5	0.7	0.11	0.71
1957	1,111,700	16.0	11.3	24	.00	.01	.00	.08	.19	.01	2.06	1.68	3.67	1.28	.39	.20	.12	.36	17.2	0.8	0.34	0.34
1958	Average	16.4	10.8	26	.00	.01	.00	.11	.25	.02	1.97	1.56	3.55	1.28	.39	.23	.12	.31	17.5	1.1	0.17	0.49
1959	1,110,800	16.6	10.9	25	.00	.01	.03	.03	.14	.01	2.08	1.55	3.46	1.29	.38	.21	.13	.37	17.9	1.0	0.16	0.48

\*Exclusive of General Paralysis †Registrar General's Estimate.

## GENERAL EPIDEMIOLOGY

The working partnership which has developed between general practitioners, hospitals, the Public Health Laboratory and the Health Department has been the means of greatly facilitating the investigations of infectious diseases.

Interest in prevention seems to be developing widely and many enquiries are now received upon this aspect. Notification, particularly of bowel infections, automatically produces assistance from the Health Department in the collection of specimens for examination, an epidemiological investigation and advice as to prevention of spread of infection. This service acts as an incentive to notification because of its value to the doctor and benefit to the patient and his household.

Requests for clinical examination of patients in their own homes are now rare, but the Health Department is still approached for aid in diagnosis when the question of smallpox arises.

### **Anthrax**

In March, 1956, portions of a carcase of a cow were sold into the Birmingham area by a vendor of horse meat. Although regarded as fit for human consumption purchasers normally used the meat from this shop for feeding pets.

It was later discovered that the cow had been infected with anthrax. The meat concerned was collected and burned and disinfection carried out. Six families were kept under surveillance.

In June the carcase of a cow being dressed at a knacker's yard was later found to be infected with anthrax. Destruction and disinfection were arranged in conjunction with the Veterinary Department and the slaughterman was kept under observation.

No humans developed anthrax.

### **Diphtheria**

Although there were 54 notifications of diphtheria in 1956 only in one patient was the diagnosis confirmed. This was an unimmunised girl aged two years who had spent the greater part of her life in hospitals because of fibrocystic disease of the pancreas. She had a bloodstained discharge from the right nostril. No membrane was visible and the throat was clear. From a nasal swab a virulent mitis organism was obtained before treatment began.

Since 1951 there have been the following numbers of confirmed cases of diphtheria in Birmingham—

<i>Year.</i>				<i>Cases</i>	<i>Deaths</i>
1952	...	...	...	13	2
1953	...	...	...	1	—
1954	...	...	...	3	—
1955	...	...	...	4	2
1956	...	...	...	1	—

Not one of these had been fully immunised and not one of the four who died had received any protective injection whatever.

## Diphtheria Immunisation

### PRIMARY IMMUNISATION

It is most disappointing to find again this year that some 20% of children presented for primary immunisation have already attained school age, and this in spite of general publicity as well as personal approaches to parents of young children known not to be immunised.

There were 17,773 live births in 1955 and by the end of that year 1,216 had completed their primary course of immunisation and a further 9,225 by the end of 1956. Thus, when the children born in 1955 were all between 1 and 2 years old, only 59% had been immunised although all their parents had been individually advised that immunisation should commence when a child reaches eight months.

<i>Year</i>	<i>Number of primary immunisations</i>	<i>Number of live births in the year</i>
1952	17,532	18,301
1953	16,641	18,566
1954	16,973	18,280
1955	16,289	17,773
1956	16,268	18,478

Even to-day, with the value of immunisation widely recognised the above figures demonstrate a year by year discrepancy approaching 2,000 between the number of births and the children immunised.

General practitioners are taking over a steadily increasing proportion of the work.

<i>Year</i>	<i>1950</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>	<i>1954</i>	<i>1955</i>	<i>1956</i>
Percentage of primary immunisation done by general practitioners ...	37%	37%	39%	45%	51%	53%	57%

The combined protection against whooping cough and diphtheria is available only from general practitioners and this field of work is steadily expanding.

<i>Year</i>	<i>1950</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>	<i>1954</i>	<i>1955</i>	<i>1956</i>
Numbers receiving combined protection	349	713	778	1,246	2,083	3,433	5,205

### REINFORCING INJECTIONS

Only 13,166 children were known to have had reinforcing injections during 1956, 25% of this work having been done by general practitioners as compared with 21%, 19%, 15% and 13% in the previous years. The total is again disappointing. A child should have this additional protection before starting school.

DIPHTHERIA IMMUNISATION CARRIED OUT IN 1956 AMONG CHILDREN 0-15 YEARS

Year of Birth	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	Total	Adults	No of Sessions
<b>PRIMARY</b>																		
Welfare Centres ...	280	2,241	464	254	173	121	44	19	8							3,604		568
Schools ...			9	63	105	1,024	1,002	453	137	18	5	5	13	7	5	2,846	9	672
Day Nurseries ...	17	118	47	31	12	2										227		148
Institutions ...		22	25	18	11	16	10	6	3	3	4	6	6	6	5	141	3	62
Council House ...	25	134	22	10	5	2	2		1			1	1		203		48	
General Practitioners, A.P.T. ...	380	2,852	418	166	93	71	37	10	6	4	1	3			4,042	2		
General Practitioners, *D.P.P. ...	628	3,858	488	134	51	31	10	3	1			1			5,205			
<b>TOTAL PRIMARY</b>	1,330	9,225	1,473	676	450	1,267	1,105	491	156	25	10	16	20	13	11	16,268	14	1,498
<b>REINFORCING</b>																		
Welfare Centres ...					593	1,442	174	78	67	7	3		1			2,365		
Schools ...					304	3,424	2,569	683	316	21	18	6	5	6	5	7,357	2	
Day Nurseries ...					14	49										63		
Institutions ...					3	15	8	5	6	2	1	2	1	5	3	51	5	
Council House ...					16	36	7	2								61		
General Practitioners, A.P.T. ...					479	1,919	348	57	13	10	3	9	2	4	3	2,847	3	
General Practitioners, *D.P.P. ...				4	97	262	47	9	3							422		
<b>TOTAL REINFORCING</b>				4	1,506	7,147	3,153	834	405	40	25	17	9	15	11	13,166	10	

\* (D.P.P. is a combined diphtheria and whooping cough immunisation).

DIPHTHERIA IMMUNISATION  
 PERCENTAGES OF IMMUNISED CHILDREN 1—5 YEARS  
 (BASED ON HEALTH VISITORS' RECORDS)

<i>Centre</i>	1952	1953	1954	1955	1956	<i>% age 0—5 yrs. imm's'd 1956</i>
Acocks Green ... ..	78	78.5	79.5	75.4	83.6	68.4
Berrowside ... ..	—	50.0	64.7	69.0	71.5	62.9
Bromford ... ..	76	73.6	83.4	72.9	74.3	61.0
Carnegie ... ..	64	63.8	60.6	63.1	63.1	50.2
Chester Road ... ..	—	—	—	76.1	72.5	62.6
Dawberry Fields ... ..	—	—	—	—	75.2	61.6
Dreghorn Road ... ..	—	—	—	74.4	77.9	67.1
East Meadway ... ..	—	—	—	—	71.0	61.0
Edgewood Road ... ..	—	—	78.6	71.5	67.8	56.5
Erdington ... ..	77	72.7	72.4	75.3	76.5	61.9
Farm Road ... ..	60	62.3	66.4	67.3	63.8	49.6
Fourlands ... ..	—	—	—	—	70.1	57.4
Greet ... ..	76	68.9	70.7	70.8	77.6	61.2
Handsworth ... ..	84	86.4	86.0	88.8	90.6	70.9
Hay Mills ... ..	71	75.3	74.9	78.0	78.0	63.0
Heath Mill Lane ... ..	64	69.3	69.6	66.1	67.6	51.8
Highfield Lane ... ..	—	—	83.3	84.5	87.9	73.9
Hollybank Road ... ..	—	—	—	77.3	86.4	72.5
Hope Street ... ..	53	52.4	53.0	49.4	49.3	39.1
Horrell Road ... ..	70	69.3	72.7	71.5	71.9	59.2
Irving Street ... ..	67	60.8	58.2	55.0	52.4	43.4
Kettlehouse ... ..	80	77.2	70.0	75.1	61.4	49.8
Kings Heath ... ..	76	76.6	78.6	84.8	81.4	61.1
Kingstanding ... ..	75	75.9	76.9	77.4	73.7	60.8
Lancaster Street ... ..	58	64.6	62.7	53.4	60.0	49.2
Lansdowne Street ... ..	74	73.9	71.5	73.8	69.9	56.3
Lea Hall ... ..	70	67.1	65.0	64.8	68.3	56.6
Maypole ... ..	86	88.7	91.0	88.8	78.9	63.9
Monument Road... ..	62	61.3	56.1	54.3	53.7	43.5
Northfield ... ..	73	70.3	74.7	69.0	77.3	65.2
Offmoor Road ... ..	—	—	—	76.5	71.7	66.6
Oscott School Lane ... ..	—	—	75.5	76.4	71.6	60.7
Overbury Road ... ..	—	—	68.9	72.6	81.2	68.4
Quinton Lane ... ..	83	81.4	78.4	81.1	78.1	63.8
The Radleys ... ..	—	—	73.9	65.2	74.0	66.3
Selly Oak ... ..	79	80.6	80.5	81.8	83.0	66.4
Small Heath ... ..	75	72.9	74.0	74.0	74.2	59.1
Stirchley ... ..	76	70.6	73.6	71.7	67.9	56.6
Stoney Lane ... ..	—	—	—	65.0	65.5	51.6
Sutton Street ... ..	60	62.4	63.7	61.0	59.4	47.0
Tower Hill ... ..	91	82.6	89.8	86.0	91.0	73.7
Treaford Lane ... ..	73	72.4	71.7	77.6	77.1	62.7
Trinity Road ... ..	65	70.9	53.3	65.8	60.7	45.8
Washwood Heath ... ..	67	64.5	68.3	67.4	66.2	52.8
Wentworth Road ... ..	88	84.9	86.4	80.9	76.8	64.7
Weoley Castle ... ..	77	74.1	76.2	74.2	73.8	60.0
Westcote Avenue ... ..	—	—	—	61.4	68.4	58.8
West Heath ... ..	—	—	71.6	78.7	79.8	66.1
Yardley Wood ... ..	80	74.9	72.8	75.9	76.0	61.0
Total immunised children of age ... ..	52,305	49,232	48,422	47,286	45,787	Total imm's'd 0—5 yrs 47,270
Percentage of child pop- ulation aged 1—5 years immunised ... ..	71.15%	69.84%	70.3%	69.84%	70.2%	% age of 0—5 pop. 57.0%

## Dysentery

Many more cases of dysentery were recorded in Birmingham during 1956 than ever before, the yearly totals in 1950 and since being—

<i>1950</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>	<i>1954</i>	<i>1955</i>	<i>1956</i>
216	562	110	359	621	514	1,258

The greatest number of cases previously recorded in any year since notification began in 1919 was 621 in 1954.

A rise in the weekly notifications of dysentery in Birmingham began during the week ending 10th February and this followed a steady increase in the total notifications which had been occurring in the country as a whole. The number of dysentery cases notified in Birmingham during the four quarters of 1956 were :—

<i>1st quarter</i>	<i>2nd quarter</i>	<i>3rd quarter</i>	<i>4th quarter</i>
744	305	111	98

*Shigella alkalescense* was isolated from a girl of 12 years. She had recently arrived in England from Jamaica.

In August and October five cases of Flexner dysentery arose in the Summer Lane area. Although the homes of those involved were relatively near one another no connection could be found but generally their standards of hygiene were not good. This particular organism is uncommon here and it was not until the very early part of 1957, when further cases in this area arose, that an Indian household appeared to be a focus of infection and association among children at school possibly also was concerned in the spread.

Dysentery cases showed a typical age distribution.

<i>Sex</i>	<i>0—</i>	<i>1—2</i>	<i>3—4</i>	<i>5—9</i>	<i>10—14</i>	<i>15—19</i>	<i>20—24</i>	<i>25—34</i>	<i>35—44</i>	<i>45—54</i>	<i>55—64</i>	<i>65—74</i>	<i>75+</i>	<i>Total</i>
Males	24	119	102	169	49	13	16	45	32	14	14	9	5	611
Females	40	98	82	146	40	21	28	82	42	26	21	16	5	647

Many notifications were received of patients residing in the south west and north east areas but dysentery sufferers have been recognised in almost all parts of the City. The efficiency of notification of dysentery throughout England and Wales varies in different areas to a greater extent than with most other communicable diseases. This might at least partly explain the apparent heavy incidence in the areas mentioned above.

The increase in dysentery is not unusual in the first quarter of the year since in the six-year period 1950 to 1955 approximately 34% of the total annual notifications occurred in the first quarter of the year compared with 27% in the second quarter and 14% and 25% in the third and fourth quarters respectively.

Detailed enquiries are directed to determine whether or not the infection is transmitted by food. In the south west and north east areas of the City there was no conclusive evidence that any food premises were at fault. Similarly the milk supply and water supply in those areas were carefully checked with negative results.

Infection is derived as a rule from ambulant or convalescent cases and symptomless carriers by direct personal contact or by infection of inanimate articles, such as w.c. seats, door handles, water flushing devices in lavatories, pencils, books, crockery, glasses, etc.

Dysentery is highly infectious and it takes very few of the organisms to infect a child. Personal contact is of paramount importance in the spread of the disease and carriage of infection by food or food utensils plays only a minor part. Personal hygiene requires special attention. Proper cleansing of the hands immediately after using the water closet, as well as before handling children or food would achieve much in the prevention of dysentery. Environmental hygiene is also important both in general and in particular as regards water closets and their seats and provision of adequate washing basins and towels. In recent years, as a result of more laboratory investigations, it has been found that for every clinical case there are many who are carriers of dysentery organisms, without showing any signs or symptoms of illness. The carriers can, however, spread the infection.

There were 46 cases of clinical dysentery in day nurseries during 1956. Apart from three nurseries where there were small outbreaks of between six and 10 children affected, the overall picture was of single cases occurring at long intervals over the year.

### **Encephalitis**

Encephalitis—an inflammation of the brain—is notifiable as infective or post infectious. The infective variety is a primary attack by a virus upon the brain whereas post infectious is usually a secondary attack upon the brain by the same organism as has already caused an illness such as measles.

(a) INFECTIVE ENCEPHALITIS was recognised in 12 patients, 11 of whom died at the following ages.

*Males.* 7 months. 2 years. 29 years. 37 years. 39 years. 57 years.

*Females.* 18 months. 24 years. 61 years. 67 years. 78 years.

The only one who recovered was a boy aged 10 years.



(b) POST INFECTIOUS occurred in three cases. Their sex, age and outcome was as follows.

AGE AND SEX	INITIAL INFECTION	OUTCOME
3 years F.	Measles	Died
4 years. F.	Measles	Died
11 years. M.	Mumps	Recovered

### Food Poisoning

There were 354 cases of food poisoning notified or ascertained in Birmingham during 1956.

Since 1950 there have been the following :

1950	1951	1952	1953	1954	1955	1956
163	116	89	282	417	679	354

The highest incidence was again the last quarter of the year.

		1st quarter	2nd quarter	3rd quarter	4th quarter	Total
1955	...	79	225	124	251	679
1956	...	61	56	116	121	354

The following is a summary of the outbreaks and single cases which occurred, an outbreak being defined as the whole of the cases either probably or certainly derived from a single contaminating or infecting source.

(i) *Outbreaks due to Identified Agents.*

Total Outbreaks ... 5 Total Cases 74

(a) *Salmonella organisms*

	Outbreaks	Cases
Salm. typhimurium	1	2
.. newport ...	1	6
.. stanleyville ...	1	5

(b) *Chemical poison* ... — —

(c) *Staphylococci (including toxin)* ... 1 59

(d) *Cl. botulinum* ... — —

(e) *Other bacteria (including heavy growths of various types)* ... 1 2

(ii) *Outbreaks of Undiscovered Cause.*

Total Outbreaks 20 Total Cases 88

(iii) *Single Cases.*

<i>Agent Identified</i>	74	<i>Unknown</i>	118	<i>Total Cases</i>	192
Salm. typhimurium	...	...	38		
.. typhimurium var. copenhagen			1		
.. heidelberg	...	...	15		
.. panama	...	...	2		
.. stanley	...	...	1		
.. enteritidis	...	...	5		
.. enteritidis var. jena		...	4		
.. thompson	...	...	3		
.. anatum	...	...	1		
B. proteus morgani	...	...	1		
B. subtilis	...	...	3		

#### OUTBREAKS

The two cases of Salm. typhimurium were members of the same household and were presumably infected from the same unknown source.

Between 7th April and 19th April, 1956, a small outbreak (six cases) of Salm. newport arose. No conclusive evidence of a single food being involved could be obtained although the circumstances pointed strongly to such an occurrence.

The five cases of Salm. stanleyville were part of an outbreak resulting from a party in a neighbouring area. Fourteen of the sixteen attending became ill.

Fifty nine persons who all partook of a canteen meal were found to have become ill. This was thought on clinical grounds to be due to toxin but the organism implicated was not detected.

Two persons became ill after consuming pork pies which were made five days previously. The remains of the pies on examination were found to be infected with B.Coli Type I and there were traces of mould in the jelly.

#### SINGLE CASES

The source of infection was never found in the single cases.

Very careful investigation was made of the Salm. heidelberg infections but no direct connection could be established between them. They were geographically widely separated and spaced in time—one case in each month January to June, except for April, six in July, three in August and one in September.

A woman of 85 died in hospital after a four day illness. Salm. typhimurium was isolated from her stools. A lightly boiled duck egg might have caused her infection.

The two cases of Salm. panama were separated by a distance of five miles and an interval of twelve weeks.

All three cases of Salm. thompson were infants aged four, five and eight months. Their onsets were 28th March and 2nd and 23rd May.

The four cases of *Salm. enteritidis* var *jena* were not traced to a single cause but the fourth might have been infected from one of the others who were taken ill one in July and two in September.

Of the five *Salm. enteritidis* cases three were members of a family who infected one another and one other was a hospital maid who almost certainly was infected on the ward.

### **Influenza**

Ten general practitioners in widely spread areas of the City once again kindly agreed to act as "spotters" when suspected cases of influenza arose in their practices during the period November 1955 to April 1956. Paired specimens of blood were obtained from the patients at an interval of 10 to 14 days and subjected to complement fixation tests.

In January to April blood examinations were carried out upon 19 patients who were referred by the "spotters" but in only eight of these was a positive result obtained—

Virus A.P.C.	...	...	...	from two patients.
Influenza virus A	...	...	...	from three patients.
Influenza virus C.	...	...	...	from one patient.
Influenza virus A. and C.	...	...	...	from one patient.
Influenza virus A. and virus A.P.C.	...	...	...	from one patient.

In November 1956, the panel of "spotters" was extended by six members of the Midland Faculty of the College of General Practitioners. A nose and throat swab was to be obtained in addition to the taking of blood specimens.

Fourteen patients were referred by the "spotters" during November and December, 1956, but in only four of these was a positive result obtained—influenza virus "A" from one patient and influenza virus "C" from each of the other three.

Blood from one patient, although negative to influenza virus gave results which indicated a recent infection with psittacosis virus. The patient had two budgerigars and, as their blood proved negative, the source of his infection was unknown.

The Principal School Medical Officer and industrial medical officers were also prepared to report any suspected prevalence of influenza coming to their knowledge, but no such reports were made.

Especially in the last two months of the year there was a remarkably low level of respiratory illness.

### **Malaria**

Six notifications were received—all infections were contracted abroad.

## Measles

During 1956 there were only 590 notifications of measles. This was not unexpected after the heavy incidence during 1955 when 24,714 notifications were received, the largest number since measles became generally notifiable in November 1939. In 1952, 1953 and 1954 the notifications were 9,684, 15,584 and 456 respectively.

At the end of the year weekly notifications began to rise, suggesting that the bi-annual periodicity of measles epidemics is being maintained.

Two girls aged three and four years died both with encephalitis as a complication. They had been healthy children with good home surroundings.

## Meningococcal Infection

There were 85 confirmed cases of this disease—62 among males and 23 among females. No connection was discovered between the patients.

Their ages were—

Sex	0—	1—2	3—4	5—9	10—14	15—19	20—24	25—34	35—44	45—54	55—64	65—74	75+	Total
Males	7	8	5	10	6	6	6	8	—	4	1	1	—	62
Females	4	5	—	3	2	1	1	2	2	1	1	—	1	23

Children up to ten years old accounted for 50% of all cases.

Recent yearly notifications have been—

	1952	1953	1954	1955	1956
Cases ...	56	89	90	70	85
Deaths ...	10	11	2	5	4

## Paratyphoid Fever

Only four cases of paratyphoid arose in Birmingham during 1956. Two cases occurred in females aged 62 years and 12 years and were of the Para B. phage type "Dundee." No definite source of infection could be found. Onset dates were 19th April and 1st May, but home addresses were widely separated. Both patients were discharged from hospital still excreting the organism; the patient aged 62 years still remains a carrier but the girl gave negative specimens four months after the illness first began.

The two cases of paratyphoid in the males were as follows—

Male aged 28 years—native of Aden and had been in England for 11 months. *Salm. paratyphi* "C" was isolated from his urine and stools.

Male aged 39 years—native of Pakistan and had only been in England a few weeks. *Salm. paratyphi* "A" isolated from stools.

## **Pneumonia**

During 1956 the 632 cases of pneumonia notified constituted a new low record. There were 865 and 788 in 1955 and 1954 respectively. 24% of the 632 cases notified were over 65 years of age.

517 deaths were attributed to pneumonia and 337 of these occurred above the age of 65.

As only acute primary and acute influenzal pneumonias are notifiable, the deaths, which are mostly from broncho pneumonia, are not related to the notifications.

## **Poliomyelitis**

The summer of 1956 was poor and on the whole rather cold. It has been suggested that, in some unknown way, this may have accounted for the low incidence of poliomyelitis throughout the country. Of 57 notifications only seven were confirmed and of these six cases were paralytic and one non-paralytic. In the case of the non-paralytic patient no bacteriological examinations for polio virus were carried out—clinical diagnosis only having been made. There were no deaths.

Their ages were—

<i>Males.</i>	21 months.	3 yrs.	3 yrs.	6 yrs.	20 yrs. (non-paralytic)
<i>Females.</i>	4 yrs.	5 yrs.			

The addresses of the patients were scattered over the City and no connection could be found between any of them.

The cases arose in January, April, July, September (2), December (2). Arrangements have been made with Ear, Nose and Throat Surgeons to notify them of districts where poliomyelitis is occurring so that they will avoid calling for children from those districts for tonsil operations.

In the past seven years the numbers of confirmed cases of poliomyelitis in Birmingham have been :—

1950	1951	1952	1953	1954	1955	1956
442	52	48	40	17	84	7

## **Vaccination against Poliomyelitis**

On 19th January 1956, the Ministry of Health announced that a British vaccine had been prepared which was believed to confer a degree of protection against paralytic poliomyelitis. It was offered without charge to local health authorities and parents of children born between 1947 and 1954 inclusive were approached through schools, welfare centres and the press and invited to apply for vaccination for their children.

In Birmingham there were 145,000 children in this age group and, in spite of one batch of a somewhat similar vaccine having actually caused a series of cases of poliomyelitis in America in April and May, 1955, there were 43,527 children (i.e., 30%) in the eligible age group whose parents requested vaccination, having been assured that adequate safeguards had been taken to avoid a similar tragedy. A good deal of public

confidence was won by the publication of details as to the elaborate precautions being taken to ensure the safety of the British vaccine.

Only two batches of vaccine comprising 4,096 and 3,902 doses were made available during May and June for Birmingham children. The Ministry of Health instructed that this was to be used only for children born in May, August and November in each of the years 1947-54 and March and October in each of the years 1951-54.

By the end of June, when vaccination was suspended for the summer months, 3,286 children had received the full course of two injections and 1,439 children had received only one injection. Vaccination was resumed in December on receipt of 1,644 doses of vaccine and before the year end there had been given three first injections, and second injections had been given to 1,129 children who had the first in June. The surplus could be used in any way convenient and so 205 first injections to children aged two to five years, with a view to protecting the most vulnerable age group first, and 307 second injections were given.

By mid-January, 1957, when all vaccine issued in 1956 had been used—

4,564	children	had	received	two	injections.
489	..	..	..	one	injection.
38,474	..	..	..	no	injections, although their parents had requested vaccination.

School teachers gave invaluable help with the scheme and an excellent mobile surgery kindly lent and equipped by the St. John Ambulance Brigade was of great value. General practitioners were kept informed of the arrangements although the vaccine was not then available to them.

### Scabies

During the year 1956 there were 496 persons treated at the Scabies Clinic in Bacchus Road—221 men and 275 women and children.

In addition, 99 school children were known to have scabies in 1956 and they were treated by the School Health Service, 233 baths having been given.

Scabies appears to be slightly upon the increase as the following figures show—

				<i>TREATED BY:</i>	
<i>Health Department</i>				<i>School Health Service</i>	
1956	...	...	496	99	
1955	...	...	382	104	
1954	...	...	328	96	
1953	...	...	423	68	
1952	...	...	438	147	

### Scarlet Fever

There were received 612 notifications the smallest number ever recorded. The age group 5—9 years accounted for 58.8% of the patients. Notifications of 224 cases were made in the 1st Quarter.

One death occurred—this was a girl aged four years who died from toxic scarlet fever. There was no history of contact with scarlet fever or sore throats and none of the children in the family or nearby had been ill since this child contracted the illness.

### Smallpox

There were no cases of smallpox in Birmingham during 1956 and no surveillance was required.

### Smallpox Vaccination

The 9,216 persons vaccinated for the first time in 1956 and 2,113 persons who were re-vaccinated were of the following ages—

<i>Age at date of vaccination</i>	<i>Under 1 year</i>	<i>1 year</i>	<i>2—4 years</i>	<i>5 to 14 years</i>	<i>15 years and over</i>	<i>Total</i>
Number vaccinated ...	8,034	226	265	209	482	9,216
Number revaccinated	—	2	37	162	1,912	2,113

A child of seven weeks who was vaccinated on the 8th February, 1956, developed generalised vaccinia on the 18th February, 1956. There was secondary vesiculation around the original vaccination and next day four scattered vesicles on head, arm, leg and buttock developed. The child recovered.

The number of persons vaccinated each year during the past five years have been—

	<i>1952</i>	<i>1953</i>	<i>1954</i>	<i>1955</i>	<i>1956</i>
Primary Vaccination					
Under 1 year ...	6,707	6,896	7,582	7,634	8,034
1 year and over ...	1,190	1,342	1,128	1,075	1,182
Revaccinations	2,147	2,495	1,683	1,673	2,113

These figures include those vaccinations performed specifically to enable persons to travel abroad. (See International Certificates of Vaccination).

Primary vaccinations under one year expressed as a percentage of live births occurring during the year—

1952 — 36·6%    1953 — 37·1%    1954 — 41·5%    1955 — 42·9%    1956 — 43·5%  
 England and Wales for year ending June, 1954 — 34·5%    1955 — 36·4%    1956 — 38·4%

## Typhoid Fever

Only one patient was found to be suffering from this disease during 1956. This was a woman aged 26 years who had been in Jordan and was probably infected there. The patient recovered.

## Venereal Disease, 1956

	<i>Name of Hospital or Clinic</i>	<i>Syphilis</i>	<i>Gonorrhoea</i>	<i>Other Conditions</i>
No. of cases under treatment on 1st January, 1956	General	1,001	381	646
	Children's	2	—	—
	*Lancaster Street	69	3	147
	Summerfield	16	—	1
	TOTALS	1,088	384	794
New cases coming under treatment during 1956	General	183**	982	2,327
	Children's	—	—	26
	*Lancaster Street	22	4	527
	Summerfield	7	2	1
	TOTALS	212**	988	2,881
Total number of attendances during 1956	General	21,651	5,141	8,638
	Children's	2	—	35
	*Lancaster Street	1,661	27	2,504
	Summerfield	475	13	18
	TOTALS	23,789	5,181	11,195
No. discharged after completion of treatment and/or observation	General	175	425	2,322
	Children's	2	—	6
	*Lancaster Street	1	3	632
	Summerfield	—	—	4
	TOTALS	178	428	2,964
No. transferred to other centres	General	35	50	20
	Children's	—	—	16
	*Lancaster Street	8	2	—
	Summerfield	1	—	—
	TOTALS	44	52	36
No. who ceased to attend before completion of treatment and/or observation	General	107	322	84
	Children's	—	—	—
	*Lancaster Street	26	—	12
	Summerfield	8	—	—
	TOTALS	141	322	96

\* Lancaster Street Special clinic closed 31st October, 1956.

\*\* Seven were congenital syphilis, two patients being aged 5—15 years and five patients over 15 years.



NUMBERS OF NEW CASES OF VENEREAL DISEASES TREATED IN BIRMINGHAM YEAR BY YEAR SINCE 1950—BIRMINGHAM RESIDENTS ONLY

<i>Year</i>	<i>Syphilis</i>	<i>Soft Chancre</i>	<i>Gonorrhoea</i>	<i>Other conditions</i>
1950	295	—	462	2,978
1951	208	—	525	2,366
1952	188	—	676	2,364
1953	148	—	571	2,352
1954	135	—	446	2,275
1955	156	—	463	2,431
1956	188	—	875	2,492

**Whooping Cough**

During 1956, 4,563 patients were notified as suffering from whooping cough. 9.5% of these were under one year and 62.5% under five years of age.

The cases were, as in previous years, evenly spread throughout the period.

Eight children died, their ages being 3 weeks, 4 weeks (2), 2 months, 3 months (3), 9 months. There was a strong association with bad housing in this group, the children before infection being reasonably healthy.

Notifications in recent years have been as follows—

	<i>1950</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>	<i>1954</i>	<i>1955</i>
Cases ...	6,172	5,120	6,225	6,049	4,112	2,955
Deaths ...	17	8	13	11	6	5

**Public Health (Aircraft) Regulations 1952**

No health control procedure has been required when an aircraft arrives in this country from the "excepted area" which comprised Ireland, France, Belgium, Holland and Luxembourg. This arrangement gave effect to the reciprocal arrangements made by the original Brussels Treaty Powers and the Irish Republic for the health control of air and sea traffic between their European territories.

In May, 1955, Italy and the Federal Republic of Germany joined the Brussels Treaty Powers in what became the Western European Union. Consequently since 20th June, 1956, the "excepted area" has also included the European territory of Italy and the Federal Republic of Germany, and aircraft from these areas also have not been subjected to routine health control.

The number of aircraft which arrived at Elmdon Airport during 1956 from outside the "excepted area" was—

January to June, 1956 ...	...	...	...	...	68
July to December, 1956 ...	...	...	...	...	52
TOTAL	...	...	...	...	120

**International Certificates of Vaccination**

Under the International Sanitary Regulations, 1952, 4,113 International Certificates of Vaccination against Smallpox, Cholera, Typhoid and Paratyphoid were checked, stamped and countersigned during 1956.

The numbers of Certificates dealt with in preceding years were—

<i>1952</i>	<i>1953</i>	<i>1954</i>	<i>1955</i>
1,419	2,756	3,089	3,291

Cases of Infectious Disease notified and verified during 1956.

Classified according to Sex and Age

AGES

DISEASE	Sex	0-	1-2	3-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75 up	Totals
Diphtheria	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F.	—	1	—	—	—	—	—	—	—	—	—	—	—	1
Dysentery	M.	24	119	102	169	49	13	16	45	32	14	14	9	5	611
	F.	40	98	82	146	40	21	28	82	42	26	21	16	5	647
Encephalitis Acute Infective	M.	1	1	—	—	1	—	—	1	2	—	1	—	—	7
	F.	—	1	—	—	—	—	1	—	—	—	1	1	1	5
Encephalitis Post Infectious	M.	—	—	—	—	1	—	—	—	—	—	—	—	—	1
	F.	—	—	2	—	—	—	—	—	—	—	—	—	—	2
Erysipelas	M.	1	—	1	1	2	—	2	5	15	13	13	4	5	62
	F.	—	—	—	—	—	—	1	5	10	19	32	10	7	84
Food Poisoning	M.	10	9	8	18	8	14	16	22	35	27	23	3	1	194
	F.	13	9	8	16	11	10	10	34	17	14	8	8	2	160
Malaria	M.	—	—	—	—	—	—	2	2	2	—	—	—	—	6
	F.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	M.	14	99	62	110	6	4	2	—	—	—	—	—	—	297
	F.	18	71	73	121	4	3	2	1	—	—	—	—	—	293
Meningococcal Infection	M.	7	8	5	10	6	6	6	8	—	4	1	1	—	62
	F.	4	5	—	3	2	1	1	2	2	1	1	—	1	23
Ophthalmia Neonatorum	M.	309	—	—	—	—	—	—	—	—	—	—	—	—	309
	F.	230	—	—	—	—	—	—	—	—	—	—	—	—	230
Paratyphoid Fever	M.	—	—	—	—	—	—	—	1	1	—	—	—	—	2
	F.	—	—	—	—	1	—	—	—	—	—	1	—	—	2
Poliomyelitis Paralytic	M.	—	1	2	1	—	—	—	—	—	—	—	—	—	4
	F.	—	—	1	1	—	—	—	—	—	—	—	—	—	2
Poliomyelitis Non-Paralytic	M.	—	—	—	—	—	—	1	—	—	—	—	—	—	1
	F.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	M.	13	14	20	22	10	4	10	21	39	54	60	50	22	339
	F.	6	23	15	30	6	3	4	23	39	36	28	41	39	293
Puerperal Pyrexia	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F.	—	—	—	—	—	28	115	158	31	—	—	—	—	332
Scarlet Fever	M.	—	30	64	157	28	6	1	2	1	1	—	—	1	291
	F.	—	28	50	203	25	8	2	2	—	2	—	1	—	321
Smallpox	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid Fever	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F.	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Undulant Fever	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	M.	230	568	599	796	31	1	—	5	—	—	—	—	—	2,230
	F.	203	592	662	820	28	4	—	14	6	1	2	—	1	2,333

## LABORATORY SERVICES

### (a) Analytical Laboratory

The establishment of scientific staff of the Analytical Laboratory comprised 15 members, but one senior post and one junior appointment were vacant during the greater part of the year. Of the effective staff eight hold professional qualifications varying from University degrees to Fellowship of the Royal Institute of Chemistry ; two possess the Higher National Certificate in Chemistry and the remaining three are in various stages of training for membership of the Royal Institute.

The total number of samples of all kinds received during the year was 9,120 and of these 5,554 were submitted by the Sampling Officers appointed under the provisions of the Food and Drugs Act, 1955, which, on the 1st January, 1956, replaced the former Act of 1938. The remaining 3,566 specimens consisted of miscellaneous articles of many kinds and were received both from Corporation Departments and from private sources. The Health Department was naturally the chief contributor to this total, but an important proportion came from the Water, Central Purchasing, Housing Management, Parks, Agricultural and Food Inspection Departments, while Hospital Management Committees and other public bodies, private organisations and persons were also responsible for a considerable proportion of the number.

The samples of foods taken under the provisions of the Food and Drugs Act numbered 4,964, and 2,880 (58%) of these consisted of milk, taken either from farmers' churns delivered at local depots, from carts or vans in the street or from registered milk shops. As milk is probably the most important single foodstuff and furthermore lends itself readily to adulteration, it is unnecessary to contrive other reasons than these for this marked emphasis in sampling.

The lower legal limits of composition, below which a presumption is raised that milk has either been watered or deprived of fat, are laid down in the Sale of Milk Regulations, 1939 ; the fat must not be lower than 3.0% and the non-fatty solids (protein, milk sugar, mineral matter) than 8.5%. The normal composition is in fact very much better than this and during 1956 the milk sold in Birmingham contained an average of 3.67% fat and 8.75% non-fatty solids. But a good deal of variation exists, depending upon the breed of cattle concerned and, to a lesser extent, upon the way the animals are fed. Some breeds produce a larger quantity of rather poorer milk than others which supply smaller amounts.

Most of the poor milk delivered in Birmingham, as elsewhere, was the result of this fact and the term "physiological watering" has been applied to the lowering of non-fatty solids below 8.5% which takes place under such conditions.

Two hundred and thirty-one samples of milk (8.0% of the total) were deficient in either fat or solids-not-fat content, and of these 94 were deficient in non-fatty solids only, 114 in fat only and 23 in both constituents. Only seven samples actually contained added water, the inferiority of the remaining 110 specimens containing less than 8.5% solids-not-fat being due to the above mentioned considerations. For the fourth year in succession the percentages of both the "physiologically watered" samples and those containing physically added water have shown a decrease in comparison with the previous twelve months. The percentages in the former category for 1954-5-6 are respectively 6.5, 5.2 and 3.3, while the percentages of samples actually containing added water were 2.4, 0.8 and 0.3. The deliberate or even careless watering of milk is in fact of very rare occurrence. As a corollary of this phenomenon, the average solids-not-fat again rose and stood at 8.75% as compared with 8.69% in 1955 and 8.65% in 1954.

On only one occasion was it necessary to take legal action in respect of adulterated milk. Two out of four "informal" samples (i.e., specimens taken without the division and sealing necessary if a vendor is to be prosecuted) contained added water to the extent of 13% and 6%. Official formal samples were thereupon taken four days later during delivery of the milk to a local dairy, and two out of four contained 9% and 4% water. On the following day one of four more samples was adulterated with 4% water, the other three being of satisfactory quality; while on the third day all the four samples were genuine milk. At the subsequent Court proceedings the farmer was absolved from blame so far as the actual watering was concerned, but, as the person who actually sold the milk and received the cheque for it, was fined a total of £10 and paid £3 4s. 6d. special costs.

A sample of milk from another farmer had a freezing point depression of 0.518°C., corresponding with the presence of about 5% added water. It was extremely poor milk by any standard, containing only 8.2 solids-not-fat and 3.0% fat. Two further samples were taken from this source after a cautionary letter had been sent to the farmer recommending him to consult the local Agricultural Advisory Officer. Considerable improvement had taken place; no extraneous water was present, the solids-not-fat were 8.8% and 9.2% and the fat contents 3.1% and 3.6%.

Another specimen of mixed milk from a third farmer contained about 7% added water. In this case an attempt was made to attribute the low solids-not-fat to insufficient watering of the cows, owing to a partial drought of several days' duration. Such a state of affairs would be more calculated to increase, not decrease, the non-fatty solids, and the

farmer himself admitted that a more likely reason for the presence of water was a leak in the cooler. Further samples from this source also were genuine.

One hundred farmers received letters of caution about deficiencies in 181 milk samples, while no administrative action was taken in the case of 44 farmers responsible for 45 samples. In most cases this was due to the fact that other samples forming part of the same consignment were of sufficiently good quality to ensure that the average of the whole was of a reasonable standard.

The deficiencies in fat were usually due to what has, for economic reasons, become standard practice, i.e., unequal intervals between the morning and evening milkings. When these are both of twelve hours' duration, the fat contents of both morning and evening milk are approximately the same, but a short interval between the morning and afternoon milkings followed by a necessarily longer one between the afternoon and morning milkings results in lower percentages of fat in the morning milk and higher percentages in the evening milk. When, as occurs in the spring months, the fat content of milk is normally less than at other seasons of the year, the effect of this inequality of intervals is greater than usual and the number of samples deficient in fat is correspondingly higher. Thus, during the second quarter 80 specimens were deficient in fat only, while only 34 others were reported against for this reason over the remainder of the year.

When the results of analysis appeared to warrant it, farmers were recommended to consult the local Agricultural Advisory Officer on questions of feeding and general maintenance, and in certain instances where results could be checked improvements in quality resulted. Fat deficiencies also were in a few cases reduced by the adoption of an earlier morning milking, but this is obviously not always a feasible proposition.

Samples, other than milk, taken under the Food and Drugs Act by the Sampling Officers, numbered 2,674, and of these 2,084 were classed as foods and 590 as drugs. Thirty-seven articles of food were adulterated, of poor quality, or mislabelled. They included, as usual, samples which had to be referred to the Food Inspection Department, whose officers have powers to inspect stocks and, if necessary, condemn them as unfit for use. Such articles as cocoa, rice, dried apricots and meat spread were found to contain food mites and other insects together with larvae, and containers of apparently great age had gone rusty and contaminated the material inside them. Vinegar was infested with so-called "mother of vinegar," i.e. the acetifying organism, rendering it unsightly and unfit for use.

A number of samples of pork sausage contained less than 65% meat generally accepted, since the repeal of the Meat Products Order, 1952, (which incorporated such a standard), as the minimum amount necessary.

The Food Standards Committee of the Ministry of Agriculture, Fisheries and Food issued a report during the year, after hearing evidence from the interested parties in which they recommended the fixing of a minimum standard of 65% meat for pork sausage and 50% for beef sausage and, in addition, the limitation of the fat content of sausage meat to a maximum of 50%. In view of the fact that it is impossible for the housewife to judge of the actual amount of meat contained in these articles merely by inspection, these recommendations are welcome ones although as yet they have not been implemented in a Standards Order. The requirement regarding the prohibition of an excessive amount of fat is certainly necessary, since during the last year or two the average contained in samples taken has tended to increase. Two sausages submitted during the year were prepared with meat containing two-thirds of its bulk of fat. The producers concerned were persuaded to amend their formulae.

Several complaints had to be made about the use of the term "glucose" as part of the description of foods. The label of a "glucose" cordial, for instance, was misleading in several ways. The word "glucose" was used as if it were synonymous with "liquid glucose," the intention being to give the impression that the article contained the former to the extent of 24%. This figure, however, referred in fact to liquid glucose which contains perhaps one-third of its weight of actual glucose. The words "glucose" and "honey" were given equal prominence on the label, although the amount of the latter present was negligible (1.6%). Thirdly, a statement "based on natural honey" was untrue; if the drink was based on anything in particular, it was based on liquid glucose. This label was revised and more truthful statements substituted for the original ones. The label supplied with a syrup spread incorporated the same error regarding glucose and liquid glucose, while stout containing a maximum of 2% glucose and probably much less exhibited a startling label claiming extra energy and with the word "glucose" in print as large as the word "stout." Similar additions of extremely small amounts of milk sugar to other brands of stout was not considered to justify the statement on the bottles "contains milk sugar."

So-called tea cake mixtures proved to consist merely of sweetened self-raising flour, the only intimation that they were not in fact complete mixes being a statement, away from the main declaration, requiring the purchaser to "add egg, fat and milk." An article of this kind should be sold for what it really is; no objection could then be taken to the printing of a recipe for making tea cakes by the addition of other ingredients. The labelling of such articles is at the moment under discussion by the appropriate panel of the Food Manufacturers' Federation.

Other articles of which complaints were made, resulting in most instances in the correction of misleading labels and an improvement in quality, included fish cakes containing only 22% fish instead of the

statutory 35%. This resulted in the purchase of an official sample, but fortunately no prosecution was needed, the fish content in this sample being 42%. Several samples of flour were deficient in one or more of the nutrients required by the Flour (Composition) Regulations, 1956, to be added to all flour other than wholemeal in certain specified amounts. These include vitamin B1 and nicotinamide, together with iron and chalk.

A sample of margarine was described as containing 25% fresh dairy cream. This type of labelling is forbidden by the Labelling of Food (Amendment) Regulations, 1955; any claim that margarine contains butter cream must state explicitly the amount of butterfat present, for the obvious reason that cream may contain anything from 18% to 60% fat. An ingredient of a lactation food was described in the list of constituents present as "milk powder" whereas in fact it was separated milk powder.

Twenty-nine drugs of a total of 590 samples taken were of sub-standard quality or misdescribed. Samples of ammonia contained considerably less of the stated ingredient than was declared on the label, others of ammoniated tincture of quinine had lost by volatilisation up to 40% of the ammonia originally present, and sal volatile was in one case deficient of no less than 90% both of ammonia and ammonium carbonate.

A specimen of so-called children's aspirin tablets had completely disintegrated and was unusable. Of more importance was the fact that the tablets were coloured in order to make them attractive to children; there is now a whole class of tablets which are tinted for the same purpose and this seems a dangerous practice, in spite of the warning "store out of reach of children" usually printed on the package. Children should not be deliberately taught to confuse drugs with sweets.

Blaud's pills labelled as "Improved Iron Pills. Dr. Blaud's formula, B.P.C." suffered from almost every possible error in labelling and composition. They contained twice the correct amount of iron carbonate, they were not made from the ingredients required by the B.P.C. and they contained oxidised iron in quantity nearly equal to the unoxidised ferrous carbonate present. A very dubious declaration was made on the label of a sample of cod liver oil, which appeared to contravene the provisions of Section 8 of the Pharmacy and Medicines Act, 1941. This prohibits the publication of an advertisement referring to an article in terms calculated to lead to its use in the treatment, among other things, of tuberculosis. The label statement in question included the phrase "for malnutrition, rickets, debility and chest weakness." In the minds of many people "chest weakness" implies a reference to tuberculosis. Incidentally, some of the chemical constants of this sample did not agree with the specifications laid down in the Pharmacopœia.

An eye lotion for which there was, according to the vendor, very little sale, contained a quantity of white mould, surely an undesirable ingredient of such an article. Indigestion and influenza mixtures were

in three cases found to have a composition not agreeing with the formulae on the bottles. Presumably these errors were due to incorrect dilutions of the original stock mixtures. Samples of malt extract were deficient of protein. Potassium bromide tablets contained a 14% excess of the drug, while a solution of the same article, which should have contained 10 grains in 60 minims, contained only eight grains in that volume. The cause of this was said to be the fact that the operator of an automatic filling machine had not been sufficiently careful to make sure that washing water had been completely eliminated from the pipes before starting another series of fillings.

Other drugs not of B.P. standard included bismuth lozenges, calamine lotion, eucalyptus oil, friar's balsam, kaolin poultice, white precipitate ointment and zinc and castor oil cream. Suitable action was taken in each one of the cases listed above, and resulted in the correction of the errors made.

The scheme, described in the report for 1955, whereby the important modern drugs of the British Pharmacopoeia, including scheduled poisons, were to be sampled has been successfully operated since March 1st, 1956. It introduced a new system whereby, with the consent of the local Committee of the Pharmaceutical Society, a pharmaceutically and chemically qualified member of the laboratory staff takes specimens of drugs for examination, upon which confidential reports are made to the Health Committee and to the pharmacists concerned. It is very gratifying to be able to report that, with very few exceptions, the co-operation of the profession has been complete and cordial. Ready access has been given to the great majority of the dispensing departments of the 330 pharmacists in the City, and information regarding stocks held and length of storage has been readily forthcoming. The present policy is to take series of samples of a particular drug or class of drugs from up to 150 dispensaries, and so to obtain a picture of the qualities of the articles supplied by the various manufacturing and wholesale drug houses, together with a very good idea of what a customer is likely to get when he asks for or presents a prescription for a specific drug. Up to the end of the year 750 specimens were obtained in this way and reports on the important group of drugs, the barbiturate family, and on penicillin solution tablets and oral tablets were presented to the Health Committee. Results of analysis and comments on each sample received were sent to the pharmacists concerned, and it is understood that they will take appropriate action when they receive adverse reports on quality. It is our aim to ensure that the supply of drugs to the Birmingham public is of the highest possible quality, and there is little doubt that with the willing help of the local members of the pharmaceutical profession great progress has already been made towards this ideal.

The specimens taken under the scheme are in addition to and not in replacement of the samples of drugs already mentioned, taken under



the Food and Drugs Act by means of random sampling methods. The latter consisted mainly of the simpler well established remedies, e.g., aspirin tablets, camphorated oil, friar's balsam, Seidlitz powder, etc., and about 90 different kinds were included in the list.

Twenty samples of fertilisers and feeding stuffs, taken by the Inspector appointed under the Fertilisers and Feeding Stuffs Act, 1926, were analysed on behalf of the Agriculture Committee, who administer the Act.

Miscellaneous samples of types other than the above-mentioned numbered 3,566. Of this total 1,736 consisted of pasteurised milk and four of cream ; 1,354 of these were submitted by the Birmingham Health Department, and the remainder by neighbouring local authorities with whom special arrangements have been made for the purpose. Two samples from Sutton Coldfield had been inadequately processed or contained raw milk, while less serious irregularities had occurred in the case of two Birmingham samples and three Dudley samples. One hundred and ninety-eight specimens of sterilised milk, comprising 136 from Birmingham and 62 from other authorities were examined by the official " turbidity " test, which indicates whether the milk has been heated to the boiling point for a sufficiently long time. All these samples had been efficiently treated.

In addition to the above, tests were carried out on 70 samples of high temperature sterilised milk submitted by a firm who are making experiments on this comparatively new process.

Two hundred and eighteen samples of ice cream were examined from the point of view of their compliance with the provisions of the Food Standards (Ice Cream) Order, 1953, which require contents of not less than 5% fat, 10% sugar and 7½% milk solids-not-fat. Two samples only were of substandard quality. Of 49 samples of ice lollipops, four contained more than the 1.0 p.p.m. of lead recommended as a maximum by the Food Standards Committee.

Routine analyses of 232 samples of water, taken from local supplies on behalf of the Health Department, were carried out ; this total included a number taken as a result of complaints of quality or of metallic contamination and others taken from flooded cellars and basements suspected of contamination with sewage or trade effluents or have been flooded through a burst water pipe. The Water Department submitted 252 samples of water and five of hydrated lime.

For the Central Purchasing Department 93 specimens, all but three of which consisted of soap, soap powder, etc., were examined. Half of these were samples submitted with tenders for the supply of soaps to the Corporation and the remainder were " check " samples taken from deliveries.

Fifty-eight samples of paint and three of size were submitted by the Housing Management Department and fairly complete chemical analyses

were carried out. This was a task of some magnitude, but very well worth while because of the very large quantity of such material used by the Department concerned.

For the Food Inspection Department nine assorted foodstuffs were examined, and for the Parks Department 19 samples, mostly of grass, were submitted in connection with a series of experiments carried out to determine the value of sewage sludge as a fertilising medium. The grasses had been grown on mixtures of sludge and soil in varying proportions and under difficult conditions, and some interesting correlations were observed between the amounts of metallic constituents of the grass and the quantities and methods of application of the sludges used in the experiments.

The Breast Milk Bank submitted a total of 197 samples for the purposes of detecting the possible presence of water or cow's milk.

The usual variety of articles, both of foods and drugs and of miscellaneous objects, was received from various sources including the Health Department, public bodies, private organisations and persons. The total number comprised in these categories was 227, and included articles as diverse as hair restorers, slimming preparations, golf balls, washing-up water, home-made wine and chocolate cigarettes.

One hundred and ninety-two samples were analysed in connection with the investigation into the amount and extent of atmospheric pollution. These consisted of monthly specimens of water from the eight soot gauges now in operation at various points within the City, together with the same number of " sulphur cylinders " used for the determination of the sulphur trioxide content of the atmosphere.

During the year, several new legal enactments affecting the work of the Department came into operation. Among these were The Food Standards (Butter and Margarine) Regulations, 1955, and The Labelling of Food (Amendment) Regulations, 1955, both of which came into force on January 1st, 1956. The former re-enacted the limits of 16% water in butter and margarine, and 10% butter in margarine, prescribed by the Food and Drugs Act of 1938 but repealed by the new Act of 1955. The new Labelling of Food (Amendment) Regulations impose certain requirements relating to the labelling, marking and advertising of margarine and margarine cheese. The Minister will no longer be responsible, as he was by the terms of the 1938 Act, for the approval of fancy names for margarine, but there is a prohibition against the use of brand or descriptive names or pictorial devices which refer to, or are suggestive of, butter or anything connected with the dairy interest. Claims that margarine contains or is made with cream or milk must be made in a prescribed form and the actual butterfat content must be stated.

The Milk and Dairies (Channel Islands and South Devon Milk) Regulations, 1956, made by the Minister of Agriculture, Fisheries and

Food, and the Minister of Health, acting jointly, came into force on July 1st, 1956. By these Regulations, the use of the descriptions "Channel Islands," "Jersey," "Guernsey" and "South Devon" in connection with milk is restricted to milk containing not less than 4% fat, and the enforcement of the regulations has, since July 1st, been the responsibility of Food and Drugs Authorities.

The Flour (Revocation) Order, 1956, which came into force on September 30th, 1956, revoked among other provisions the definitions of national and national brown flour and bread which appeared in the Flour Order of 1953, and on the same date the new Flour (Composition) Regulations, 1956, came into operation. These provide that all flour intended for human consumption shall when sold contain not less than 1.65 milligrammes of iron, 0.24 milligrammes of vitamin B<sub>1</sub> and 1.60 milligrammes of nicotinamide or nicotinic acid per 100 grammes and, except in the case of wholemeal flour, between 235 and 390 milligrammes of prepared chalk per 100 grammes. The Food Standards Committee has also been invited by the Minister of Agriculture, Fisheries and Food to consider whether more extensive regulations are necessary to protect the consumer of flour and bread, in particular the desirability of a standard of composition for bread, the appropriate amount of the three nutrients, mentioned above, to be present in flour and bread, the case for the present compulsory addition of calcium, the possible compulsory addition of riboflavin (vitamin B<sub>2</sub>) and the question of the labelling and composition of special types of bread and flour.

Minor alterations in the law were enacted by the Food Standards Amendment Regulations concerning tomato ketchup and sauce and curry powder. The maximum allowable copper content of these tomato products is now 20 parts per million of the article as such, instead of as previously 50 parts per million on the total dried solids. The maximum amount of lead permitted in curry powder is now 20 parts per million instead of ten.

A number of Reports were issued by the Food Standards Committee dealing with colouring matters in food, the composition of sausage and sausage meat, the limits of contamination of food by copper, the use of emulsifying and stabilising agents in food and processed cheese and cheese spreads.

The Report on colouring matters was the second making recommendations on this subject, the first having been issued in January, 1955. The supplementary one reviews the representations made to the Committee by trade and other interests and with slight modifications reaffirms the original recommendations. In brief the conclusion arrived at was that the Public Health (Preservatives, etc., for Food) Regulations, 1925-1953, should be amended so as to permit the use of certain specified colours only, instead of as at present the addition of any colouring matter with a few specified exceptions.

A Food Standards Committee report on sausages was issued in May, 1956, in which, after an examination of the need for statutory control in the light of evidence received from the sausage trade and the organisations responsible for the enforcement of food and drugs legislation, recommendations were made that standards should be set up for sausage and sausage meat. A minimum meat content of 65% was proposed for sausages made wholly or mainly with pork, and of 50% for other meat sausages, and a limit of 50% was recommended for the proportion of fat contained in the meat used. Some difference of opinion was evident with regard to the suggestion that the terms "pork sausage" and "beef sausage" should be applicable to articles in which the meat content was only four-fifths pork or beef respectively, but this recommendation was carried by a majority over other members who maintained that these descriptions should only be allowed when the meat content was wholly of the named variety.

In July, 1956, a series of recommendations relating to the use of emulsifying and stabilising agents in food was embodied in a report of the Food Standards Committee. These included proposals for the statutory regulation of such substances by giving official approval to the use of eleven, constituting a "permitted list." It was agreed that only two of these agents should be allowed in bread, and that the addition of emulsifying agents to milk and of thickening agents to cream should be prohibited. Further, specifications of composition and purity should be prescribed for each of the permitted substances and, when prepared for use in food, should carry a statement of their chemical nature.

The Food Standards Committee Report of August, 1956, on the subject of processed cheese and cheese spread recommended that regulations should be made governing the composition of these articles, providing respectively in processed Cheddar or Cheshire cheese, processed cheese, and cheese spread, minimum butterfat contents of 48% on the dry matter, 45% on the dry matter and 20% on the product as sold. The recommended maximum moisture contents of the three types were 42%, 45% and 60%. This Report was the second made by the Committee on the same subject and the standards now chosen are, as a result of criticisms made by various organisations, slightly different from the original ones.

Finally, a Report of the same Committee, issued in January, 1956, made certain recommendations regarding the permissible amounts of copper in foods and drinks, the original Report published in 1951 having been the subject of certain representations made by trade and other interests. Briefly, the revised limits are two parts per million for ready-to-drink beverages, and for other foods, with certain exceptions provided for in a separate category, 20 parts per million. The amounts specified for articles in the special category vary from 30 p.p.m. for chicory, coffee, flavourings, etc., to 150 p.p.m. for tea.

## (b) Public Health Laboratory

During 1956 the virological work of the Laboratory has been extended and thanks are due to Dr. B. R. Sandiford, Director, for the following information.

Serological examinations are now available for the diagnosis of infections due to influenza A, B or C, adeno-viruses ("APC"), psittacosis or lymphogranuloma, "Q" fever, lymphocytic chorio-meningitis and mumps. Serological tests for certain other virus infections can also be done by arrangement, amongst which are herpes, poliomyelitis and Coxsackie infections.

An important development during the year has been the introduction of virus cultivations, for which a special laboratory has been equipped, in part by the National Fund for Poliomyelitis Research.

Viruses differ from ordinary bacteria as they will only grow in living cells, so to grow them *in vitro* we must first grow appropriate tissue cultures. The recent introduction of monolayer tissue cultures in test tubes has greatly facilitated this, and has made it possible to examine comparatively large numbers of specimens. An outstanding example of its application is for the examination of faeces for poliovirus. In addition to the diagnostic help in suspected cases of polio afforded to clinicians, the culture technique opens up interesting possibilities for the elucidation of the epidemiology of poliomyelitis. To this end certain laboratories in the Public Health Laboratory Service, amongst which is Birmingham, are undertaking the examination of case contacts and a survey of "normal" stools for poliovirus carriers.

Another development in the Laboratory during the year has been the introduction of chick embryo culture for the detection of certain viruses, particularly influenza virus.

It is stressed that the taking of appropriate specimens, at the right times, is essential in virus investigations. For cultural work, specimens taken within a few days of infection are most valuable. For serological investigations paired sera taken respectively early and late in the course of infection are most desirable. A significant rise in titre will afford a diagnostic result, whereas a single specimen taken after the disease has been going for a week or two often gives a result of dubious value.

SPECIMENS EXAMINED FOR THE CITY OF BIRMINGHAM

<i>Type of Specimen</i>	<i>Totals</i>
Throat swabs ... ..	203
Swabs, various ... ..	244
Sputa for tubercle bacilli ... ..	452
Faeces for pathogenic organisms ... ..	2,973
Bloods for agglutinins ... ..	10
Bloods for leptospirosis ... ..	79
Bloods for serological virus tests ... ..	275
Urines for pathogenic organisms ... ..	71
Milks for hygienic assay ... ..	1,461
Milks for tubercle bacilli ... ..	2,025
Ice creams for hygienic assay ... ..	705
Synthetic creams for hygienic assay ... ..	393
Creams for hygienic assay ... ..	204
Waters for hygienic assay ... ..	1,377
Foodstuffs for pathogenic organisms ... ..	72
Shellfish for hygienic assay ... ..	116
Specimens for virus culture ... ..	91
	10,751

# TUBERCULOSIS

## Notifications

There were 1,136 notifications of new cases of tuberculosis in 1956, giving a rate of 1.02 per thousand population (Table 1). This is a reduction of 133 (10%) compared with 1955, and the lowest total of notifications since before the war; the notification rate is in fact the lowest recorded, since the similar totals in 1936-1940 were drawn from a smaller population.

There was a decline in both respiratory (Table 2) and non-respiratory (Table 3) forms of the disease.

## RESPIRATORY TUBERCULOSIS

There were 1,029 notifications of respiratory tuberculosis in 1956, compared with 1,142 in 1955. There was no real change in the number of notifications for males at 646 instead of 662, while notifications for women declined by nearly 100, from 480 to 383.

Table 4 shows the age groups of notifications of each sex; for males there was some decline in notifications at ages under 20 years and an increase at age 20-24 years with small changes in either direction in older age-groups. In females there was a decline, usually substantial, in all but the youngest (0-4 years) and oldest (over 74 years) age-groups in which there were small increases. It is possible that some of the decline in notifications in the 15-19 year age group of each sex is due to the B.C.G. vaccination scheme for tuberculin-negative school-leavers and the associated x-ray examination of tuberculin-positives. There was no notification in Birmingham during the year of a child who had received B.C.G. under this scheme.

## NON-RESPIRATORY TUBERCULOSIS

There were 107 notifications of non-respiratory tuberculosis in 1956, a decline of 20 compared with 1955.

The major part of this decline was in the more serious disseminated and meningeal forms of the disease which were reduced from 27 to 15. Tuberculosis of bones, joints and spine was also reduced from 39 to 28, with little change for other sites. As with respiratory disease, the decline in non-respiratory notifications was confined to women, with the notification in males reduced only from 62 to 61.

## Mortality

There were 161 deaths from tuberculosis in 1956 giving a rate of 0.15 per 1,000 population. This is a decline of 25% compared with 1955 and the ninth consecutive year in which mortality has declined.

Once again the greatest decline in mortality appeared in the younger age groups ; there were two deaths in children under 14 years of age, six at age 15-24, but all older age groups of each sex showed some decline in mortality.

#### RESPIRATORY TUBERCULOSIS

Respiratory tuberculosis deaths declined from 213 to 150. Under the age of 25 years there were five deaths from respiratory tuberculosis ; in two, a boy of 11 years and a woman of 24 years the diagnosis was made only at post-mortem examination, and both had miliary disease ; two patients in their early twenties died from disease which had been extensive on diagnosis ten years previously, and the other death was of a mental hospital patient also in his early twenties. In all older age groups there were substantial reductions in the number of deaths, but the majority of deaths occurred in the older age groups of males—71 in those aged 45-64 years, 27 in those over 64 years of age.

#### NON-RESPIRATORY TUBERCULOSIS

The number of deaths attributed to non-respiratory tuberculosis was 11, the same number as in 1955. Only one of these deaths occurred in a child, a boy of seven months who died of tuberculous meningitis. One man of 24 years died from tuberculosis of the spine originally diagnosed 20 years previously. The localisation of the disease in the other nine cases was meningitis, 1 ; abdomen, 1 ; bone and joint, 1 ; spinal column, 3 ; glands and other parts, 3.

#### DEATH OF PATIENTS NOT NOTIFIED BEFORE DEATH.

Tuberculosis was recorded on the death certificates of 26 persons who were not notified as suffering from tuberculosis ; this is little more than half the corresponding figure for each of the two previous years and suggests that there may have been some improvement in the completeness of notification. The number of posthumous notifications at 17 showed little change from previous years, however.

In nine of the unnotified cases and two of the posthumous notifications it is probable that tuberculosis was not the main cause of death, and in a further 11 the fact that tuberculosis was the cause of death was established only at autopsy. There remain six deaths for whom no notification was received and 15 posthumous notifications.

#### Contact Examinations

The number of examinations of contacts of known cases of tuberculosis was 5,270, an increase of 1,002 over the number performed in 1955. 2,181 examinations were done at the Chest Clinic and 3,089 at the Mass Radiography Unit (Table 9). Most of the examinations at the Clinic were either first examinations, or re-examinations of children under 12



years, while those at the Mass Radiography Unit were mainly re-examinations of persons over 12 years of age. Thirty-nine cases of tuberculosis were found as a result of the examinations at the Clinic, less than 2% of the total examined.

### Tuberculosis Visitors

The tuberculosis visitors, 16 in number, visited patients' homes on 49,760 occasions during the year ; 1,096 of these were first visits following notification, the remainder routine visits to supervise home conditions and to give advice. Material help was arranged in the following ways :—

Beds issued	...	...	...	...	...	...	...	...	366
Nursing materials supplied	...	...	...	...	...	...	...	...	220
Food grants (free milk)	...	...	...	...	...	...	...	...	2,404
Grants for clothing, etc. (Tippetts Bequest Fund)	...	...	...	...	...	...	...	...	66
Chalets provided	...	...	...	...	...	...	...	...	3
Disinfection	...	...	...	...	...	...	...	...	639

The decline in notifications and the more rapid admission of patients to hospital after diagnosis is reflected in the decline in the number of beds issued and of nursing utensils supplied ; for the same reasons the issue of chalets and disinfection of patients' homes were also reduced in number. On the other hand there was an increase in the number of patients to whom assistance was granted in the form of free milk on the grounds of tuberculosis and financial need. Increasing use was also made of the Tippetts Bequest Fund to give material assistance to patients whose needs could not be met from other sources.

### Re-housing

There was again a decline in the number of tuberculous families re-housed during the year, to 201 from 243. 98 of the families were re-housed under the normal " points " scheme, and 103 under the quota scheme for urgent re-housing of tuberculous families in great need.

#### HOUSES ALLOCATED TO TUBERCULOUS FAMILIES: 1946—1956

1946	...	...	...	...	...	...	...	...	79
1947	...	...	...	...	...	...	...	...	215
1948	...	...	...	...	...	...	...	...	234
1949	...	...	...	...	...	...	...	...	148
1950	...	...	...	...	...	...	...	...	196
1951	...	...	...	...	...	...	...	...	349
1952	...	...	...	...	...	...	...	...	402
1953	...	...	...	...	...	...	...	...	367
1954	...	...	...	...	...	...	...	...	333
1955	...	...	...	...	...	...	...	...	243
1956	...	...	...	...	...	...	...	...	201
TOTAL									2,767

A very great deal of work is involved in the assessment of the housing needs of these families, and a total of 801 new applications for re-housing were considered during the year. 535 families were awarded additional "points" for rehousing, and virtually all the cases had been considered for "quota" in addition to 131 brought forward for consideration from earlier years.

### Rehabilitation

The method of working of the Medical Interviewing Committee described on page 87 of the Report for 1953 was revised during the year; the object of the change in method was to enable each patient ready to resume work to be seen by his own physician with the Disablement Resettlement Officer. These meetings are not now held at Whittall Street, but at the Chest Clinic, West Heath Hospital or Yardley Green Hospital, according to the patient's district of residence. The change in method led to some difficulties at first but by the end of the year the new arrangements were working satisfactorily and the recommendations made were as follows:—

Sheltered Factory (Remploi)	...	...	...	...	...	48
Industrial Rehabilitation Unit	...	...	...	...	...	107
Government Training Centre	...	...	...	...	...	65
Rehabilitation with Employer	...	...	...	...	...	25
Open Industry ...	...	...	...	...	...	292
Deferred	...	...	...	...	...	3

### Domiciliary Occupational Therapy

The work has progressed along similar lines to the previous year, with no change in the number of staff employed. Patients continue to appreciate the Centre in Whittall Street not only as a place from which they can collect materials at reasonable prices, but as a place at which they can be socially at ease and find companionship, for the handicraft facilities provide an excellent background. These facts are well shown by the figures of 3,691 visits of patients attending for materials alone and 1,687 visits of patients to use the facilities of the Centre for two or three hours at a time. 2,592 home visits were made, only a small drop on last year's number in spite of a staff vacancy for some months. More patients are being received from the Occupational Therapy Departments of the Sanatoria.

A Christmas party was once again enjoyed by about 100 patients and a floor show was kindly arranged by the Sanatoria League of Friends.

Outwork was given up in the Spring owing to general short-time working. This was not recommenced due to the irregularity of supply. Instead a new scheme was tried—an enlargement of the usual seasonal activity of cracker-making. This year they were made for the parties at two hospitals. This was highly successful and it is hoped to enlarge it next year.

A handicraft competition was held in August and quite a high standard was reached in a large variety of entries, including art and photography.

### Domiciliary Library Service

This service for supplying books to patients at home organised by the Joint Committee of the British Red Cross Society and the Order of St. John of Jerusalem was successfully continued during 1956. Owing to the decline in notifications and the great reduction in waiting lists for hospital beds the need for this service showed some decline, but 147 patients were visited during the year and 7,125 books were issued.

Many patients live some distance from the City Centre and considerable travelling is involved in visiting them at regular two or three week intervals; the introduction of petrol rationing at the end of the year necessitated longer intervals between visits but larger numbers of books were issued at each visit. The collection of books available has been enlarged, and the library at the Domiciliary Occupational Therapy Centre has been maintained and supplied.

This service is greatly appreciated by patients, and there have been useful links with the Hospital Library Service under the same auspices.

### Dental Work

A weekly dental clinic for patients with infectious tuberculosis was held throughout the year. Over 400 patients were seen during the year, by far the commonest treatment required being extraction, but the full range of dental work was performed as needed.

### Statistics

#### TUBERCULOSIS—ALL FORMS

TABLE 1

#### PRIMARY NOTIFICATIONS AND DEATHS FOR THE YEARS 1901—1956

	<i>Primary Notifications</i>	<i>Rate per 1,000 population</i>	<i>Deaths</i>	<i>Rate per 1000 population</i>
1901—1910 (average)	—	—	1,309	1.65
1911—1920 ( „ )	—	—	1,284	1.46
1921—1930 ( „ )	1,824	1.91	1,031	1.08
1931—1940 ( „ )	1,284	1.24	883	0.85
1941—1945 ( „ )	1,258	1.29	793	0.82
1946	1,300	1.28	689	0.68
1947	1,407	1.31	748	0.70
1948	1,294	1.18	696	0.63
1949	1,285	1.16	647	0.58
1950	1,253	1.12	518	0.46
1951	1,326	1.19	418	0.38
1952	1,384	1.24	303	0.27
1953	1,386	1.24	279	0.25
1954	1,241	1.11	235	0.21
1955	1,269	1.14	224	0.20
<b>1956</b>	<b>1,136</b>	<b>1.02</b>	<b>161</b>	<b>0.15</b>

## RESPIRATORY TUBERCULOSIS

TABLE 2

PRIMARY NOTIFICATIONS AND DEATHS FOR THE YEARS 1901-1956

	<i>Primary Notifications</i>	<i>Rate per 1,000 population</i>	<i>Deaths</i>	<i>Rate per 1,000 population</i>
1901—1910 (average)	—	—	993	1·25
1911—1920 ( .. )	—	—	1,059	1·20
1921—1930 ( .. )	1,533	1·61	892	0·94
1931—1940 ( .. )	1,082	1·05	793	0·76
1941—1945 ( .. )	1,096	1·13	712	0·73
1946	1,135	1·12	616	0·61
1947	1,223	1·14	691	0·64
1948	1,132	1·03	650	0·59
1949	1,133	1·02	595	0·54
1950	1,133	1·02	486	0·43
1951	1,184	1·07	382	0·34
1952	1,242	1·11	280	0·25
1953	1,241	1·11	264	0·24
1954	1,104	0·99	222	0·20
1955	1,142	1·03	213	0·19
<b>1956</b>	<b>1,029</b>	<b>0·93</b>	<b>150</b>	<b>0·14</b>

## NON-RESPIRATORY TUBERCULOSIS

TABLE 3

PRIMARY NOTIFICATIONS AND DEATHS FOR THE YEARS 1901-1956

	<i>Primary Notifications</i>	<i>Rate per 1,000 population</i>	<i>Deaths</i>	<i>Rate per 1,000 population</i>
1901—1910 (average)	—	—	317	0·40
1911—1920 ( .. )	—	—	224	0·26
1921—1930 ( .. )	290	0·31	139	0·14
1931—1940 ( .. )	202	0·19	90	0·09
1941—1945 ( .. )	162	0·16	81	0·09
1946	165	0·16	73	0·07
1947	184	0·17	57	0·05
1948	162	0·15	46	0·04
1949	152	0·14	52	0·05
1950	120	0·11	32	0·03
1951	142	0·13	36	0·03
1952	142	0·13	23	0·02
1953	145	0·13	15	0·01
1954	137	0·12	13	0·01
1955	127	0·11	11	0·01
<b>1956</b>	<b>107</b>	<b>0·10</b>	<b>11</b>	<b>0·01</b>

TABLE 4 NOTIFICATIONS OF RESPIRATORY TUBERCULOSIS BY  
SEX AND AGE GROUP—1955 AND 1956

<i>Age Group</i>		<i>Males</i>		<i>Females</i>	
<i>Years</i>		<i>1955</i>	<i>1956</i>	<i>1955</i>	<i>1956</i>
0—4	...	41	38	26	41
5—9	...	25	26	43	27
10—14	...	30	22	29	26
15—19	...	59	46	64	46
20—24	...	59	84	71	66
25—34	...	114	102	110	88
35—44	...	95	96	53	41
45—54	...	114	103	45	19
55—64	...	94	85	22	11
65—74	...	22	38	16	13
75—	...	9	6	1	5
ALL AGES	...	662	646	480	383

TABLE 5 NOTIFICATIONS OF NON-RESPIRATORY TUBERCULOSIS  
BY SEX AND AGE GROUP—1955 AND 1956

<i>Age Group</i>		<i>Males</i>		<i>Females</i>	
<i>Years</i>		<i>1955</i>	<i>1956</i>	<i>1955</i>	<i>1956</i>
0—4	...	1	5	6	1
5—9	...	10	3	8	6
10—14	...	7	3	3	3
15—19	...	5	6	8	3
20—24	...	6	9	11	11
25—34	...	19	16	19	14
35—44	...	3	8	5	3
45—54	...	7	7	2	3
55—64	...	1	3	3	1
65—74	...	3	1	—	1
75—	...	—	—	—	—
ALL AGES	...	62	61	65	46

TABLE 6

NOTIFICATIONS OF NON-RESPIRATORY TUBERCULOSIS BY SITE OF  
DISEASE—(ALL AGES, BOTH SEXES)

Disseminated	...	...	...	...	...	...	...	4
Meningitis	...	...	...	...	...	...	...	11
Bones, Joints and Spine	...	...	...	...	...	...	...	28
Abdomen	...	...	...	...	...	...	...	8
Other Organs, including Glands	...	...	...	...	...	...	...	56
TOTAL	...	...	...	...	...	...	...	107

TABLE 7

## DEATHS FROM RESPIRATORY TUBERCULOSIS BY SEX AND AGE GROUP

<i>Age Groups</i>						<i>Males</i>	<i>Females</i>
<i>Years</i>							
0—4	...	...	...	...	...	—	—
5—14	...	...	...	...	...	1	—
15—24	...	...	...	...	...	2	2
25—44	...	...	...	...	...	18	15
45—64	...	...	...	...	...	71	8
65—	...	...	...	...	...	27	6
ALL AGES						119	31

TABLE 8

## PLACE OF BIRTH OF 1,136 INDIVIDUALS NOTIFIED AS SUFFERING FROM TUBERCULOSIS IN BIRMINGHAM IN 1956

<i>British Isles</i>						
England	...	...	...	...	...	886
Scotland	...	...	...	...	...	19
Wales	...	...	...	...	...	20
Ireland	...	...	...	...	...	132
<i>Rest of Europe</i>						
Poland	...	...	...	...	...	4
Hungary	...	...	...	...	...	2
France	...	...	...	...	...	2
Others	...	...	...	...	...	5
<i>Asia</i>						
India	...	...	...	...	...	26
Pakistan	...	...	...	...	...	19
Others	...	...	...	...	...	6 [Includes Arabia, Aden, Cyprus, Iraq (3)]
<i>Africa</i>	...	...	...	...	...	4
<i>America</i>						
West Indies	...	...	...	...	...	9
Canada	...	...	...	...	...	1
Not known	...	...	...	...	...	1
TOTAL						1,136

TABLE 9

RESULTS OF CONTACT EXAMINATIONS PERFORMED  
AT THE CHEST CLINIC DURING 1956

<i>Age Groups in years</i>	<i>Found</i>		<i>Found</i>		<i>Total</i>	<i>Found tuberculous</i>
	<i>Males</i>	<i>tuberculous</i>	<i>Females</i>	<i>tuberculous</i>		
0—5	390	8	344	7	734	15
6—15	421	6	390	5	811	11
16—	245	5	391	8	636	13
All ages	1,056	19	1,125	20	2,181	39

Contacts examined at Mass Radiography Unit : 3,089.

**B.C.G. Vaccination of Contacts Living at Home**

As soon as possible after the discovery of a case of tuberculosis, child contacts are given a Heaf test by the tuberculosis visitors. Three days later the reaction is read at the Chest Clinic by the chest physician in charge of the case. Those who show no reaction are referred to the B.C.G. Clinic which has now been transferred to the Council House as being more convenient for the patients than was the Carnegie Institute. Here the standard Mantoux test is performed and the negative reactors are vaccinated immediately. Babies up to twelve days old are vaccinated without a preliminary skin test and older babies up to the age of six months are given no preliminary Heaf test.

There has been a change in the procedure following vaccination, all those vaccinated receiving a conversion Mantoux test to ensure that they have become positive, following which they are referred again to the chest physician for supervision as contacts.

## STATISTICS, EXCLUDING CHILDREN ADMITTED TO SKILTS

Number of children receiving Mantoux test injection	1,395
Number of children giving positive reaction	122
Number of children giving doubtful reaction	10
Number of children giving negative reaction	1,208
Number of non reactors vaccinated	1,190

Results of conversion Mantoux test three months after vaccination with B.C.G.

Number fully Mantoux tested	764
Number converted	754
Number negative	5 (1 revaccinated)
Number doubtful	5

Not included in the above are three vaccinations by a member of the hospital medical staff of newly-born children in Loveday Street Maternity Hospital and the Queen Elizabeth Hospital.

Included are nurses and other staff of thirteen hospitals who are Mantoux tested and, if necessary, vaccinated by the Public Health Department.

### **Skilts Residential Nursery for Child Contacts of Tuberculosis**

The children admitted to Skilts may be either contacts of tuberculosis in their homes but previous to admission tuberculin negative, or, as in the majority of cases, small babies direct from maternity hospitals where the mothers have had no contact with them since birth, the mothers returning to hospital or home for treatment. The babies are not tuberculin tested before admission but all others are Mantoux tested and, if negative, are given B.C.G. vaccination in the Home. The usual length of stay is six and a half weeks for the older children and eight and a half weeks for babies who take rather longer to convert to tuberculin positive after vaccination.

One hundred and seventy-two children have been admitted throughout the year within the following age groups at the date of admission :—

0—under 6 months	...	...	...	...	100	(The majority between
6—under 12 months	...	...	...	...	14	8 and 12 days old.)
1—under 2 years	...	...	...	...	13	
2—under 5 years	...	...	...	...	20	
5—under 10 years	...	...	...	...	16	
10—under 15 years	...	...	...	...	9	

The proportion of small babies is still high (66·3 per cent. of admissions under one year as against 65·4 per cent. in 1955 and 52·6 per cent. in 1954). The allocation of beds for small babies was officially increased to 20 but most of the year that number was exceeded. On the other hand there was a reduction in the admissions in the older age groups. Many of the older child contacts when tuberculin tested are already tuberculin positive and are therefore not admitted to Skilts.

The health of the children and staff in Skilts has been very good.

Of 170 Mantoux tests on admission, 165 were negative and 5 positive. Two of the latter children were discharged home and two to Yardley Green Hospital. One of these little girls had been B.C.G. vaccinated at Skilts two years previously. When her sister developed tuberculous meningitis and an infection of the knee joint, the family were Heaf tested at home and this child was negative. When, however, she was Mantoux tested in Skilts on admission, she was positive and was therefore transferred to a residential home, her own home conditions being extremely poor.

One hundred and sixty-five children were B.C.G. vaccinated and 161 of these children were positive prior to discharge, two of the Mantoux tests were doubtful and two children were discharged prematurely before their second Mantoux test at Skilts. There were no complications.



The staff are x-rayed six monthly.

Number of children in residence on 1/1/56 ...	28	+one in hospital.
Total admissions during 1956 ... ..	172	
Total discharged during 1956 ... ..	177	
Number of children in residence on 31/12/56	24	

The sources of admission of these children were as follows :—

Direct from their homes ... ..	90
Maternity Hospitals ... ..	79
Other Hospitals ... ..	3

Details of children discharged from Skilts are as follows :—

To their own homes ... 165	To Somerset Road Nursery	1
To foster parents ... 1	To Yardley Green Hospital	2
To adopting parents ... 2	To other hospitals ...	4
To residential homes ... 2		

Conditions for which admitted to other hospitals :—

Urinary infection ... ..	2
Heart murmur for observation ... ..	1
Severe bronchitis ... ..	1

All were discharged home subsequently.

### **B.C.G. Vaccination of School Children**

The arrangements have continued for approaching the parents of 13 years old school children and offering a Mantoux Test followed by B.C.G. vaccination if necessary.

During the year the parents of 16,773 scholars were offered this protection for their children and 12,709 (75·8%) accepted.

There were 12,355 children who received the intradermal Mantoux test dose of 0·1 c.c. of 1/1,000 P.P.D. and whose reaction was read three days later.

Of these, 10,659 (86·3%) were Mantoux negative and 10,630 were immediately vaccinated.

There were 1,674 (13·5%) Mantoux positive.

All children who were not Mantoux tested and all those found to be Mantoux positive were x-rayed, the strong reactors immediately and all others as soon as administratively convenient. Ten children were thus found to have active tuberculosis. Of these seven had given a strongly positive Mantoux reaction, although a total of 409 strong Mantoux reactors were met during the year.

A sample of children at each school who had received B.C.G. vaccination a year previously were also given a Mantoux test with parental consent. Of 758 so examined, 736 (97%) were Mantoux positive.

In connection with this work the vaccination teams paid 406 visits to 171 schools.

### Visitors

Six welcome visitors were doctors from Spain, South Africa, Thailand and Hyderabad. On fourteen occasions medical staff of neighbouring authorities attended to see the procedure adopted in organising the work. There were also 42 student nurses who received practical instruction in the running of the clinics.

## PERSONAL HEALTH SERVICES

### GENERAL COMMENTS

Trends in the activities of a large local government department are interesting particularly when related to the progress of the social services, and reference back to 1946 is very enlightening. Against the background of the work of the social services of the Public Health Department is silhouetted, very clearly, the time-absorbing activities of the staff endeavouring to succour the aged and infirm and also those suffering from illness generally whilst in their own homes.

The graph on page 81 shows the great change which has taken place in the deployment of the staff of the Domestic Help Service alone, as related to the aged and infirm, and gives a clear indication of the extent to which the Department's time is devoted to this needy section of the community, time which, without question, is well spent.

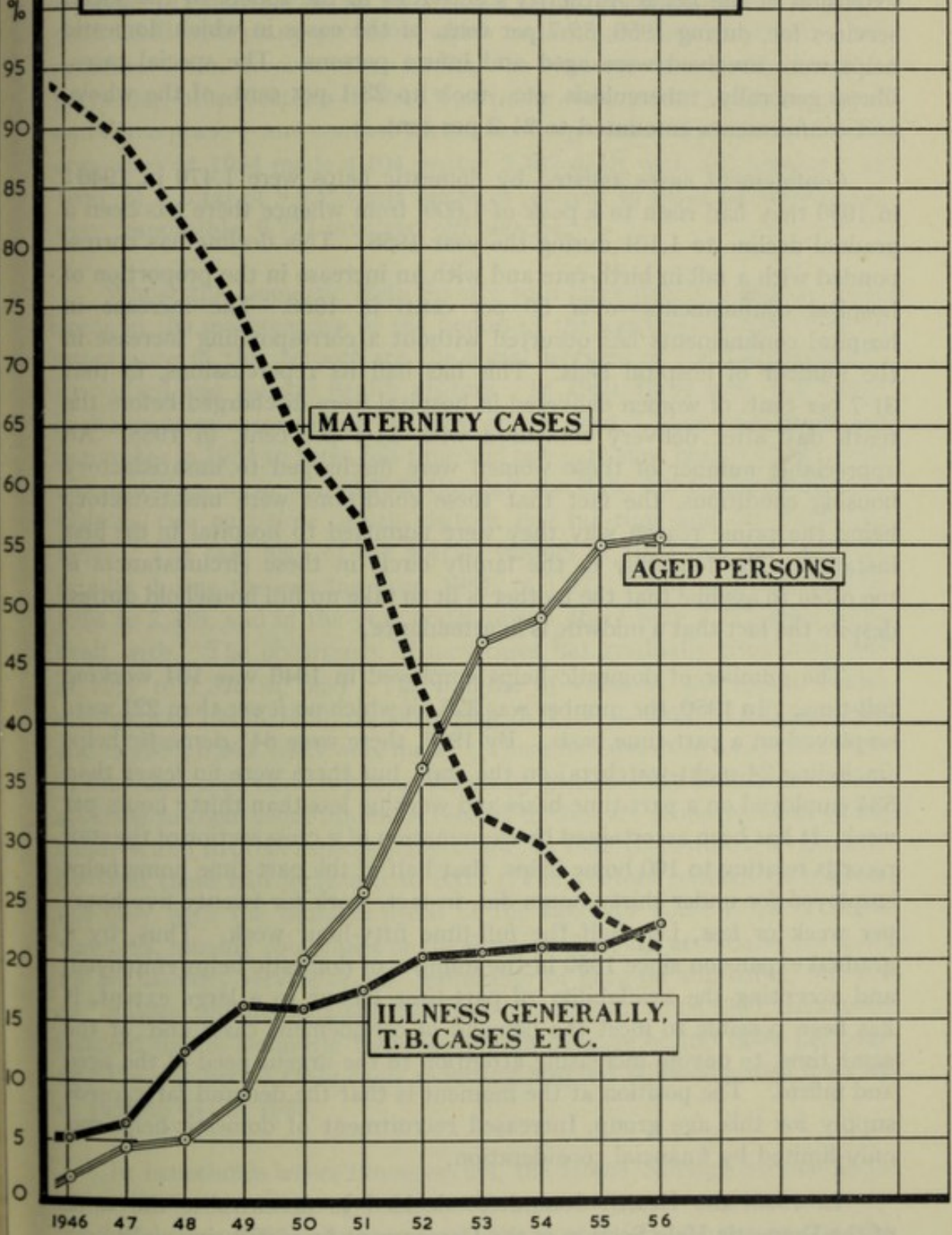
The census of 1931 shows that in this City there were 1,002,603 persons. Of this number, 269,109 persons were in the age group 45 and over, i.e., 26·8 per cent. of the population. In 1951, when the population was 1,112,685, that proportion had risen to 32·0 per cent. of the population, i.e., an increase over 1931 of 5·2 per cent. (87,171 persons). Dealing with the age group 60 and over, the census population for the years 1931 and 1951 was 98,642 and 151,881 respectively, giving percentages in 1931 of 9·8 per cent. and in 1951 of 13·6 per cent. of the total population. Thus, in this age group of 60 and over, there was an increase in the twenty years since 1931 of 3·8 per cent. (53,239 persons).

The birth rate in 1931 was 16·9 per thousand and in 1951 was 16·5. The average birth rate for the years 1931 to 1935 was 15·7, for 1936 to 1940, 16·4; in the war years of 1941 to 1945 the average was 19·9 and in the immediate post-war years of 1946 to 1950, 19·8.

The death rate in 1931 per thousand population was 11·7 and in 1951 was 11·4. The average death rate for the years 1931 to 1935 was 11·2, 1936 to 1940, 11·9, in the war years of 1941 to 1945, 11·9 and in the immediate post-war years 1946 to 1950 the average was 10·8.

Reverting to 1946 and referring to the graph, it will be seen that 93·2 per cent. of the cases dealt with by domestic helps were households where confinements took place. So far as the aged and infirm were concerned, the proportion was 1·7 per cent. and illness generally and special cases amounted to 5·1 per cent. of the total number of cases. In 1948, the year in which the National Health Service Act came into operation, little significant change had taken place. Eighty-two per cent. of the cases being dealt with by the Domestic Help Service were again in the

**TREND OF USE OF HOME HELP SERVICE**



homes where confinements had taken place. The percentage relating to aged persons had increased to 5.1 per cent. and, similarly, cases of general illness, tuberculosis, etc., had risen to 12.5 per cent. The graph further reveals that in the eight years since the operation of the National Health Service Act, there has been a complete change brought about by the extension of the Local Authority's activities in the sphere of the social services for, during 1956, 55.7 per cent. of the cases in which domestic helps were involved were aged and infirm persons. The special cases, illness generally, tuberculosis, etc., took up 23.1 per cent. of the whole, and confinements amounted to 21.2 per cent.

Confinement cases assisted by domestic helps were 1,470 in 1946; in 1950 they had risen to a peak of 1,600, from whence there has been a gradual decline to 1,101 during the year 1956. This decline has corresponded with a fall in birth-rate and with an increase in the proportion of hospital confinements—over 60 per cent. in 1956. The increase in hospital confinements has occurred without a corresponding increase in the number of hospital beds. This has had its repercussions, in that 31.7 per cent. of women delivered in hospital were discharged before the tenth day after delivery compared with 24.4 per cent. in 1955. An appreciable number of these women were discharged to unsatisfactory housing conditions, the fact that these conditions were unsatisfactory being the prime reason why they were admitted to hospital in the first instance. The tendency in the family circle in these circumstances is too often to assume that the mother is fit to take up full household duties, despite the fact that a midwife is in attendance.

The number of domestic helps employed in 1946 was 104 working full-time. In 1950, the number was 325, of which no fewer than 221 were employed on a part-time basis. By 1956, there were 841 domestic helps (including 24 night-watchers) on the staff, but there were no fewer than 534 employed on a part-time basis and working less than thirty hours per week. It has been ascertained by examination of a cross section of the staff records relating to 100 home helps, that half of the part-time home helps employed for under thirty hours did, in fact, work for twenty-five hours per week or less, i.e., half the full-time fifty-hour week. Thus, by a gradual expansion since 1950 in the number of domestic helps employed, and accepting the availability of part-time labour to a large extent, it has been possible to meet the demand of confinement cases and, at the same time, to devote increasing attention to the urgent need of the aged and infirm. The position at the moment is that the demand far exceeds supply for this age group. Increased recruitment of domestic helps was only limited by financial consideration.

In 1953, the Health Committee decided to decentralise the work of the Domestic Help Section of the Department by instituting eight area offices, from which district home help organisers would work under the

supervision of the Home Help Organiser located in the central office. Three district home help organisers were appointed in 1953 and the remainder in 1954. The organisers play an active part in the care of the aged and have daily contact with the specialised health visitors and also with the general duty health visitors in their area of operation, and in addition to supplying, as far as possible, the need for a domestic help, are confronted with many problems which material aid does not meet. The problems often involve other bodies, the National Assistance Board in particular, other sections of the Department—the public health inspector and home nurse—and contact with other Corporation departments. The organisers in 1954 made 4,104 visits; 2,787 dealt with old persons. In 1956, of a total of 9,626 visits made in relation to cases for which they were responsible, 6,727 involved old persons.

Whilst the Domestic Help Service to a large degree meets material needs in the maintenance of the homes of the aged and infirm, of equal importance in this respect are the social workers of the Department—specialised and general health visitors. In 1950, there were two senior health visitors seconded to the care of the aged. They were increased in number in 1954 to three full-time and one part-time health visitor, with one part-time nurse, and in 1956 the staff was three full-time senior health visitors, two part-time health visitors, one full-time and one part-time nurse. The case load of the special visitors in 1950 was 565 and rose rapidly during the ensuing year, 1951, to 1,027. This had increased by 1954 to 2,348, and in the year under review there were 2,711 cases to be dealt with. The occurrence of new cases has gradually risen from 869 in 1951 to 1,328 in 1956. The number of visits by the special health visitors was 789 in 1950, rapidly rising to 3,166 in 1952. In 1954, 4,996 and in 1956, 6,961 visits were made. There has also been a rapid increase in the number of visits to these persons by general duty health visitors, in addition to their usual functions related to the care of mothers and young children and to other aspects of family life. In 1952, there were 189 visits and by 1956 these had increased to 937. The visitors concern themselves not only with the tangible needs of the aged for home helps or night watchers, nursing equipment or the services of a bath attendant, the need for the laundry service or the desirability of hospital admission, but act as "guides, philosophers and friends." Each year, since 1950, they have referred to the Domestic Help Section an average of 150 cases per year and the number of these cases requiring hospital admission rose from 89 in 1950 to 641 in 1956.

In households where illness occurs, the Home Nursing Service plays its part. So far as the aged are concerned, comparative figures are only available since 1953. In that year, the proportion of aged among the whole number of cases attended was 31.2 per cent. In 1956, it was

35.6 per cent. One person in fifty of the population in 1956 received attention from the district nurses and the average number of visits per patient was 30.8. The fact that the district nursing service is being asked to tackle a larger proportion of seriously ill patients is a testimonial to the excellence of the work done. Even so, there is still more scope for the development of this service by earlier discharge from hospital, and the referral of a proportion of the patients now in attendance at hospital out-patient departments to the care of the general practitioners and district nurses. It will be appreciated that the district nurse attends the patient at the request of the doctor, and the number of attendances the patient will receive depends upon the treatment ordered and the general condition of the patient. The nurses can call on the other services of the Department which may help in the comfort of patients in their homes by providing, on loan, equipment such as wheelchairs, stairway chairs, special mattresses, walking sticks, etc., and the Domiciliary Laundry Service, a most useful facility. Of the 646 patients who received the laundry service during the year, 82 per cent. were of pensionable age and, of the remaining 18 per cent. only 4 per cent. were under forty years of age. In July, 1955, an arrangement was made for the bathing of old people at the Department's Cleansing Station in Bacchus Road, and this has now grown into a very useful and much appreciated service. During 1956, the total number of baths given was 489. Sixty individual old people (34 women and 26 men) had benefited from this service which makes a small contribution to the domiciliary care and attention to that particular group of old people who tend to deteriorate through lack of personal cleanliness which, in some cases, has been forced upon them by lack of facilities in the home and physical incapacity.

As mentioned earlier, there were 1,328 new cases seen by the senior health visitors for the care of the aged in 1956. Of these, the larger proportion were in the 75 and over age group, and it was found that 31.7 per cent of this group were living alone, 31.6 per cent were living with relatives and 23.8 per cent with their spouse who were, in the majority of cases, in the same age group. Of the total number 11.8 per cent were found to be bedridden and 7.5 per cent were incontinent.

The Welfare Department is responsible for residential accommodation for aged persons and, where voluntary organisations provide such accommodation, financial assistance is frequently made available to these organisations. The Visiting Service, operated jointly by the Birmingham Council for Old People and the Birmingham Council of Social Service and financed by the Welfare Committee, made visits to approximately 1,000 persons during 1956. Financial assistance is also given by the Welfare Committee to Darby and Joan Clubs, the Sons of Rest and to other voluntary associations providing recreation and meals for aged people.

Handicapped aged people can also benefit from the facilities made available by the Welfare Department in the adaptation of domestic equipment in their own homes.

From the brief survey of the great change which has taken place in the care of the aged during the years since the responsibility for the domiciliary social services has been placed on local authorities, it can be observed that, to say the least, this problem is vast and is by no means diminishing; indeed, it is likely to increase. The development in the local authority social services has brought the staffs into close contact with family life, this together with the additional facilities which have been made available gives further emphasis to the need for personal contact between the various departments of the local authority, government bodies and voluntary organisations, to achieve, as far as they are able the maximum comfort for this most necessitous group of the community. Whilst much has been already achieved by statutory bodies and voluntary organisations, there is still scope for further efforts.

In the other personal health services, the year 1956 was, on the whole, one of consolidation rather than advance.

There was a new low record in the death rate among babies between the ages of four weeks and one year. Elsewhere the record was not so satisfactory. The stillbirth rate was practically the same as in 1955, while the death rate under four weeks of age rose, and this in spite of the fact that a still higher proportion of mothers were booked for hospital delivery.

The proportion of live born premature babies, i.e., weighing 2,500 grammes (5½ lbs.) or less, born in hospital, has increased and this is particularly the case among those babies weighing 2,000 grammes (4 lbs. 6 ozs.) or less where risk of death is very much greater. To rear successfully these very small babies, particularly in the early days of life, calls for a high degree of medical and nursing skill. Progress in the reduction of mortality rates in this field is still very slow,

Owing to pressure of work, it was not possible to arrange a meeting with the consultant obstetricians during the year, but a memorandum was sent to them on the progress of the maternity services in 1955. The Committee set up by the Local Medical Committee to study the causes of stillbirth and neonatal death held monthly meetings. At the time of writing this report their work was not yet complete.

The rise in the illegitimate birth rate continues and has thrown a heavy burden of work on the Department. The increasing volume and complexity of the work necessitated the appointment of an additional full-time worker.

A new day nursery building to replace the day nursery at the Settlement, Summer Lane, was opened in March.



The importance of the early ascertainment of deafness in young children has been referred to in earlier reports. Sufficient staff have now been trained to enable screening tests to take place at all welfare centres.

A small survey of the dental condition of children between the ages of two and five confirms findings elsewhere in the country that only a small proportion of children at the age of five years have sound teeth. As the dental services of the country are already fully occupied, the need for more dental health education is urgent. In 1956 a special effort was made in September to highlight this important matter.

The co-operation of the dental profession and the chemists in the City was appreciated.

Two additional maternity and child welfare centres were opened during the year. The attendance at children's clinics has been well maintained and, indeed, between the ages of one and four years, has shown an increase. In spite of the fact that there was a decrease of four in the number of health visitors working in the field, the number of domiciliary visits to all age groups in the population showed an increase. The health visitors attached to hospitals do excellent work but it is very obvious that their number must be increased if the essential work which is waiting for them is to be fully covered.

It is a pleasure to record appreciation for the very ready co-operation which is received from the medical profession, hospital and general practitioners service, in referring needy cases and assisting in providing care wherever this may be required, to acknowledge the co-operation of other Corporation Departments who have very readily put to right matters which have been of great concern particularly to old people in their homes, and to the voluntary organisations who daily either draw attention to cases where they feel the Department can provide help or, on the other hand, assist in providing help where it is felt their services are necessary.

## MATERNITY AND CHILD WELFARE STATISTICS

For the purpose of this Report the population estimated by the Registrar General is used for the birth rate, but the figures used for the live births, stillbirths, infant and maternal deaths are local figures. Throughout this Report rates printed in italics are based on less than 20 instances.

Thanks are due to the Central Statistical Office for analysing the midwives' and health visitors' records and to Dr. V. M. Crosse, O.B.E., Paediatrician, Birmingham Regional Hospital Board, for help received in investigating the mortality among infants.

There were 18,478 live births and 434 stillbirths among Birmingham residents, making a total of 18,912 births during the year. These figures compared with 17,773 live births and 419 stillbirths in 1955. Of the 18,912 births, 1,718 (9.1 per cent.) were prematurely born. In 1955 the proportion was 9.2 per cent. The live birth rate was 16.6 per 1,000 of the population, which shows an increase over 1955 (16.0). The illegitimate birth rate was 61.9 per 1,000 live births compared with 53.2 in 1955.

The stillbirth rate (22.9 per 1,000 live and still births) is practically the same as in 1955, when the rate was 23.0. The neonatal death rate showed a rise, being 17.6 per 1,000 live births compared with 16.3 in 1955. The death rate between 4 weeks and one year was 7.0 per 1,000 live births, being a new low record. Even so, the death rate in this age period following infection (3.9 per 1,000 live births) showed an increase compared with 1955 (3.2 per 1,000 live births). This increased death rate from infection was only among the premature infants. The death rate from infection among mature infants was the same as in 1955.

The fact that all over the country the stillbirth and neonatal death rates, in contrast to the death rate between four weeks and one year, have, broadly speaking, shown little or no improvement over the past few years has been the subject of comment and discussion. Birmingham has had an experience similar to the rest of the country. When the births are divided into those prematurely born, i.e., weighing 2,500 grammes (5½ lbs.) or less and those births which are mature, it is seen that the stillbirth, neonatal death rates and the death rate between four weeks and one year among the mature infants have shown a slow downward trend. This has been counterbalanced by a rise in these rates among the premature births. This subject is dealt with in greater detail in the section on Prematurity. (page 109).

The maternal death rate, excluding abortions, was 0.48 per 1,000 live and still births. In 1956 it was 0.27. A more detailed discussion of the maternal death rate will be found on page 94).

## BIRTHS

	<i>Live births</i>	<i>Stillbirths</i>
Single births	18,025	377
Twins—both living (208 pairs)	416	—
one living, one dead (29 pairs)	29	29
both dead (12 pairs)	—	24
Triplets		
all live born (2 sets)	6	—
one living, two stillborn (2 sets)	2	4
	18,478	434
	18,478	434

## LIVE BIRTH RATES

1949	18.1	1953	16.6
1950	16.8	1954	16.4
1951	16.5	1955	16.0
1952	16.4	1956	16.6

	<i>Illegitimate births per 1,000 live births</i>		<i>Illegitimate births per 1,000 live births</i>
1949	50.1	1953	50.7
1950	51.5	1954	52.2
1951	47.3	1955	53.2
1952	48.2	1956	61.9

## Mortality Rates

### STILLBIRTH RATE

	<i>Rate per 1,000 total births</i>		<i>Rate per 1,000 total births</i>
1949	22	1953	23
1950	23	1954	22
1951	22	1955	23
1952	20	1956	23

### NEONATAL DEATH RATE

	<i>Rate per 1,000 live births</i>		<i>Rate per 1,000 live births</i>
1949	17.7	1953	18.0
1950	19.2	1954	16.8
1951	19.2	1955	16.3
1952	17.6	1956	17.6

### PERINATAL DEATH RATE (STILLBIRTHS AND DEATHS 0—6 DAYS)

	<i>Rate per 1,000 live births and still births</i>		<i>Rate per 1,000 live births and still births</i>
1951	37.7	1954	35.1
1952	33.3	1955	35.7
1953	37.9	1956	37.4

DEATH RATE 4 WEEKS TO 1 YEAR

				<i>Death rate per 1,000 live births</i>					<i>Death rate per 1,000 live births</i>
1949	...	...	...	13.1	1953	...	...	...	8.1
1950	...	...	...	10.9	1954	...	...	...	7.4
1951	...	...	...	10.5	1955	...	...	...	7.4
1952	...	...	...	9.2	1956	...	...	...	7.0

DEATH RATE 4 WEEKS TO 1 YEAR BY CAUSE

	1955			1956		
	<i>Total</i>	<i>Premature babies (rate per 1,000 premature live births)</i>	<i>Babies over 2,500 gms. (rate per 1,000 live births over 2,500 gms.)</i>	<i>Total</i>	<i>Premature babies (rate per 1,000 premature live births)</i>	<i>Babies over 2,500 gms. (rate per 1,000 live births over 2,500 gms.)</i>
Respiratory infection	2.5	7.1	2.1	2.3	8.9	1.8
Digestive infection	0.5	0.7	0.5	0.7	1.4	0.6
Other infection	0.7	1.4	0.6	0.9	2.1	0.8
Congenital malformations	2.4	5.7	2.1	2.2	2.1	2.3
Other causes (including tuberculosis)	1.4	2.1	1.3	0.9	3.4	0.6
<hr/>						
Total death rate 4 weeks—						
1 year	7.4	17.0	6.6	7.0	17.9	6.1

INFANT MORTALITY RATE

	<i>Birmingham</i>		<i>England and Wales</i>	
	<i>Birmingham</i>	<i>England and Wales</i>	<i>Birmingham</i>	<i>England and Wales</i>
1949	31	32	1953	26
1950	30	30	1954	24
1951	30	30	1955	24
1952	27	28	1956	25

INFANT MORTALITY RATE BY CAUSE

	1954	1955	1956
Respiratory disease ... ..	4.3	3.5	3.8
Diarrhoea and enteritis ... ..	0.6	0.7	0.9
Congenital malformations ... ..	4.9	5.7	5.2
Prematurity ... ..	6.9	6.6	7.2
Atrophy, debility and marasmus ... ..	0.5	0.7	0.1
Injury at birth ... ..	3.0	3.2	3.7
Other causes ... ..	4.0	3.2	3.7
<b>All causes ... ..</b>	<b>24.2</b>	<b>23.7</b>	<b>24.6</b>

LEGITIMACY IN RELATION TO MORTALITY AMONG INFANTS BY CAUSE

	<i>Legitimate live births</i>			<i>Illegitimate live births</i>		
	1954	1955	1956	1954	1955	1956
Infectious disease ... ..	0.3	0.3	0.5	—	—	0.9
Tuberculosis ... ..	—	—	0.1	—	1.1	—
Respiratory disease ... ..	4.0	3.6	3.8	8.4	2.1	6.1
Diarrhoea and enteritis ... ..	0.5	0.7	0.9	3.1	1.1	0.9
Congenital malformations ... ..	5.0	5.6	5.1	3.1	6.2	7.9
Premature birth ... ..	7.0	6.2	6.9	6.3	13.7	12.2
Atrophy, debility, marasmus and atelectasis ... ..	0.6	0.7	0.1	—	1.1	—
Injury at birth ... ..	3.0	3.1	3.7	3.1	6.3	4.4
Other causes ... ..	3.4	2.7	2.2	9.4	6.3	5.3
<b>All causes ... ..</b>	<b>23.7</b>	<b>22.9</b>	<b>23.3</b>	<b>33.5</b>	<b>38.1</b>	<b>37.7</b>

INCIDENCE OF TWIN CONFINEMENTS PER 1,000 MATERNITIES

1953—13.4 per 1,000	1955—15.4 per 1,000
1954—14.1 per 1,000	1956—13.4 per 1,000

STILLBIRTH RATE PER 1,000 BIRTHS

	<i>Twins</i>	<i>Single Births</i>
1953 ... ..	82.0	21.9
1954 ... ..	39.1	21.3
1955 ... ..	54.9	22.0
1956 ... ..	106.4	20.5

PERINATAL AND INFANT MORTALITY RATE (1—12 MONTHS) IN

WELFARE CENTRE AREAS, 1956

(CITY RESIDENTS)

<i>Centre Areas</i>	<i>Perinatal mortality*</i>					<i>Death rate 1-12 months</i>				
	1952	1953	1954	1955	1956	1952	1953	1954	1955	1956
Acocks Green	27.0	33.1	34.7	30.4	33.5	3.2	3.6	3.6	3.9	2.1
Berrowside Road	—	—	44.9	19.5	49.4	—	—	—	4.0	12.8
Bromford	49.1	58.2	52.3	45.5	62.0	4.8	4.7	4.9	5.9	4.9
Carnegie	42.1	48.6	39.5	40.8	36.5	7.4	5.6	10.3	9.7	9.5
Chester Road	—	—	—	87.7	64.5	—	—	—	36.4	4.8
Dawberry Fields Road	—	—	—	—	37.0	—	—	—	—	7.6
Dreghorn Road	—	—	—	35.7	32.9	—	—	—	—	—
East Meadway	—	—	—	—	9.3	—	—	—	—	—
Edgewood Road	—	—	—	34.5	45.3	—	—	—	—	4.3
Erdington	51.2	36.9	28.7	33.0	38.4	8.8	6.8	1.8	3.7	3.6
Farm Road	29.9	37.1	39.3	40.1	28.9	4.4	9.1	10.4	13.8	5.6
Greet	25.6	43.0	40.4	37.7	50.0	5.5	7.1	4.6	—	7.5
Handsworth	42.7	36.1	38.7	17.3	35.3	—	6.5	7.5	15.2	4.0
Hay Mills	34.5	42.1	27.2	38.0	41.8	3.7	10.8	3.9	7.3	8.0
Heath Mill Lane	31.6	46.1	40.6	42.1	49.1	22.4	8.5	12.9	14.3	18.9
Highfield Lane	—	—	27.8	21.7	56.8	—	—	—	—	—
Hollybank Road	—	—	—	—	38.5	—	—	—	—	8.0
Hope Street	22.7	44.0	41.9	47.5	47.5	13.1	9.0	12.2	10.9	6.0
Horrell Road	30.4	24.6	40.6	29.6	35.8	9.9	2.4	4.3	5.7	7.3
Irving Street	26.1	41.5	48.1	39.8	45.4	6.6	4.5	4.5	7.2	9.3
Kettlehouse	21.4	55.7	19.4	34.5	49.6	7.2	12.4	7.4	—	4.7
King's Heath	20.4	27.8	35.4	34.2	17.3	5.6	5.7	3.3	5.8	5.9
Kingstanding	48.4	42.2	32.5	32.2	36.8	3.8	5.9	4.5	2.3	9.4
Lancaster St.	42.0	47.6	41.2	44.7	45.5	12.3	12.2	15.2	14.9	8.8
Lansdowne St.	28.6	52.9	46.5	39.0	51.6	5.4	7.5	15.2	15.3	11.4
Lea Hall	28.3	33.9	46.7	35.7	32.5	14.4	12.1	6.3	4.9	9.1
Maypole	11.4	57.4	33.4	52.6	46.6	11.5	15.8	22.6	—	5.4
Monument Rd.	37.9	48.9	42.3	54.3	39.9	14.0	11.0	12.7	8.0	10.2
Northfield	29.1	37.0	26.9	39.0	35.4	12.1	6.8	6.5	4.2	3.3
Offmoor Road	—	—	—	—	34.5	—	—	—	14.1	—
Oscott School Lane	—	—	—	45.0	16.3	—	—	—	4.7	4.1
Overbury Rd.	—	—	71.4	35.7	21.3	—	—	38.5	12.0	10.7
Quinton Lane	—	—	—	22.1	36.0	—	—	—	—	4.6
Radleys, The	—	—	33.0	18.7	44.2	—	—	—	4.8	—
Selly Oak	37.7	42.1	33.8	30.2	30.3	7.8	6.6	3.4	3.8	11.6
Small Heath	20.5	40.1	27.0	34.5	45.9	6.9	12.7	8.6	9.2	14.1
Stirchley	42.7	29.5	29.3	25.4	25.4	17.0	4.3	6.6	6.5	9.2
Stoney Lane	—	—	—	46.9	32.3	—	—	—	7.9	—
Sutton Street	30.6	38.7	32.9	45.9	38.6	14.7	9.2	8.0	8.8	7.9
Tower Hill	39.7	32.9	50.2	43.3	32.9	—	2.4	2.4	2.5	4.8
Treaford Ln.	30.9	44.2	40.6	23.9	43.1	8.8	6.6	3.3	6.1	5.9
Trinity Road	38.8	27.9	42.1	31.2	41.9	13.2	8.9	9.6	6.0	1.4
Washwood Heath	37.7	39.3	44.7	39.9	42.3	7.7	12.9	7.4	1.5	5.8
Wentworth Road	29.0	34.5	19.2	31.9	33.7	—	—	6.4	—	2.6
Weoley Castle	38.8	35.5	27.8	18.8	28.3	2.8	7.8	2.4	9.5	10.7
Westcote Avenue	—	—	—	60.6	22.1	—	—	—	—	—
West Heath	—	—	18.1	63.2	53.8	—	—	—	11.0	—
Yardley Wood	18.5	25.0	32.8	29.5	45.2	10.7	2.8	2.8	10.0	—

\*Stillbirths plus death 0—4 weeks per 1,000 live and still births.

## THE MATERNITY SERVICES

There were 18,478 live births and 434 stillbirths born to women resident in Birmingham in 1956. There is no information about 207 live births and two stillbirths which occurred outside the City but information is available about all births to Birmingham residents which occurred in Marston Green and Solihull Hospitals. The following remarks, therefore, relate to 18,451 confinements which resulted in 18,271 live births and 432 stillbirths, about which there is information. The tables on which the observations are based are to be found on page 97 onwards.

During the year 12,045 women were delivered in hospital compared with 11,449 in 1955. Of these, 837 were emergency admissions. Only 137 women were confined in nursing homes. The number of domiciliary deliveries was 6,269, i.e. 34.0 per cent. of the total confinements.

This steady increase in the number of hospital confinements, without a corresponding increase in the number of hospital beds, resulted in 3,817 mothers, i.e. 31.7 per cent. of the hospital confinements, being discharged home before the tenth day. In 1955 the proportion discharged early was 24.4 per cent. Even although these women were cared for by domiciliary midwives after discharge, this cannot be said to be a very satisfactory arrangement in that, too often, the family assume that the mother is then fit to resume whole time work in the house in spite of the fact that the midwife is still in attendance. The housing conditions to which the mother is discharged may also be unsatisfactory.

The Bed Bureau run by the Department deals with women who require admission to hospital for social reasons. In 1956, 4,448 applications were received and hospital bookings were made for 2,779 women. Of the remaining 1,669 women, 214 were considered to require beds for social reasons. These were placed on an emergency list which was forwarded to the Regional Hospital Board. Ultimately beds were found for 163 of these women, the remaining 51 having to be confined at home. This is the more unfortunate as there is reason to think that some at least of the 1,455 women who were refused beds because their home conditions were suitable, in fact, did obtain a hospital bed by direct booking with the hospital, thus increasing the pressure on beds.

Although there was a further increase in the proportion of primigravidae booked for hospital delivery, one quarter of those not booked for hospital had to be admitted as emergencies. This is higher than in previous years when the proportion was one-fifth. The proportion of women, having their fifth or more child, booked for hospital delivery (36.7 per cent.) was the same as for 1955, as was the proportion of those not so booked who were admitted as hospital emergencies, i.e., one-tenth.

The definition of the perinatal death rate which has now come into general use is the number of stillbirths and infant deaths under seven days per 1,000 live and still births. This definition has been adopted in this Report. The perinatal death rate is influenced by a number of factors; the health of the mother during pregnancy, the type of labour, the weight of the infant, the age of the mother and the number of her previous confinements. During the past three years the perinatal death rate has shown a tendency to rise and in 1956 was 37.4 per 1,000 live and still births.

Although there has been a rise in the proportion of mothers having their first baby and those who have had at least four previous confinements, the perinatal death rate among these parity groups has shown a reduction. On the other hand, the perinatal death rate among babies whose mothers were having their second, third and fourth child has risen. This may be partly accounted for by the fact that the proportion of births to mothers under 20 years of age has risen from 12.6 per cent. in 1955 to 14.7 per cent. in 1956 and that among mothers having their second, third or fourth child the proportion of births in this age group has risen from 1.2 per cent. in 1955 to 1.7 in 1956.

Although there has been an increase in the proportion of women having premature babies who were delivered in hospital, there is as yet no improvement in the stillbirth and neonatal death rate among these babies. This is referred to in greater detail in the section on Prematurity.

An attempt with only moderate success was made during the year to subdivide the heading toxæmia into those cases where conditions such as albuminuria and oedema occurred, which might or might not have been associated with raised blood pressure, and those cases where raised blood pressure occurred alone either before or after the 28th week. Raised blood pressure was defined as a diastolic pressure over 90. The results, which should be accepted with reserve, are shown in the tables at the end of this section.

During the year a very intensive study has been made into the causes of stillbirths and infant deaths under seven days with a view to ascertaining whether or not these deaths could have been prevented. In this investigation the Department was fortunate in having the assistance of Mr. E. Cope and Mr. W. Mills, Consultant Obstetricians and Dr. V. M. Crosse, Consultant Paediatrician, who were nominated by the Local Medical Committee. Professor J. M. Smellie made funds available to enable arrangements to be made for the postmortem examination of domiciliary stillbirths. There has also been the cordial support of the consultant pathologists who undertook the examinations. The investigation is not yet complete. It is hoped that the results may make some contribution to the reduction of the stillbirth and neonatal death rates.



## **Maternal Mortality**

There were 12 deaths ascribed to pregnancy and childbirth in 1956, which included three deaths following abortion. This gives a maternal mortality rate, excluding deaths due to abortion, of 0.49 per 1,000 live births and 0.48 per 1,000 live and still births.

### **A. Deaths ascribed to pregnancy and childbirth**

#### **1. Not associated with a notifiable birth**

There were five deaths not associated with a notifiable birth. One of these followed an illegal abortion and another followed an operation for termination of pregnancy, advised on the grounds of rhesus incompatibility. The patient had had 12 pregnancies, with only one living unaffected child. The third case was due to haemorrhage from an ectopic pregnancy and the fourth developed a pulmonary embolus while she was in hospital for treatment of hyperemesis. The fifth case was found dead in bed at home and the Coroner's report was that she had developed heart failure due to fulminating toxæmia.

#### **2. Associated with a notifiable birth**

There were seven deaths associated with a notifiable birth. One death was due to adrenal haemorrhage, a rare complication, and two to obstetric shock. Both of these patients were booked hospital deliveries for medical reasons as there had been previous complications.

One patient died from toxæmia of pregnancy. She was admitted to hospital as an emergency two weeks before the expected date of delivery as she had developed a sudden rise in blood pressure. After a normal delivery, she collapsed and died from haemorrhage of the liver.

Three patients died from pulmonary embolism following thrombosis of the leg and pelvic veins.

### **B. Deaths associated with pregnancy and childbirth**

Deaths due to concomitant conditions were five in number. Two mothers died in early pregnancy, one with cardiac failure and one from a rupture of a cerebral aneurysm. In two cases the baby was stillborn, one mother dying of pneumonia and the other of purpura; in both cases the baby was viable. One mother was delivered of a living child and died following delivery from heart failure due to mitral stenosis.

## **DOMICILIARY MIDWIFERY**

### **(a) General Practitioners**

The number of general practitioners doing domiciliary midwifery was 523 (526 in 1955). There were 161 single handed practices, in 16

of which there was also an assistant, and 137 partnerships with or without assistants. The amount of midwifery undertaken varied very much from practice to practice. Ninety-seven of the single handed practices and 37 of the partnerships delivered less than 10 women during the year and only six of the single handed practices did more than 30 cases. (Table, page 104).

### **(b) Domiciliary Midwives**

The City midwives delivered 6,586 women in their own homes and nine women had home deliveries by midwives in private practice in the City. The ambulance midwives attended 141 women in their homes or in ambulances. The domiciliary midwives also attended during the puerperium 4,428 women who had been confined in hospital.

Fifty-nine midwives are trained to instruct mothers in relaxation for natural childbirth. All the full time City midwives have obtained certificates to qualify them to administer gas and air analgesia and 116 sets of apparatus are available. During 1956, 3,688 women delivered at home were given gas and air analgesia by midwives. In 457 of these cases the midwife acted as a maternity nurse. Pethidine was administered to 3,171 women in domiciliary practice. In 383 of these cases, the midwife acted as a maternity nurse.

During the year 29 midwives, who are specially approved as teachers, undertook the district training of 109 pupil midwives studying for the Part II Examination of the Central Midwives Board.

One midwife supervisor and 28 midwives attended refresher courses during the year. Lectures given to the midwives at their monthly meetings by consultant obstetricians included the following subjects:—“Toxaemia of Pregnancy” and “Recent Advances in Paediatrics with Special Reference to Premature Babies,” while colleagues on the staff, including the Chief Public Health Inspector, explained the work of other sections of the Department.

Ninety-six midwives attended for mass radiography during the year.

### **(c) Local Authority Clinics**

(1) ANTENATAL CLINICS. The proportion of expectant mothers attending local authority clinics staffed by local authority medical officers is now 22 per cent. An increasing proportion of women are booked for hospital delivery and receive their antenatal care there. The proportion of expectant mothers for whose antenatal care the general practitioner is responsible remains the same as in 1955, *i.e.*, 35 per cent.

(2) BLOOD TESTS. All women attending local authority clinics have their blood tested for the Wassermann reaction and the Rhesus factor. Some general practitioners also send their patients to these clinics

for the tests. In 1956 the number of women sent was 1,604 compared with 1,561 in 1955.

Thanks are due to the Blood Transfusion Service and the Public Health Laboratory who undertook these tests.

(3) MASS RADIOGRAPHY. All women attending local authority antenatal clinics are given the opportunity of attending the Mass Radiography Centre. The same facility is offered to general practitioners for their patients. In 1956, 6,305 women were examined by miniature film.

(4) RELAXATION CLASSES. Classes are held regularly at 38 centres and are taken by physiotherapists, midwives and health visitors. Mothercraft classes are held in association with these classes.

(5) POSTNATAL EXAMINATIONS. The majority of mothers now attend their own general practitioner for postnatal examination. In 1956, 982 women attended local authority clinics for this examination.

#### (d) Emergency Maternity Service

During the year there were 108 requests for the service, of which 22 were to residents outside the City.

An analysis of the 86 Birmingham cases is given below. Eighteen patients were transferred to hospital and blood transfusion was given in the home on 60 occasions.

<i>Reasons for summoning Emergency Maternity Service</i>	1956	1955	1954
Postpartum haemorrhage and placenta retained ... ..	31	32	38
Postpartum haemorrhage and placenta delivered ... ..	32	28	44
Antepartum haemorrhage ... ..	4	2	4
Eclampsia ... ..	2	—	1
Retained placenta ... ..	8	7	7
Obstetric shock ... ..	—	1	4
Haemorrhage and abortion ... ..	5	4	2
Perineal tear ... ..	4	—	—
Other causes ... ..	—	—	1
			(false alarm)

#### Puerperal Pyrexia and Puerperal Sepsis

Under the Puerperal Pyrexia Regulations, 1951, "any febrile condition occurring in a woman in whom a temperature of 100·4° Fahrenheit (38° Centigrade) or more has occurred within 14 days after childbirth or miscarriage" must be notified to the Medical Officer of Health by the attendant medical practitioner.

The number of notifications during 1956 was as follows :—

Out of City residents confined in City	...	...	...	...	23
Birmingham City cases	...	...	...	...	332
1. Due to conditions of genital tract	...	...	...	...	111
2. Due to extra-genital conditions	...	...	...	...	158
Urinary infection	...	...	...	46	
Mastitis	...	...	...	66	
Influenza	...	...	...	11	
Upper respiratory infection...	...	...	...	16	
Chest infection	...	...	...	15	
Thrombophlebitis	...	...	...	4	
3. Other causes	...	...	...	...	63
					332

### Ophthalmia Neonatorum

During 1956, 539 cases of ophthalmia neonatorum were notified. No impairment of vision occurred in any case notified to the Department.

### Pemphigus

Three cases of pemphigus occurred in domiciliary practice during the year. One of the cases was successfully nursed at home under the care of the family doctor and the district nurse. One infant was transferred to the Skin Hospital and the other to Little Bromwich Hospital. All responded satisfactorily to treatment.

### Statistics

#### CONFINEMENT BY PARITY

<i>No. of previous confinements</i>		<i>Percentage of confinements</i>		
		<i>1954</i>	<i>1955</i>	<i>1956</i>
0	...	37.2	36.4	37.3
1—3	...	52.0	52.3	51.0
4+	...	10.8	11.3	11.7
		100.0	100.0	100.0
		100.0	100.0	100.0

#### RESPONSIBILITY FOR ANTENATAL CARE

	<i>Percentage of births</i>		
	<i>1954</i>	<i>1955</i>	<i>1956</i>
Hospital	52.9	53.7	55.6
General practitioners	34.8	34.8	34.9
Midwife and centre	11.2	10.1	8.2
None or unknown	1.1	1.4	1.3
	100.0	100.0	100.0
	100.0	100.0	100.0

FREQUENCY OF ANTENATAL CARE

	Percentage of births		
	1954	1955	1956
1—2 visits ... ..	2.4	2.5	2.1
3—5 visits ... ..	11.4	10.7	10.5
6—8 visits ... ..	28.6	28.9	29.2
9 and over ... ..	57.2	57.3	57.6
None ... ..	0.4	0.6	0.6
	100.0	100.0	100.0
Number unknown ... ..	4,156	4,438	4,498

MATERNAL MORTALITY RATE

	Rate per 1,000 live and still births (excluding abortions)		Rate per 1,000 live and still births (excluding abortions)	
	Birmingham	England and Wales	Birmingham	England and Wales
1949 ...	0.39	0.82	0.58	0.65
1950 ...	0.73	0.72	0.59	0.58
1951 ...	0.64	0.65	0.27	0.54
1952 ...	0.59	0.59	0.48	0.46

MATERNAL DEATH RATE PER 1,000 LIVE AND STILL BIRTHS  
(INCLUDING ABORTION)

Year	Abortion	Sepsis	Toxaemia	Haem-orrhage	Other puer- peral causes	Total due to puer- peral causes	Maternal deaths due to "associated conditions"
1947	0.20	0.12	0.25	0.04	0.37	0.98	0.57
1948	—	0.09	0.18	—	0.23	0.50	0.50
1949	0.05	—	0.39	—	0.05	0.49	0.68
1950	0.10	0.26	0.16	0.05	0.26	0.83	0.10
1951	0.11	0.05	0.11	0.21	0.27	0.75	0.11
1952	0.21	0.16	0.05	0.11	0.27	0.80	0.27
1953	—	0.10	0.16	—	0.32	0.58	0.37
1954	0.21	0.05	0.27	0.11	0.16	0.80	0.21
1955	0.05	—	0.11	0.05	0.11	0.32	—
1956	0.16	0.11	0.11	—	0.26	0.64	0.26

A. Deaths ascribed to pregnancy and childbirth ... ..	12
1. Not associated with a notifiable birth ... ..	3
Abortion ... ..	2
Ruptured ectopic gestation ... ..	1
2. Associated with a notifiable birth ... ..	9
Toxaemia ... ..	2
Obstetric shock ... ..	2
Pulmonary embolism ... ..	4
Adrenal haemorrhage ... ..	1

Responsibility for antenatal care	Amount of antenatal care			Place of death		
	None	Inadequate	Adequate	Home	Hospital	
					Booked	Emergency
Hospital ...	1	—	3	—	3	1
Hospital and General Practitioner ...	—	—	1	—	1	—
Midwife and General Practitioner ...	—	—	4	1	—	3*
No-one responsible ...	3	—	—	2**	—	1
<b>TOTAL ...</b>	<b>4</b>	<b>—</b>	<b>8</b>	<b>3</b>	<b>4</b>	<b>5</b>

\*Including 1 transferred after delivery.

\*\*Including 1 in home for unmarried mothers.

B. Deaths associated with pregnancy and childbirth ...	...	...	...	...	5
1. Not associated with a notifiable birth ...	...	...	...	...	2
Heart failure ...	...	...	1		
Subarachnoid haemorrhage ...	...	...	1		
2. Associated with a notifiable birth ...	...	...	...	...	3
Lobar pneumonia ...	...	...	1		
Purpura ...	...	...	1		
Heart failure ...	...	...	1		

#### PLACE OF DELIVERY INCIDENCE BY PARITY

				Hospital	Hospital	Domiciliary	Nursing
				booked	emergency		Home
				%	%	%	%
Primigravidae	1956	...	...	84.5	3.8	10.8	0.9
	1955	...	...	83.0	3.3	12.9	0.8
	1954	...	...	80.6	4.0	14.0	1.4
	1953	...	...	79.9	3.7	15.2	1.2
	1952	...	...	77.6	3.7	16.3	2.4
Para. 5+	1956	...	...	36.7	7.3	56.0	—
	1955	...	...	36.8	7.3	55.7	0.2
	1954	...	...	32.8	5.9	60.5	0.8
	1953	...	...	33.8	5.9	60.3	—
	1952	...	...	30.3	4.6	64.7	0.4
All parities	1956	...	...	61.0	4.6	33.6	0.7
	1955	...	...	60.4	4.1	34.8	0.7
	1954	...	...	58.6	4.2	36.1	1.1
	1953	...	...	58.9	3.7	36.1	1.3
	1952	...	...	56.1	3.6	38.4	1.9

**PERINATAL DEATH RATE**  
(STILLBIRTHS + DEATHS 0—6 DAYS)

(a) <i>By Frequency of Antenatal Care</i>								1956	1955
1—2 visits	...	...	...	...	...	...	...	228.5	225.5
3—5 visits	...	...	...	...	...	...	...	76.8	89.2
6—8 visits	...	...	...	...	...	...	...	33.8	32.6
9 and over	...	...	...	...	...	...	...	22.5	22.9
None	...	...	...	...	...	...	...	259.3	189.9
Unknown	...	...	...	...	...	...	...	37.3	29.1

(b) *By Responsibility for Antenatal Care*

	Total births	No. of stillbirths and neonatal deaths		Perinatal death rate	
		1956	1956	1956	1955
Hospital	10,396	443	42.6	41.2	
General Practitioner	6,530	192	29.4	26.8	
Midwife and centre	1,541	31	20.1	24.2	
None	81	21	259.3	189.9	
Unknown	155	10	64.5	88.4	

(c) *By Parity of Mother*

No. of previous confinements	Perinatal death rate	
	1956	1955
0	37.5	37.9
1, 2 and 3	33.3	29.7
4+	53.8	55.0

(d) *By Age of Mother*

	Perinatal death rate	
	1956	1955
16—19 years	37.9	33.7
20—24 years	32.9	32.5
25—29 years	29.4	29.8
30—34 years	39.0	35.0
35—39 years	56.3	45.4
40+	61.6	79.1

**PERINATAL DEATH RATE BY PRIMARY FACTOR**  
1956

	1956		1955	
	Total	Premature Babies (per 1,000 premature births live and still)	Total	Babies over 2,500 grammes (per 1,000 births over 2,500 grammes live and still)
<i>Antenatal causes:</i>				
Toxaemia	5.6	54.8	5.1	0.7
Separation of placenta	4.6	38.9	4.5	1.2
Rhesus incompatibility	0.9	3.5	0.7	0.6
Other maternal conditions	1.8	14.1	1.0	0.5
Other causes	2.9	23.0	1.1	0.9

*Intranatal causes :*

Breech presentation	1.3	4.7	0.9	1.7
Other difficult labour ...	2.0	4.1	1.8	2.6
Other causes	4.0	13.6	3.0	2.9

*Postnatal causes :*

Infection only	0.3	0.6	0.3	0.4
Other ...	0.6	1.8	0.5	0.6
Foetal deformity	6.6	48.9	2.4	7.2
Prematurity only	3.2	34.8	—	3.0
Unknown causes	3.6	23.0	1.7	4.9
All causes ...	37.4	265.8	14.5	35.7

INCIDENCE OF, AND PERINATAL DEATH RATE ASSOCIATED WITH ABNORMALITY IN PREGNANCY OR LABOUR

	1956		1955		
	<i>Incidence per cent.</i>	<i>Perinatal death rate</i>	<i>Incidence per cent.</i>	<i>Perinatal death rate</i>	
<i>Antenatal</i>					
Raised blood pressure occurring alone before 29th week	0.6	112.1	88.7	8.0	63.2
Raised blood pressure occurring alone after 28th week	4.5	53.6			
Other toxæmic conditions	3.1	134.1			
Threatened abortion ...	0.5	219.8	0.4		240.5
Non-toxic antepartum hæmorrhage ...	1.5	187.9	1.3		244.9
Pyelitis ...	0.6	47.2	0.7		—
Anaemia ...	4.8	37.0	5.4		21.6
Varicose veins ...	3.9	23.0	4.0		22.4
Other disease or complication	7.3	91.3	6.1		75.8
Combination of above ...	5.9	79.6	5.8		67.8
No known disease or complication ...	66.1	20.7	64.3		22.3
Antenatal record unknown	4.3	16.4	4.0		29.7
<i>Presentation</i>					
Normal vertex (L.O.A. and R.O.A.) ...	86.9	27.2	87.2		24.0
Occipito posterior ...	4.5	27.5	3.8		32.2
Brow ...	0.1	—	0.1		52.6
Face ...	0.4	363.6	0.4		348.5
Breech ...	3.4	204.7	3.5		227.3
Transverse ...	0.4	231.9	0.4		343.8
Other ...	0.4	141.0	0.3		183.3
Unknown ...	3.9	63.5	4.3		48.0



*Type of Labour*

Spontaneous onset, spontaneous delivery ...	78.9	29.7	79.2	29.7
Spontaneous onset, instrumental delivery ...	3.6	54.1	3.3	51.3
Medical induction, spontaneous delivery ...	2.3	73.6	3.0	39.2
Medical induction, instrumental delivery ...	0.2	76.9	0.3	68.8
Surgical induction, spontaneous delivery ...	6.3	74.6	5.5	75.0
Surgical induction, instrumental delivery ...	0.8	68.0	0.6	70.2
Medical and surgical induction, spontaneous delivery ...	2.1	36.1	2.1	37.7
Medical and surgical induction, instrumental delivery ...	0.2	43.5	0.3	61.2
Caesarean section ...	3.1	77.2	3.0	67.5
Other ...	0.3	457.6	0.5	272.7
Unknown ...	2.2	7.2	2.2	2.5

BIRTHS ASSOCIATED WITH  
ABNORMALITY IN PREGNANCY OR LABOUR BY PLACE OF  
CONFINEMENT

	<i>Percentage Distribution of births</i>			
	<i>Domiciliary</i>	<i>Hospital booked</i>	<i>Hospital emergency</i>	<i>Nursing Home</i>
<i>Antenatal:</i>				
Raised blood pressure occurring alone before 29th week ... 1956	19.8	73.3	6.0	0.9
Raised blood pressure occurring alone after 28th week ... 1956				
Other toxæmic conditions 1956				
All toxæmic conditions ... 1955	11.3	81.6	7.1	—
Threatened abortion ... 1956	17.6	71.4	11.0	—
1955	18.4	73.7	7.9	—
Non-toxic antepartum				
haemorrhage ... 1956	11.0	53.2	35.8	—
1955	5.8	56.1	38.1	—
Pyelitis ... 1956	21.7	73.6	4.7	—
1955	24.0	73.6	2.4	—
Anaemia ... 1956	13.5	84.4	2.0	0.1
1955	14.5	83.5	2.0	—
Varicose veins ... 1956	62.3	36.1	1.5	0.1
1955	60.2	37.4	2.1	0.3
Other conditions ... 1956	11.8	82.7	5.2	0.3
1955	16.2	79.2	4.3	0.2
Combination of above ... 1956	9.1	85.8	5.2	—
1955	11.1	82.8	6.1	—
No known antenatal disease or complication ... 1956				
1955	39.8	57.0	3.0	0.2
1955	42.0	55.1	2.7	0.2
Antenatal record unknown 1956	39.7	31.1	15.4	13.8
1955	40.0	33.0	10.7	16.3

*Presentation*

Normal vertex (L.O.A. and R.O.A.)		...	1956	33.9	62.1	4.0	0.03
			1955	35.0	61.6	3.4	0.02
Occipito posterior		...	1956	41.8	51.6	6.6	—
			1955	43.3	50.4	6.3	—
Brow		... ..	1956	16.7	66.6	16.7	—
			1955	10.5	68.4	21.1	—
Face		... ..	1956	22.1	64.9	11.7	1.3
			1955	13.6	72.7	13.6	—
Breech		... ..	1956	13.9	72.4	13.7	—
			1955	14.3	70.5	15.2	—
Transverse		... ..	1956	2.9	69.6	27.5	—
			1955	3.1	70.3	26.6	—
Other		... ..	1956	12.8	73.1	14.1	—
			1955	13.3	78.3	8.4	—
Unknown		... ..	1956	41.5	35.5	4.8	18.2
			1955	39.6	37.9	5.5	17.0

*Type of Delivery*

Spontaneous onset,			1956	40.5	55.9	3.6	0.03
spontaneous delivery			1955	41.3	55.6	3.1	—
Spontaneous onset,			1956	4.3	84.4	11.3	—
instrumental delivery			1955	9.1	80.3	10.6	—
Medical induction,			1956	20.9	74.3	4.8	—
spontaneous delivery			1955	16.9	80.1	2.8	0.2
Medical induction,			1956	7.7	92.3	—	—
instrumental delivery			1955	3.8	94.2	2.0	—
Surgical induction,			1956	1.3	87.8	10.9	—
spontaneous delivery			1955	1.6	86.5	11.8	0.1
Surgical induction,			1956	2.1	88.4	9.5	—
instrumental delivery			1955	1.7	92.0	6.3	—
Medical and surgical			1956	—	97.7	2.3	—
induction,			1955	0.5	98.4	1.1	—
spontaneous delivery							
Medical and surgical			1956	2.2	95.6	2.2	—
induction,			1955	—	98.0	2.0	—
instrumental delivery							
Caesarean section		...	1956	—	89.2	10.8	—
			1955	—	87.3	12.7	—
Other		... ..	1956	8.5	67.8	23.7	—
			1955	6.2	68.8	25.0	—
Unknown		... ..	1956	39.5	26.1	2.6	31.8
			1955	43.3	23.4	1.2	32.1

ANALYSIS OF NUMBER OF MIDWIFERY CASES FOR WHICH GENERAL  
PRACTITIONERS WERE RESPONSIBLE.

<i>Number of booked midwifery cases</i>	<i>Number of doctors in the practice</i>					
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>8</i>
Less than 10 ...	94	29	8	2	—	1
10—19 ...	37	34	3	2	—	—
20—29 ...	9	20	7	—	—	—
30—39 ...	4	12	9	—	—	—
40—49 ...	1	3	6	2	—	—
50—59 ...	—	1	2	1	—	—
60—69 ...	—	1	2	3	1	—
70—75 ...	—	1	—	—	—	—
Over 75 ...	—	—	1	1	1	—
	145	101	38	11	2	1

ANTENATAL CLINICS HELD BY GENERAL PRACTITIONERS

<i>Where held</i>	<i>Number of Clinics</i>
Maternity and child welfare centre ...	33
Practitioner's surgery with midwife and/or health visitor ...	65
Practitioner's surgery without midwife or health visitor ...	41
	139

ANTENATAL AND POSTNATAL CLINICS

(a) *Local Authority clinics*

<i>Year</i>	(1) <i>Total live and stillbirths notified</i>	(2) <i>Total No. of individual women attending antenatal clinics</i>	(3) <i>(2) as percentage of (1)</i>	(4) <i>Total No. of mothers attending for postnatal examination</i>	(5) <i>(4) as percentage of (1)</i>
1948	21,822	17,283	79	4,830	22
1949	20,499	12,891	63	3,456	17
1950	19,277	10,732	56	2,751	14
1951	18,771	8,868	47	2,397	13
1952	18,667	7,419	40	2,089	11
1953	19,012	6,490	34	1,670	9
1954	18,684	5,184	28	1,309	7
1955	18,192	4,636	25	1,084	6
1956	18,912	4,241	22	1,105	6

1956

Number of antenatal clinics held with medical officer present ... ..	2,238
New expectant mothers booked during year ... ..	3,269
Total individual women attending ... ..	4,241
Total antenatal attendances ... ..	22,146

Number of ante-natal clinics with midwife only ... ..	68
Number of new expectant mothers registered ... ..	139
Number of attendances ... ..	441
Number of primary postnatal cases examined at clinics ... ..	982
Total number of postnatal examinations ... ..	1,123

(b) *General practitioner clinics at welfare centres**Antenatal*

Total of examinations of mothers ... ..	6,992
Number of new mothers registered ... ..	1,215
Number of Rhesus tests taken ... ..	488
Number of Wassermann reaction tests taken ... ..	385

*Postnatal*

Number of new mothers examined ... ..	558
Number of re-examinations ... ..	50

## RELAXATION CLASSES

Classes taken by physiotherapists at 12 centres.

Classes taken by midwives at 21 centres.

Classes taken by health visitors at 5 centres.

Total number of individual mothers attending ... ..	1,974
Total number of sessions held ... ..	1,573
Total number of attendances ... ..	13,522
Total number of attendances at associated mothercraft classes ... ..	10,917

## MASS RADIOGRAPHY EXAMINATION

Number examined by miniature film ... ..	6,305
Recalled for further examination ... ..	130
Failed to attend for further examination ... ..	3
Found normal on further examination ... ..	55
Abnormality shown—further examination requested ... ..	72
Abnormality shown—diagnosed on miniature film ... ..	31

*Analysis of results of survey*

1. <i>Normal cases</i> ... ..	6,199
2. <i>Pulmonary tuberculosis</i>	
(a) Referred to Chest Clinic (for assessment and/or treatment) ... ..	30
(b) Referred to family doctor only ... ..	8
(c) No action necessary ... ..	20
	—
TOTAL ... ..	58

3. <i>Non-tuberculous conditions of heart or lungs</i>					
(a)	Referred to hospital or clinic	...	...	...	3
(b)	Referred to family doctor only	...	...	...	21
(c)	No action necessary	...	...	...	21
	TOTAL	...	...	...	45

### Midwives giving Notification of Intention to Practise

During the year 1956, 398 midwives notified their intention to practise in the City.

Number of City domiciliary midwives *	...	...	...	...	114
Number of independent domiciliary midwives	...	...	...	...	9
Number of midwives in institutions	...	...	...	...	234
Number of midwives in Birmingham Fire and Ambulance Service	...	...	...	...	14
Number of midwives in private nursing homes	...	...	...	...	8
Number of City domiciliary part-time midwives	...	...	...	...	15
Number of independent maternity nurses	...	...	...	...	4
					398

\*Three of the whole time City midwives were transferred to the part time service during the year.

### NUMBER OF MIDWIVES CEASING TO PRACTISE IN THE CITY IN 1956

Number of domiciliary midwives and part-time midwives who left the City in 1956	...	...	...	...	...	14
Number of domiciliary midwives ceasing to practise	...	...	...	...	...	5
Number of Birmingham Fire and Ambulance Service midwives ceasing to practise	...	...	...	...	...	1
Number of hospital midwives ceasing to practise	...	...	...	...	...	71
Number of midwives in nursing homes ceasing to practise	...	...	...	...	...	3
						94

### NUMBER OF DOMICILIARY MIDWIVES IN ACTIVE PRACTICE

	No. in practice 31.12.56	Number retired during year	Number resigned or ceased to practise during year	Deaths	New appointments	No. in practice 31.12.56
<i>Employed by local authority :</i>						
(1) Midwives	111	1	18	2	6	96
(2) Part-time midwives	11	—	1	—	4	14
(3) Ambulance midwives	12	—	1	—	2	13
<i>In private practice :</i>						
(1) Living in City	13	2	—	—	—	11
(2) Living outside City	2	—	—	—	—	2

## Supervision of Midwives

The following visits were paid by the Supervisors of Midwives during 1956 :—

Routine visits to midwives ... ..	105
Special visits to midwives ... ..	369
Visits to stillbirths ... ..	9
Visits after neonatal deaths ... ..	14
Nursing and deliveries supervised ... ..	150
Visits to ophthalmia neonatorum cases ... ..	500
Visits to puerperal sepsis cases ... ..	—
Unsuccessful visits ... ..	115
Number of interviews with midwives ... ..	884
Other interviews ... ..	114
Other visits ... ..	188
Lectures given ... ..	9
Interviews at Bed Bureau ... ..	4,448

### ANALYSIS OF DOMICILIARY CONFINEMENTS ATTENDED BY MIDWIVES

	<i>City Midwives</i>	<i>Private Midwives</i>
1. (a) No. of cases where midwife was engaged and solely responsible ... ..	1,050	—
(b) No. of cases in 1 (a) where for some reason it was necessary to seek a doctor's assistance during labour ... .. (Of these 101 cases the doctor was present at the actual delivery of the child in 27 instances, of which 4 were instrumental deliveries).	101	—
2. (a) No. of cases where the doctor was booked for antenatal and postnatal care under the National Health Service and where the doctor had not expressed a wish to be present at the birth ... ..	4,361	6
(b) No. of cases in 2 (a) where for some reason it was necessary to seek a doctor's assistance during labour ... .. (Of these 405 cases, the doctor was present at the actual delivery of the child in 128 instances, of which 23 were instrumental deliveries).	405	—
3. (a) No. of cases where the doctor, having undertaken antenatal and postnatal care, had expressed a desire to be notified of the onset of labour and his intention was to be present irrespective of whether that labour was likely to be normal or not ... .. (Of these 658 cases, the doctor was present at the actual delivery of the child in 400 instances, of which 8 were instrumental deliveries).	658	2

	<i>City Midwives</i>	<i>Private Midwives</i>
4. (a) No. of cases where the doctor was privately booked to deliver the patient ... .. (Of these 11 cases, the doctor was present at the actual delivery of the child in 6 cases, of which one was an instrumental delivery. The private midwife was in attendance in one case, which was an instrumental delivery).	11	1
5. (a) No. of cases delivered by ambulance midwives (Of these cases, 121 were booked for hospital, 18 were unbooked emergencies and 2 were booked for home confinement).	141	—

REASONS FOR SENDING FOR MEDICAL AID  
MOTHERS

	<i>Midwife booked and solely responsible</i>	<i>Doctor booked for antenatal and postnatal care</i>
Antepartum haemorrhage ... ..	31	46
Chest conditions ... ..	9	10
Essential hypertension ... ..	12	15
Hydramnios ... ..	5	2
Malpresentation ... ..	29	61
Multiple pregnancy ... ..	—	1
Other antenatal conditions ... ..	12	17
Poor general condition ... ..	15	7
Toxaemia ... ..	10	10
Urinary conditions ... ..	1	2
Varicose veins ... ..	1	—
Difficult or prolonged labour ... ..	78	95
Foetal distress ... ..	23	52
Postpartum haemorrhage ... ..	23	26
Laceration of perineum ... ..	230	340
Obstetric shock ... ..	3	6
Premature labour ... ..	36	40
Retained placenta ... ..	12	18
Inflamed breast ... ..	26	15
Other postnatal complications ... ..	23	8
Puerperal pyrexia ... ..	60	61
Thrombosis of leg veins ... ..	29	35
Abortion ... ..	13	9
Social conditions ... ..	20	5
	<hr/> 701	<hr/> 881

CHILDREN

						<i>Midwife booked and solely responsible</i>	<i>Doctor booked for antenatal and postnatal care</i>
Ophthalmia neonatorum ...	...	...	...	...	...	48	175
Premature birth and debility ...	...	...	...	...	...	4	7
Convulsions ...	...	...	...	...	...	3	1
Deformity or malformation ...	...	...	...	...	...	5	1
Jaundice ...	...	...	...	...	...	17	8
Umbilical inflammation ...	...	...	...	...	...	—	4
Inflamed breast ...	...	...	...	...	...	3	—
Skin eruption ...	...	...	...	...	...	15	19
Unsatisfactory condition ...	...	...	...	...	...	48	43
Other causes ...	...	...	...	...	...	43	24
						<hr/> 186	<hr/> 282
						<hr/>	<hr/>

PREMATURITY

All babies weighing 2,500 grammes (5½ lbs.) or less are classed as premature. The proportion of total births which were premature (9·1 per cent.) remained at much the same level as in 1955 (9·2 per cent.).

The stillbirth rate among mature babies over the past five years has shown a tendency to fall although there was a slight rise of 0·3 per 1,000 in 1956. Among premature babies, however, it has risen over the past three years. On the other hand there was a more or less steady fall in the neonatal death rate among prematures and matures until 1956 when the neonatal death rate rose, particularly among the prematures. The stillbirth rate and neonatal death rate among prematures is 12 to 14 times higher than among mature babies. Even after the age of four weeks premature infants have a death rate three times higher than mature infants for the rest of the first year. Here, too, while the death rate has shown a steady fall among mature infants there has been little or no improvement among premature infants and, in fact, the death rate among them has risen over the past three years.

The weight of the premature infant when born influences greatly its chance of survival, the stillbirth and neonatal death rates among babies weighing 2,250 grammes (4 lbs. 15 ozs.) or less being very much higher than among those in the weight group 2,251–2,500 grammes.



This remains true for 1956 ; however, although the proportion of babies born in the lower weight groups was smaller in 1956 than in 1955, the total stillbirth and neonatal death rates among prematures was higher. It is constantly urged that all women suffering from conditions which are likely to produce a premature birth should be delivered in hospital and that those booked for domiciliary confinement who unexpectedly go into premature labour should, if possible, be admitted to hospital before the baby is born. In Birmingham the proportion of premature stillbirths which were booked for hospital delivery has risen steadily over the past four years and the proportion of premature live births weighing 2,000 grammes (4 lbs. 6 ozs.) and under, who were born in hospital has also increased. It is disappointing, therefore, to find no improvement in the total stillbirth and neonatal death rates among the premature group considered as a whole.

Because of this it was thought it would be of interest to examine over the past six years (1951-56) the neonatal death rate of premature babies born in hospital and nursed in the hospital in which they were born. The results are shown in the table on p. 119. It will be seen that there is a marked difference as measured by the neonatal death rate in the results obtained by different hospitals and that this is true whether all prematures are considered or only those weighing less than 2,250 grammes. During these six years, 179 babies were transferred after birth in one hospital to the premature baby unit of another hospital. With two exceptions, all these babies weighed 2,250 grammes or less. The neonatal death rate in this group was 337.0 per 1,000 live births.

The neonatal death rate among babies born at home over the same period is also shown on p. 119. The proportion of babies weighing 2,250 grammes or less was smaller than among the hospital born babies. In view of the differing environmental circumstances, and allowing for the fact that the pregnancy of the women confined at home was likely to be more normal, the results attained were reasonably good.

### **Domiciliary Care of the Premature Infant**

Seven midwives, who have had special training, were engaged in 1956 in the domiciliary care of the premature baby. They are supplied with special equipment for use, where necessary, in the homes. Eight hundred and twenty-nine premature infants were cared for in the following categories, of which a total of 693 infants were looked after by the specially trained midwives.

*Premature baby midwives*

Home confinement and baby after-care at home ... ..	175
Home confinement, care by premature baby midwife and subsequent admission to hospital ... ..	14
Home confinement, care by premature baby midwife, admission to hospital and care by premature baby midwife on discharge	4
Home confinement, admission to hospital and care by premature baby midwife on discharge ... ..	17
Hospital confinement and nursed by premature baby midwife on discharge ... ..	483

*Other Midwives*

Home confinement—not transferred to premature baby midwife	38
Home confinement and admission to hospital ... ..	70
There were 28 infants born in the ambulance en route to hospital	28

HOME CONFINEMENT AND BABY AFTER-CARE AT HOME. There were 175 infants nursed by the premature baby midwife, among which were four sets of twins. The weight distribution was as follows :—

<i>Birth weight</i>	<i>Number</i>
1,501—2,000 grammes ... ..	4
2,001—2,250 grammes ... ..	35
2,251—2,500 grammes ... ..	136

There were two neonatal deaths among them, one at two days and one at eight hours. In both cases the cause of death was prematurity only.

In addition there were 38 babies nursed at home by other midwives. The weight distribution was as follows :—

<i>Birth weight</i>	<i>Number</i>
1,000 grammes or less ... ..	2
1,001—1,500 grammes ... ..	—
1,501—2,000 grammes ... ..	2
2,001—2,250 grammes ... ..	—
2,251—2,500 grammes ... ..	34

The reasons for non-transfer to hospital were :—

Condition good	...	...	...	...	...	...	...	32
Too weak	...	...	...	...	...	...	...	5
Anencephalic—spina bifida	...	...	...	...	...	...	...	1

There were six neonatal deaths :—

Anencephalic and spina bifida	...	...	...	...	...	...	...	10 minutes
Very weak	...	...	...	...	...	...	...	10 minutes
Very weak (23 weeks' gestation)	...	...	...	...	...	...	...	30 minutes
Very weak	...	...	...	...	...	...	...	1 hour
Very weak	...	...	...	...	...	...	...	1 hour
Very weak	...	...	...	...	...	...	...	5 hours

HOME CONFINEMENT—SUBSEQUENT ADMISSION TO HOSPITAL. There were 18 premature infants, including one baby of a twin delivery, who were nursed by the premature baby midwife before admission to hospital. Four of these infants were again nursed by the premature baby midwife on return from hospital. The weight distribution was as follows :—

<i>Birth weight</i>	<i>Number</i>
1,501—2,000 grammes	3
2,001—2,250 grammes	3
2,251—2,500 grammes	12

The reasons for admission to hospital were as follows :—

Poor condition	...	...	...	...	...	...	...	6
Poor condition and feeding difficulties	...	...	...	...	...	...	...	1
Poor condition and cyanosis	...	...	...	...	...	...	...	1
Cyanosis	...	...	...	...	...	...	...	2
Jaundice	...	...	...	...	...	...	...	1
Cerebral irritation	...	...	...	...	...	...	...	1
Osteomyelitis	...	...	...	...	...	...	...	1
Cyst on throat	...	...	...	...	...	...	...	1
? pemphigus	...	...	...	...	...	...	...	1
Whooping cough contact	...	...	...	...	...	...	...	1
Persistent vomiting	...	...	...	...	...	...	...	1
Sclerema	...	...	...	...	...	...	...	1

There were three neonatal deaths among them from the following conditions :—

Mongolism and haemorrhagic disease.

Atelectasis and cerebral haemorrhage.

Intracranial haemorrhage.

The time lapse before admission to hospital was as follows :—

Under 7 hours ... ..	1
7 hours and under 24 hours ... ..	4
1 day ... ..	2
2 days ... ..	4
4 days ... ..	2
5th—14th day ... ..	3
15th—28th day ... ..	2

There were 17 premature infants, among whom were one set of twins and one baby of twin delivery, nursed by other midwives, who were discharged from hospital to the care of the premature baby midwife. The weight distribution was as follows :—

<i>Birth weight</i>	<i>Number</i>
1,001—1,500 grammes ... ..	1
1,501—2,000 grammes ... ..	4
2,001—2,250 grammes ... ..	5
2,251—2,500 grammes ... ..	7

The time lapse before admission is indicated below :—

Under 2 hours ... ..	13
Over 2 and under 6 hours ... ..	3
Over 6 and under 12 hours ... ..	—
Over 12 and under 24 hours ... ..	—
Over 24 hours ... ..	1

The babies were admitted for the following reasons :—

Low birth weight ... ..	3
Low birth weight and hospital booking ... ..	1
Twins—small ... ..	3
Poor condition ... ..	7
White asphyxia ... ..	1
Mother retained placenta ... ..	1
Rhesus baby—jaundiced ... ..	1

There were no neonatal deaths among them.

In addition there were 70 premature infants, including five sets of twins and two babies of twin deliveries, who were admitted to hospital, and whom the premature baby midwife did not attend. The weight distribution was as follows :—

<i>Birth weight</i>	<i>Number</i>
1,000 grammes or less	1
1,001—1,500 grammes	12
1,501—2,000 grammes	28
2,001—2,250 grammes	21
2,251—2,500 grammes	8

The time lapse before admission is indicated below :—

Under 2 hours	50
Over 2 and under 6 hours	19
Over 6 and under 12 hours	1
Over 12 and under 24 hours	—
Over 24 hours	—

The infants were admitted for the following reasons :—

Low birth weight	41
Poor condition	11
Poor home conditions	3
Low birth weight—twins	12
Meningocele	1
Cyanosis	2

There were 14 neonatal deaths among them.

**HOSPITAL CONFINEMENT—BABY NURSED BY PREMATURE BABY MIDWIFE ON DISCHARGE.** There were 483 premature infants in this category, including 22 sets of twins and 36 babies of twin delivery and two are triplet delivery. There were three neonatal deaths as follows :—

Pneumonia and melaena neonatorum at four weeks.

Broncho pneumonia at two weeks.

Asphyxia—discharged second day—re-admitted third day—died fourth day.

There was also a baby re-admitted to hospital who died at two months with whooping cough.

In addition, 18 babies born in 1955 were discharged to the care of the premature baby midwife in 1956.

### **Born in Ambulance**

Among the 28 premature babies born in an ambulance there were 9 neonatal deaths, all under five days. Eleven of these infants were subsequently discharged to the care of the premature baby nurse.

## Follow-up of Premature Infants

The following table supplied by Dr. V. M. Crosse, shows the history up to 1 year of 1,398 premature babies born alive in 1955 :—

<i>Birth weight Group</i>	<i>Up to 2 lbs. 3 ozs. (1,000 g.)</i>	<i>Over 2 lbs. 3 ozs. up to 3 lbs. 4 ozs. (1,500 g.)</i>	<i>Over 3 lbs. 4 ozs. up to 4 lbs. 6 ozs. (2,000 g.)</i>	<i>Over 4 lbs. 6 ozs. up to 4 lbs. 15 ozs. (2,250 g.)</i>	<i>Over 4 lbs. 15 ozs. up to 5 lbs. 8 ozs. (2,500 g.)</i>
Original number in each group	50	99	259	333	657
Neonatal deaths	46	63	43	15	24
Alive at 4 weeks	4	36	216	318	633
Died after 4 weeks and before 1 yr.	1	2	2	7	11
Left City or untraced	1	1	19	34	66
Followed to age of 1 yr.	2	33	195	277	556
Abnormalities found at 1 year	—	5 =(15.1%)	14 =(7.2%)	16 =(5.8%)	16 =(2.9%)
		2 Squint 1 Hernia 1 Congenital heart 1 Genital defect	5 Squint 3 Hernia 1 Congenital heart 1 Talipes 1 Defect of digits 1 Spastic 1 Spastic and retarded 1 Mentally retarded and ear defect	4 Squint 5 Hernia 2 Congenital heart 1 Defect of digits 1 Congenital hip 1 Spastic 2 Mongol	3 Squint 3 Hernia 2 Congenital heart 2 Talipes 3 Defect of digits 1 Multiple deformities 1 Mongol 1 Hydrocephaly

## Statistics

### PERCENTAGE INCIDENCE OF PREMATURE BIRTHS AMONG :

	1951	1952	1953	1954	1955	1956
Total births ...	8.2	7.9	8.4	8.7	9.2	9.1
Stillbirths ...	51.0	57.1	52.0	58.2	61.8	61.3
Live births ...	7.2	6.9	7.4	7.6	7.9	7.9
Neonatal deaths ...	61.6	61.8	66.6	61.2	68.9	64.6
Deaths (4 weeks— 1 year) ...	19.2	17.9	14.7	15.4	18.2	20.2
Total infant mortality ...	46.6	46.7	50.5	47.2	53.0	52.0

### DEATH RATES AMONG PREMATURE AND MATURE BABIES

Year	Stillbirth Rate		Neonatal Death Rate		Death Rate 4 weeks—1 year	
	Premature	Mature	Premature	Mature	Premature	Mature
1956 ...	155.6	9.9	140.3	6.8	17.9	6.0
1955 ...	155.3	9.6	136.6	5.4	17.0	6.6
1954 ...	144.5	10.0	138.4	7.1	15.1	6.8
1953 ...	145.5	12.3	162.8	6.4	16.1	7.4
1952 ...	145.3	9.2	154.4	7.5	23.8	8.1

### STILLBIRTH RATE BY CAUSE

Cause of Death Primary Factor	Premature				Mature			
	1956	1955	1954	1953	1956	1955	1954	1953
<b>Antenatal causes :</b>								
Toxaemia ...	35.9	27.2	37.8	44.3	0.6	1.4	1.3	1.4
Separation of placenta ...	18.3	21.1	12.4	17.1	1.1	0.4	0.8	0.9
Rhesus incompatibility ...	2.9	1.2	4.3	3.2	0.5	0.3	0.3	0.6
Other maternal conditions	2.4	2.4	1.2	5.1	0.5	—	0.1	0.2
Other causes ...	20.6	7.9	9.9	8.9	0.9	0.3	0.5	0.5
<b>Intranatal causes :</b>								
Breech presentation ...	2.9	7.9	5.6	3.8	0.6	0.7	1.0	0.6
Other difficult labours ...	3.5	4.8	3.1	9.5	1.4	1.9	1.6	2.3
Other causes ...	10.0	4.8	3.7	5.1	1.5	1.6	0.8	2.0
Foetal abnormality ...	35.9	44.1	36.0	22.1	1.0	1.1	1.3	1.6
Unknown causes ...	23.0	33.8	30.4	26.6	1.7	1.9	2.3	2.4
<b>Total ...</b>	<b>155.6</b>	<b>155.3</b>	<b>144.5</b>	<b>145.5</b>	<b>9.9</b>	<b>9.6</b>	<b>10.0</b>	<b>12.3</b>

NEONATAL DEATH RATE BY CAUSE  
(PER 1,000 LIVE AND STILL BIRTHS)

Cause of Death Primary Factor	Premature				Mature			
	1956	1955	1954	1953	1956	1955	1954	1953
Antenatal causes :								
Toxaemia ... ..	21.2	12.1	12.4	18.3	0.1	0.2	—	—
Separation of placenta ...	22.4	25.4	24.2	33.5	0.1	0.2	0.1	0.1
Rhesus incompatibility ...	0.6	1.8	1.2	3.2	0.2	0.2	0.4	0.5
Other maternal conditions	12.4	7.9	6.2	6.3	0.1	0.2	0.2	0.1
Other causes ... ..	2.4	1.2	1.9	3.2	—	0.1	0.1	—
Intranatal causes :								
Breech presentation ...	1.8	1.2	4.3	5.1	0.3	0.2	0.3	0.2
Other difficult labours ...	0.6	1.8	2.5	1.3	0.4	0.3	0.6	0.5
Other causes ... ..	3.5	3.6	3.1	3.8	1.5	0.8	0.8	1.0
Postnatal causes :								
Infection ... ..	1.2	6.0	1.9	6.3	1.1	0.6	0.9	0.9
Other ... ..	2.4	4.8	7.4	3.8	0.8	0.6	0.8	0.7
Foetal abnormality ... ..	15.3	15.1	14.9	15.8	2.5	2.0	2.7	2.3
Prematurity only ... ..	34.8	33.8	38.4	38.6	—	—	—	—
Unknown causes ... ..	—	0.6	—	—	—	—	—	—
Total ... ..	118.6	115.4	118.4	139.2	6.8	5.4	6.8	6.3

INCIDENCE OF DISTRIBUTION OF KNOWN WEIGHT AMONG  
PREMATURE STILLBIRTHS AND LIVE BIRTHS

Stillbirths	2,000 grammes and under			2,001—2,250 grammes			2,251—2,500 grammes		
	%			%			%		
1956 ... ..	77.6			9.0			12.5		
1955 ... ..	79.4			10.1			10.5		
1954 ... ..	77.2			10.3			12.5		
1953 ... ..	70.8			11.9			17.3		
Live births									
1956 ... ..	28.4			21.3			50.3		
1955 ... ..	29.2			23.8			47.0		
1954 ... ..	27.5			23.3			49.2		
1953 ... ..	30.4			20.6			48.9		

NEONATAL DEATH RATE AMONG PREMATURE BABIES

	2,000 grammes and under			2,001—2,250 grammes			2,251—2,500 grammes		
1956 ... ..	383.3			78.7			29.1		
1955 ... ..	372.5			45.0			36.5		
1954 ... ..	376.3			87.2			29.4		
1953 ... ..	410.2			97.1			36.2		



STILLBIRTHS BY ATTENDANT AT BIRTH

	<i>Domiciliary</i>		<i>Hospital booked</i>		<i>Hospital emergency</i>		<i>Nursing Home</i>	
	<i>Premature</i>	<i>Mature</i>	<i>Premature</i>	<i>Mature</i>	<i>Premature</i>	<i>Mature</i>	<i>Premature</i>	<i>Mature</i>
	%	%	%	%	%	%	%	%
1956	11.4	20.2	66.7	58.9	21.2	20.9	0.7	—
1955	15.2	22.2	65.0	63.9	19.5	12.7	0.3	1.2
1954	18.5	23.7	61.4	58.0	18.0	17.2	2.1	1.1
1953	21.3	28.2	62.2	53.5	16.5	16.0	—	2.3

STILLBIRTH RATE BY ATTENDANT AT BIRTH

	<i>Domiciliary</i>		<i>Hospital booked</i>		<i>Hospital emergency</i>		<i>Nursing Home</i>	
	<i>Premature</i>	<i>Mature</i>	<i>Premature</i>	<i>Mature</i>	<i>Premature</i>	<i>Mature</i>	<i>Premature</i>	<i>Mature</i>
1956	78.5	5.8	162.4	9.6	253.4	54.4	200.0	—
1955	104.3	6.0	154.6	10.3	256.4	35.7	166.7	15.5
1954	103.6	6.4	142.7	9.9	229.5	48.3	384.6	10.8
1953	113.7	9.4	148.8	11.2	208.8	64.9	—	22.8

PREMATURE LIVE BIRTHS BY ATTENDANT AT BIRTH

	<i>2,000 grammes and under</i>		<i>2,001—2,250 grammes</i>		<i>2,251—2,500 grammes</i>	
	%		%		%	
	<i>Domiciliary</i>	<i>Hospital</i>	<i>Domiciliary</i>	<i>Hospital</i>	<i>Domiciliary</i>	<i>Hospital</i>
1956	17.7	82.3	23.6	76.4	29.1	70.9
1955	20.8	79.2	20.7	79.3	27.5	72.5
1954	22.6	77.4	24.6	75.4	30.5	69.5
1953	21.4	78.6	26.3	73.7	33.4	66.6

NEONATAL DEATH RATE (PER 1,000 LIVE BIRTHS) BY ATTENDANT AT BIRTH

	<i>2,000 grammes or less</i>		<i>2,001—2,250 grammes</i>		<i>2,251—2,500 grammes</i>	
	<i>Domiciliary</i>	<i>Hospital</i>	<i>Domiciliary</i>	<i>Hospital</i>	<i>Domiciliary</i>	<i>Hospital</i>
1956	305.6	398.2	69.4	81.5	33.7	27.7
1955	329.4	383.9	14.5	53.0	44.2	33.6
1954	261.9	411.6	101.3	82.6	33.8	27.5
1953	363.6	422.8	95.9	97.6	22.6	43.6

AGE AT DEATH OF PREMATURE BABIES AND OF BABIES OVER 2,500 GRAMMES (DEATHS UNDER 4 WEEKS)

<i>Age at death</i>	<i>Premature Babies</i>		<i>Babies over 2,500 grammes</i>	
	<i>Per cent. of deaths</i>	<i>Per cent. of live births</i>	<i>Per cent. of deaths</i>	<i>Per cent. of live births</i>
	Less than 24 hours ... ..	53.2	7.5	40.9
24 hours, less than 48 hours ... ..	18.4	2.6	7.8	0.05
48 hours, less than 1 week ... ..	21.4	3.0	19.1	0.13
1 week, less than 2 weeks ... ..	3.5	0.5	14.8	0.10
2 weeks, less than 3 weeks ... ..	2.5	0.3	8.7	0.06
3 weeks, less than 4 weeks ... ..	1.0	0.1	8.7	0.06
Unknown ... ..	—	—	—	—
All ages to 4 weeks ... ..	100.0	14.0	100.0	0.68

DEATH RATE 4 WEEKS TO 1 YEAR

	<i>Death rate per 1,000 live births</i>		<i>Death rate per 1,000 live births</i>		
	<i>Premature</i>	<i>Mature</i>	<i>Premature</i>	<i>Mature</i>	
	1951 ... ..	28.1	9.2	1954 ... ..	15.1
1952 ... ..	23.8	8.1	1955 ... ..	17.0	6.6
1953 ... ..	16.1	7.4	1956 ... ..	17.9	6.0

PREMATURE LIVE BIRTHS—BORN IN HOSPITAL  
1951-56

<i>Hospital</i>	<i>Number of premature live births</i>	<i>Neonatal death rate</i>	<i>Proportion of premature live births weighing 2,250 grammes or less</i>	<i>Neonatal Death Rate among babies weighing 2,250 grammes or less</i>
A	738	128.7	53.1	209.2
B	1,068	133.0	52.5	221.4
C	455	149.5	57.8	315.6
D	752	187.5	61.2	290.7
E	1,647	191.3	54.5	324.4
F	213	239.4	61.5	328.2
G	55	272.7	56.4	483.9

PREMATURE LIVE BIRTHS BORN AT HOME  
1951-56

	<i>Number of premature live births</i>	<i>Neonatal death rate</i>	<i>Proportion of premature live births weighing 2,250 grammes or less</i>	<i>Neonatal Death rate among babies weighing 2,250 grammes or less</i>
Nursed at home	1,380	35.5	20.9	114.6
Transferred to hospital within 24 hours	719	229.5	82.1	252.5
Transferred to hospital after 24 hours	108	259.3	46.3	220.0
All babies born at home	2,207	109.7	42.0	208.0

## MATERNITY AND CHILD WELFARE CENTRES

As we are in a period of transition when the question of the future functions of the maternity and child welfare centre are under active discussion, it may be of interest to trace the history and development of the maternity and child welfare centres in Birmingham.

In April, 1899, four women health visitors were appointed "their mission being to visit the houses of the poor with the object of helping the tenants to make their homes as healthy and as comfortable as possible having regard to their construction." The Medical Officer of Health, Dr. Alfred Hill, in his report for that year said their appointment was a striking success. At the same time he had to report that the infant death rate was unusually high, i.e., 193 per 1,000. In 1900 it rose to 199 per 1,000 and it was noted that a large number of the infant deaths were of a preventable kind resulting chiefly from bad feeding, exposure to cold and other avoidable conditions. Thereafter the infant mortality rate began to fall although it was still substantially above the average for the country as a whole. In the meantime, the number of health visitors had increased to twelve.

Soon after his appointment as Medical Officer of Health in 1903, Sir John Robertson began to take an active interest in the reduction of infant mortality and the number of health visitors steadily increased. In 1905 the Selly Oak Maternity Provident Society, Mother's Parlour and Babies' Welcome was established to assist mothers in the care of their babies. In 1907 the Corporation appointed a doctor, Dr. Jessie Duncan, to visit babies born in one large and poor district in Birmingham with a view to giving advice on the prevention of infant mortality. In 1908 an Infants' Health Society was established in St. Bartholomew's Ward. Through the good offices of voluntary and paid visitors, mothers in that area were encouraged to take a greater interest in the welfare of their babies and to have them weighed regularly. When found to be doing badly they were referred to a doctor. Meanwhile Dr. Duncan and the health visitors continued to pay visits in the homes, Dr. Duncan making the first visit to each house where a birth had been notified. In addition she held infant consultations twice a week in a room in the district rented for the purpose. In her report for 1909 to the Medical Officer of Health she said that in her opinion much more good could be done by combining regular home visiting with consultation work than could be done otherwise. In the same year Dr. Duncan began a class for expectant mothers.

By 1909 five voluntary organisations for infant consultations were established in St. Mary's Ward and at Hay Mills and Greet. In 1910 an infant consultation was begun at Birmingham Maternity Hospital where the babies who were born in that institution were regularly brought up for advice and, if necessary, treatment. In addition, many other organisations such as Mothers' Meetings were, by means of lectures, emphasising the importance of attending to certain general principles in the rearing of infants. In 1910 additional infant consultations by Dr. Duncan were arranged in the areas of Deritend, Nechells and Ladywood. By 1913 infant consultations were being held in eight different areas of the City and in his report to the Health Committee in that year, Sir John Robertson recommended that the whole area of the City should be covered by such institutions which he suggested might be called Welfare Stations for Mothers and Children. As minimal requirements at these Stations he recommended (a) a consultation for mothers to enable antenatal conditions to be thoroughly dealt with ; (b) a consultation for infants ; (c) a consultation for older children up to school age ; and (d) classes for mothers for cookery, sewing, budgeting, etc. In the same year he advocated strongly increased facilities for the better education of parents in what constitutes healthy conditions for the feeding and rearing of young children and recommended instruction of children and young people in elementary schools and clubs on the main principles of healthy living.

By 1916 eleven child welfare centres were established in the City. The annual report of Sir John Robertson for that year had a special section on Maternity and Child Welfare. In that year the stillbirth rate was of the order of 34·2 per 1,000 live and still births and the infant mortality rate 104 per 1,000 live births. The death rate per 1,000 living among children between the ages of one and five years was 16·1. In that year we find the first reference to antenatal clinics—sessions being held at eleven centres and eight women doctors participating in this work. Two hundred and twenty-two midwives had given notice of their intention to practise during that year but only 75 held qualifications from one or other of the examining bodies. The standard of practice in those days is perhaps shown by the fact that 53 of these midwives each attended more than 100 cases and one midwife attended 425 women.

The work in relation to the prevention of infant mortality and of improving infant health had been entrusted to a Special Sub-Committee of the Public Health and Housing Committee, to which three women were co-opted for their special knowledge in addition to the ordinary Council representatives. A beginning was made in that year of looking after the health and welfare of children between the ages of one and five years. It was estimated that there were approximately 79,000 children between these ages in the City. Of these, 3,024 attended at the centres during the year in addition to 16 per cent. of the infants born during the year.

In the following year (1917) Sir John began his report with the words : " Judged by the infant mortality rate the year 1917 was the best on record." The mortality rate was 101 per 1,000 live births. He went on to say that the Government Departments were now sympathetic and willing to assist and, indeed, were overlapping each other in urging local authorities to still further efforts. Then, as is our experience at the present time, he lamented the delaying effect which war was having on the betterment of housing conditions. In that year the Public Health Committee decided to take over the responsibility for the payment of fees for medical help to midwives, which had previously been undertaken by the Board of Guardians. Meanwhile, the number of welfare centres provided had risen to 20 and the proportion of infants born during the year attending the centres was 25·7.

In May, 1918, a dental clinic for mothers and children was established in Broad Street. Heathfield Road Maternity Home was opened in October, 1920, and in February, 1921, a second maternity home was opened in Penn's Lane. Pype Hayes Hall was also in use throughout the year 1921 as a convalescent home for mothers and babies, of whom 380 were admitted during the year. Witton Babies' Hospital was also opened in February to accommodate babies suffering from some form of wasting disease. During the year 29,970 dinners were served to necessitous mothers. Seventy per cent. of infants born were attending the child welfare centres.

By 1922 Sir John Robertson was referring to financial stress and the limitations it was imposing on the expansion of the work. He remarked that it was not sufficiently realised that " Health is Purchasable and that this was particularly true of young life." Two new centres were opened in 1923, bringing the total to 23 and the centre at Farm Street was transferred to the newly opened Carnegie Infant Welfare Institute. This building included an observation ward of eight cots for babies who appeared to be suffering from some digestive defect.

By 1926, 76 per cent. of the infants born were attending the centres. The majority of the centres had the assistance of voluntary workers which was of the greatest value to the centres. In addition half the centres had mothers' committees and in four centres there were fathers' committees as well. A vigorous programme of health education was in being in most of the centres and remedial exercise classes and ultra violet light clinics were fully established.

In 1929 the coming of age of the child welfare centre service was marked by a maternity and child welfare exhibition which was held in the Town Hall in April, 1929. There were now 28 welfare centres in the City. In 1930 medical inspection clinics for young people between the ages of two and five years were established in 17 centres. In the same

year the Health Department became responsible for the work previously carried out by the Board of Guardians relating to the welfare of unmarried mothers.

In 1931, 89 per cent. of the total notified live births were in attendance at the welfare centres. From 1929 onwards, efforts had been made to establish toddlers' educational classes and by 1931 in seven child welfare centres these classes were meeting once a week. In the same year the Babies' Hospital at Witton, was transferred to Canwell Hall. The Maternity and Child Welfare Committee became responsible for the Lordswood Nursery for infants and children up to the age of two years which had previously been run by the Board of Guardians. Sorrento Maternity Home had been opened in May, 1929, and in 1931 dealt with 407 maternity patients, 144 antenatal patients and 95 premature or weakly infants. The antenatal and premature baby blocks were formally opened on the 20th January, 1931.

During the inter-war years there were many enquiries by the staff into various aspects of child welfare such as the incidence of bronchitis, the welfare of young children in canal boats, into breast feeding and the progress of premature infants.

The year 1934 was noteworthy for the opening of the Parents' Guidance Clinic to assist parents in the management of difficult children. Following conferences between the representatives of the Public Health, Public Assistance and Education Committees, an organised scheme for foster mothers was introduced which then became the responsibility of the Public Health Committee. In the same year birth control clinics were established at Dudley Road and Selly Oak Hospitals.

In 1935 there were more than 400 voluntary workers assisting at child welfare centres. The voluntary workers now had an organising committee which arranged lectures and meetings for these workers.

By 1936 the proportion of children under one year of age attending welfare centres was 71%. At the outbreak of war in 1939 there were 32 child welfare centres, one of which was provided and maintained by a voluntary committee.

The outbreak of war in 1939 inevitably caused some disruption of the work, so that in 1941 the proportion of infants born in that year attending the welfare centres had fallen to 68.2 per cent. The infant mortality rate was 69 per 1,000 live births compared with 60 per 1,000 live births in 1939. The end of the war saw an improvement in attendances and by 1946 the proportion of infants attending had risen to 77 per cent. The Child Health Institute was formed and its Council held its first meeting on the 15th January, 1946. The funds for the

Institute come from three sources, the University, the Children's Hospital and the City Council. Its objects are as follows :—

- (1) To establish a closer liaison between preventive and curative aspects of paediatrics, with resultant benefit to the children of the City.
- (2) To improve the teaching of paediatrics, particularly on the preventive side, to medical students and postgraduate students.
- (3) For the purpose of research.

Arrangements were made whereby medical officers employed by the local authority have access to the work at the Children's Hospital and members of the staff of the Children's Hospital obtain experience in the clinics run by the Authority.

On the 5th July, 1948, the National Health Service Act, 1946, came into force. The main effect which these new arrangements had on the attendance at maternity and child welfare centres was a diminution in the attendance at antenatal clinics. Whereas in 1947, the proportion of pregnant women attending the Local Authority clinics was 84 per cent., this proportion has fallen steadily during the last ten years so that in 1956 it had fallen to 22 per cent. To an increasing extent the hospitals and the general practitioners have become responsible for the antenatal care of expectant mothers. Where general practitioners hold special sessions for expectant mothers at their surgeries, the domiciliary midwives are encouraged to attend with their patients. Facilities are also offered at welfare centres for general practitioners to hold antenatal clinics for their own patients. General practitioners are also given the opportunity to send their patients to the antenatal exercise classes at welfare centres where they also have the opportunity of listening to the health talks given at the same time. Patients can also be sent to the centres to have their blood taken for the Wassermann and Rhesus reactions or appointments made for mass radiography and dental treatment. An increasing number of general practitioners are availing themselves of these facilities so that in 1956, 139 antenatal sessions were being held by general practitioners for their own patients either at child welfare centres or at their own surgeries, in 98 of which they are assisted by the staff of this Department.

In 1949 an additional child welfare centre was opened in Sladepool Farm Road, making the total number in the City, 33. In recent years there has been and continues to be a considerable movement of population into new housing estates. In consequence, mothers and their children in some instances were living long distances from the nearest maternity and child welfare centre. As a result, the proportion of infants attending fell to 71 per cent. in 1952. In 1953, therefore, on the recommendation of the Health Committee, the City Council decided to allocate over the

next few years 21 houses on Corporation housing estates for use as temporary welfare centres until such time as it became more clear what form these centres should take. As a result, the number of maternity and child welfare centres provided had risen to 49 by the end of 1956, new centres having been opened at East Meadway and Dawberry Fields. That the mothers appreciate the improved facilities is shown by the fact that in 1956, 74 per cent. of the children under one year, 66 per cent. of the children between one and two years, 40 per cent. between two and three years, 30 per cent. between three and four years and 25 per cent. between four and five years attended the centres. This is particularly interesting in view of the fact that those general practitioners who, assisted by health visitors, held child welfare clinics for their own patients either at the child welfare centres or at their own surgeries, saw 9,057 children under five in 1956, compared with 5,588 in 1955.

General practitioners usually undertake diphtheria and whooping cough immunisation and vaccination against smallpox at their clinics, as well as in some instances the antenatal examination of expectant mothers. None of these procedures are undertaken at the ordinary child welfare clinics staffed by local authority medical officers. A number of other general practitioners run children's clinics without the help of our staff. In some of these cases a husband and wife are practising together, in others the wife is a qualified nurse or the surgery attendant has nursing qualifications.

The child welfare centre in each district is, in fact, developing as a focal point to which general practitioners and the lay public of all ages turn for help when in difficulty.

**Antenatal Clinics and Postnatal Clinics**  
**Mass Radiography for Mothers**  
**Relaxation Classes**

} See Maternity  
Services Section.

#### **Audiology Clinic**

During 1956, one hundred and eleven new children attended the clinic, in addition to the fifty-nine cases who were still under supervision at the beginning of the year.

Mrs. Ewing's visits ceased in July, and in October the Education Committee gave permission for the services of their Ear, Nose and Throat Consultant to be made available, to give advice in such cases as it might be necessary to refer to him from the Audiology Clinic. This link has proved valuable in maintaining the continuity of treatment for the children.

Before she left for America, Mrs. Ewing gave courses of training to a further fifty health visitors, and all the part-time medical officers. This has meant that the valuable preliminary testing can be done more



frequently in welfare centres. Two thousand, one hundred and fifty-nine screening tests were made in the welfare centres and as a result sixty children were referred for fuller investigation in the Audiology Clinic. In five a definite hearing loss was discovered, eleven more are being kept under observation, and two were considered to be mentally backward. Forty-two who had speech defects, suggestive of a hearing loss, have been found to have perfect hearing, but twenty of them were considered in need of speech therapy.

In considering the apparent cause of deafness, the numbers due to preventable conditions are still high, especially in the case of middle ear disease.

### Foot Defect Clinic

Children are referred to these clinics from the child welfare clinics and occasionally by general practitioners. Appointment sessions are held at three centres in the City.

During 1956 it was felt advisable to train another medical officer in this work. The type of defects found were similar to those found in the previous year and occurred with about the same frequency. Knock knees, the inrolled forefoot and twisted toes are the most usual defects.

It has been suggested that knock knee is a physiological occurrence during the pre-school years and should not require treatment, and in many cases, this is probably true. But it was noted that, of the children referred, the more severe degrees of knock knee were found among the older, rather than the younger children. This would add force to the suggestion that there is a proportion of children whose legs do not straighten without help by the time they are school age.

### Remedial Exercise Classes

During the year children attended classes held by the physiotherapist at four centres. The number of children attending and the number of clinics has shown a substantial increase.

				1956	1955
Number of individual children attending	...	...	...	218	173
Number of sessions held	...	...	...	239	181
Total number of attendances	...	...	...	2,286	1,629

### Chiropody Clinic

The Chiropody Clinic continued to be held for four sessions weekly.

Total number of sessions held	...	...	...	...	181
Total number of attendances	...	...	...	...	1,425
Average number of patients called per session	...	...	...	...	10
Average number of attendances per session	...	...	...	...	8

## Consultation Clinic

						<i>No. of sessions</i>	<i>No. of attendances</i>
Dr. Braid's paediatric clinic	...	...	...	...	...	22	80
X-ray clinic	...	...	...	...	...	48	270
Adoption clinic	...	...	...	...	...	50	248

## Sewing Classes

Sewing classes have been held at 37 centres, with a total attendance during the year of 11,532.

## Health Talks

Mothers made 29,166 attendances at health talks at clinic sessions during the year. This figure is in addition to the attendances at mothercraft classes held in conjunction with relaxation classes and to attendances at parents' meetings held in the evening at the centres.

## Voluntary Workers

The Executive Committee for the Association of Voluntary Workers held one meeting during the year. One General Meeting was held on May 30th at Stirchley Infant Welfare Centre, when Mr. George Clarke gave a talk on the work of the Marriage Guidance Council.

## Statistics

### LOCAL AUTHORITY CHILD WELFARE CLINICS

#### PERCENTAGE OF CHILDREN VISITED IN THEIR OWN HOMES, WHO ATTENDED CHILD WELFARE CLINICS

<i>Year</i>		<i>0—1 year</i>	<i>1—2 years</i>	<i>2—3 years</i>	<i>3—4 years</i>	<i>4—5 years</i>
1950	...	73.2	62.2	33.8	24.0	19.0
1951	...	71.9	59.1	34.8	26.4	20.5
1952	...	71.3	58.8	34.4	28.2	20.9
1953	...	73.2	60.1	34.9	25.8	21.7
1954	...	75.1	61.4	35.8	26.0	21.6
1955	...	74.3	64.0	39.0	29.0	24.5
1956	...	74.1	65.6	40.0	30.3	24.4

### CHILDREN'S CLINICS

#### FREQUENCY OF ATTENDANCE AS A PERCENTAGE OF ATTENDERS IN EACH AGE GROUP

<i>Children who made :</i>	<i>0—1 year</i>			<i>1—2 years</i>			<i>2—5 years</i>		
	<i>1954</i>	<i>1955</i>	<i>1956</i>	<i>1954</i>	<i>1955</i>	<i>1956</i>	<i>1954</i>	<i>1955</i>	<i>1956</i>
1—2 attendances	26.3	26.1	26.7	33.5	34.5	35.0	61.2	64.4	60.8
3—5 attendances	23.7	23.9	23.9	23.3	25.6	25.5	35.0	32.5	36.0
6—11 attendances	27.4	28.1	29.3	24.6	24.4	24.2	3.4	2.7	3.2
Over 12 attendances	22.6	21.9	20.1	18.5	15.5	15.3	0.4	0.4	—

POSTNATAL CLINICS—INFANTS ATTENDING

Number of clinics held	...	...	...	...	...	...	1,267
Number of new infants attending	...	...	...	...	...	...	5,978
Total number of infant attendances	...	...	...	...	...	...	41,057
Total examined by doctor	...	...	...	...	...	...	16,083
Average attendance of infants per consultation	...	...	...	...	...	...	32.4
Average number of infants seen by doctor per consultation	...	...	...	...	...	...	12.6

CHILDREN'S CLINICS

Number of clinics held :							
(1) With doctor attending	...	...	...	...	...	...	3,601
(2) Without doctor attending	...	...	...	...	...	...	300
New children attending	...	...	...	...	...	...	9,968
Total attendances	...	...	...	...	...	...	124,268
Average attendance per clinic	...	...	...	...	...	...	31.8
Total seen by doctor	...	...	...	...	...	...	46,288
Average seen by doctor per clinic	...	...	...	...	...	...	13

APPOINTMENT CLINICS

Number of clinics	...	...	...	...	...	...	2,696
Total attendances	...	...	...	...	...	...	36,957
Average attendance per clinic	...	...	...	...	...	...	13.7
Total number of individual children examined	...	...	...	...	...	...	17,566
Number of these children attending clinic for the first time	...	...	...	...	...	...	5,730

(Of these, 2,723 children were making their first attendance at the centre).

The following table shows the result of these examinations :—

DEFECTS AMONG CHILDREN ATTENDING APPOINTMENT CLINICS

Number of individual children having a defect	...	...	...	...	...	...	9,844
Eyes :							
Squint	...	...	...	...	...	...	383
Inflammatory condition	...	...	...	...	...	...	86
Other eye conditions	...	...	...	...	...	...	40
Skin :							
Eczema	...	...	...	...	...	...	320
Purulent conditions	...	...	...	...	...	...	43
Ear, Nose and Throat :							
Otorrhoea	...	...	...	...	...	...	89
Deafness	...	...	...	...	...	...	43
Enlarged or diseased tonsils and/or adenoids	...	...	...	...	...	...	2,325
Nasal obstruction and/or mouth breathing	...	...	...	...	...	...	236
Teeth :							
Carious or defective	...	...	...	...	...	...	3,039
Glands :							
Enlarged	...	...	...	...	...	...	1,363

Heart :							
Congenital	...	...	...	...	...	...	139
Rheumatic conditions	...	...	...	...	...	...	43
Anaemia	...	...	...	...	...	...	31
Lung conditions	...	...	...	...	...	...	83
Rickets :							
Active	...	...	...	...	...	...	3
Rachitic deformities	...	...	...	...	...	...	50
Knock knee	...	...	...	...	...	...	1,594
Flat foot	...	...	...	...	...	...	694
Other deformities	...	...	...	...	...	...	471
Mentality (backward)	...	...	...	...	...	...	27
Speech (backward or defective)	...	...	...	...	...	...	173
Enuresis...	...	...	...	...	...	...	382
Other	...	...	...	...	...	...	254
							21,755

More than one defect may have been found in the same child.

#### GENERAL PRACTITIONERS' CHILDREN'S CLINICS

(a) *At welfare centres :*

Total attendances (under 1 year)	...	...	...	6,832	}	8,756
(1—but under 2 years)	...	...	981			
(2—but under 5 years)	...	...	943			
Number examined	...	...	...	...	...	7,518
Diphtheria immunisation	...	...	...	...	...	1,385
Whooping cough immunisation	...	...	...	...	...	847
Vaccination	...	...	...	...	...	607
Number of individuals attending health talks given						
by health visitors	...	...	...	...	...	7,049

(b) *At general practitioners' surgeries :*

Total attendances (under 1 year)	...	...	...	1,688	}	2,291
(1—but under 2 years)	...	...	265			
(2—but under 5 years)	...	...	248			
(over 5 years)	...	...	90			
Number examined	...	...	...	...	...	1,539
Diphtheria immunisation	...	...	...	...	...	643
Whooping cough immunisation	...	...	...	...	...	439
Vaccination	...	...	...	...	...	220
Number of individuals attending health talks given						
by health visitors	...	...	...	...	...	4,813

#### AUDIOLOGY CLINIC

Number of 1954-55 cases still attending on 1st January, 1956	...	...	...	...	59
Number of new cases seen during 1956	...	...	...	...	111
Number seen for testing only :					
(a) discharged	...	...	...	...	90
(b) under supervision on 31st December, 1956	...	...	...	...	22
Number taken for guidance :					
(a) discharged	...	...	...	...	17
(b) under supervision on 31st December, 1956	...	...	...	...	41

Disposal :

(a) Likely to require special educational treatment :	
(1) To care of Birmingham Education Department	11
(2) To care of other local authorities ... ..	6
(b) Normal ... ..	90
Total number of attendances ... ..	855
Number of children on waiting list, 31st December, 1956 ...	26

Source of referral to clinic :

(a) Birmingham child welfare clinics ... ..	61
(b) Other local authorities ... ..	35
(c) Hospital consultants ... ..	10
(d) Education Department ... ..	5

1956 cases :

Number not deaf ... ..	42
(Of these, 20 were considered in need of speech therapy)	
Number with hearing loss ... ..	69

Cause :

*Acquired deafness :*

Middle ear disease ... ..	9
Meningitis ... ..	4
Birth injury ... ..	2
Prematurity ... ..	3
Kernicterus ... ..	2
Cerebral palsy ... ..	2
Infectious disease ... ..	2
	24

*Congenital deafness :*

Rubella ... ..	5
Familial ... ..	6
Associated mental backwardness ... ..	4
Congenital ... ..	17
Deaf-blind ... ..	3
	35

*Degree of deafness :*

Profound ... ..	18
Severe ... ..	7
Partial ... ..	13
High tone loss ... ..	5
Undetermined ... ..	26
	69

*Screening tests at welfare centres :*

Number of children seen... ..	2,159
Number of children who failed the test ... ..	60

## FOOT DEFECT CLINIC

<i>Age Group</i>		<i>Lancaster Street</i>	<i>Selly Oak</i>	<i>Farm Road</i>	<i>Total</i>
Under 1 year	... ..	2	5	—	7
1—2 years	... ..	30	21	13	64
2—3 years	... ..	96	47	4	147
3—4 years	... ..	140	36	12	188
4—5 years	... ..	198	25	15	238
<b>Totals</b>	... ..	466	134	44	644
Number discharged	... ..	116	13	9	138

<i>Defects of forefoot</i>	<i>Lancaster Street</i>	<i>Selly Oak</i>	<i>Farm Road</i>	<i>Total</i>	<i>Per cent.</i>
Toe defects	63	25	13	101	15 per cent.
Metatarsus varus	22	6	1	29	4 .. ..
Nail defects	1	2	1	4	1 .. ..
<i>Defects of arches</i>					
Valgus ankles alone	80	22	6	108	17 per cent
Valgus ankles and knock knees	63	15	—	78	12 .. ..
Short in tendo achilles	20	1	—	21	3 .. ..
Pes cavus	2	—	—	2	—
Inverted ankles	4	2	1	7	1 .. ..
Long slim foot	11	8	2	21	3 .. ..
Low arch	12	4	2	18	3 .. ..
<i>Defects of Leg :</i>					
Knock knee alone	158	31	11	200	31 per cent.
Bowing	11	4	3	18	3 .. ..
Others	32	11	4	47	7 .. ..

## DENTAL TREATMENT

### General

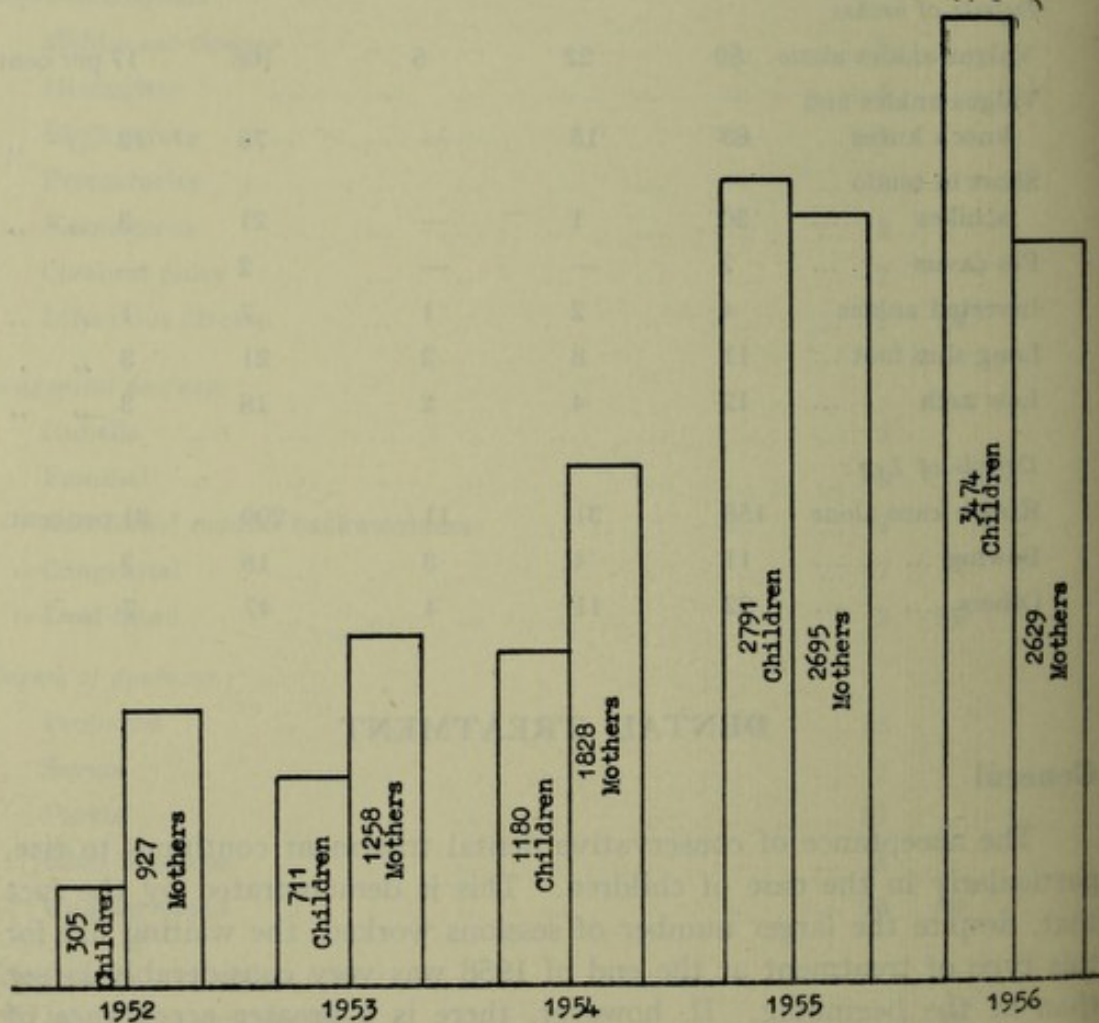
The acceptance of conservative dental treatment continues to rise, particularly in the case of children. This is demonstrated by the fact that, despite the larger number of sessions worked, the waiting list for this type of treatment at the end of 1956 was very considerably larger than at the beginning. If, however, there is a greater acceptance of treatment there can be no doubt that the need of it is greater than ever.

Statistics obtained by the Staffordshire County Council at the request of the Ministry of Health and quoted in the report of the Chief Medical Officer of the Ministry of Health for 1955 are given below :—

DENTAL CONDITION OF FIVE YEAR OLD CHILDREN ENTERING SCHOOL IN STAFFORDSHIRE

Year	No. of children	Per cent. with sound teeth	Per cent.	Per cent.	Per cent.	Per cent.
			with one decayed tooth	with two decayed teeth	with three decayed teeth	with four decayed teeth
1947	3,920	38.9	13.4	14.4	11.0	22.3
1951	3,673	27.7	10.9	10.8	11.6	35.0
1953	4,982	21.3	6.6	12.1	9.4	50.6
1954	4,462	17.2	7.7	12.0	10.2	52.9

It will be seen that while in 1947, 38.9 per cent. of these children had sound teeth, in 1954 this percentage had dropped to 17.2 while at the other extreme in 1947 children with four or more decayed teeth constituted 22.3 per cent. of the total and in 1954 they constituted 52.9 per cent. These figures are supported by a small scale survey which was made in Birmingham towards the end of 1955 of children between two and five years of age who attended welfare centres and day nurseries.



Annual totals of teeth filled for Expectant and Nursing Mothers and Children under five.

SURVEY OF DENTAL CONDITION OF CHILDREN BETWEEN THE AGES  
OF TWO AND FIVE YEARS ATTENDING WELFARE CENTRES AND DAY  
NURSERIES IN BIRMINGHAM

<i>Age</i>	<i>No. of children examined</i>	<i>No. with defective teeth</i>	<i>No. who have had teeth extracted</i>	<i>No. who have had fillings</i>
2—3 years	238	59	5	—
3—4 years	234	145	12	6
4—5 years	184	141	40	4

The term "defective teeth" includes teeth which are decayed, have been extracted, or filled. In this survey no child had both extractions and fillings. On the other hand some of the treated children still had decayed teeth.

It will be seen how large is the amount of dental decay, but on the other hand what a small proportion of children needing treatment are actually receiving it, either in the form of extractions or fillings. As the Dental Services are already fully occupied this situation underlines the need for much greater attention to dental health education.

Facilities for taking radiographs are provided at Lancaster Street Clinic. The mechanical work in connection with the supply of dentures continues to be undertaken by an outside firm of technicians.

### Statistics

#### *Mothers*

Number examined	...	...	...	...	...	...	2,697
Number needing treatment	...	...	...	...	...	...	2,612
Number whose treatment was completed	...	...	...	...	...	...	1,577
Teeth extracted with general anaesthetics	...	...	...	...	...	...	1,683
Extractions with general anaesthetics	...	...	...	...	...	...	9,728
Teeth extracted with local anaesthetics	...	...	...	...	...	...	857
Extractions with local anaesthetics	...	...	...	...	...	...	1,244
Fillings	...	...	...	...	...	...	2,629
Scalings	...	...	...	...	...	...	366
						(+ 474 by hygienist)	
Silver nitrate treatments	...	...	...	...	...	...	54
Radiographs	...	...	...	...	...	...	121
Number of mothers supplied with dentures	...	...	...	...	...	...	951
Number of dentures supplied	...	...	...	...	...	...	1,612
Total attendances	...	...	...	...	...	...	11,031

#### *Children*

Number examined	...	...	...	...	...	...	4,155
Number needing treatment	...	...	...	...	...	...	3,822
Number whose treatment was completed	...	...	...	...	...	...	3,162
General anaesthetics	...	...	...	...	...	...	2,318
Extractions	...	...	...	...	...	...	6,575
Fillings	...	...	...	...	...	...	3,474
Silver nitrate treatments	...	...	...	...	...	...	1,771
Radiographs	...	...	...	...	...	...	12
Total attendances	...	...	...	...	...	...	8,452



In the case of mothers, these figures do not show any very marked change from last year. An interesting point is that the number of teeth extracted with local anaesthetic continues to rise. This might perhaps indicate an increase in confidence in dentistry and a lessening of the desire to be put to sleep and to know nothing of what is going on.

In the case of children, an increase of the order of 25 per cent. has been achieved under most headings.

The total number of sessions was 2,227 and the average attendance was 3.8 children and 5 mothers.

### Professional Staff

The year 1956 has been rather more difficult than previous years in connection with dental staff. The only whole time assistant dental officer resigned at the end of August and four part-time dental surgeons resigned during the year. In addition, it has not been possible to replace the hygienist who resigned on the 31st December, 1955. Towards the end of the year, however, it is satisfactory to report that better progress was made in recruiting part-time dental officers and that at the end of the year a total of 47 sessions per week was being worked with the prospect of this amount improving early in 1957. The number of sessions per week worked at the various clinics at the beginning and end of the year are compared below :—

<i>Clinic</i>					<i>Beginning of 1956</i>	<i>End of 1956</i>
Lancaster Street ...	...	...	...	...	14	11
Carnegie ...	...	...	...	...	10	10
Treaford Lane ...	...	...	...	...	12	12
Northfield ...	...	...	...	...	10	6
Kingstanding ...	...	...	...	...	2	6
Quinton Lane ...	...	...	...	...	1	2
					—	—
Total ...	...	...	...	...	49	47
					—	—

### Accommodation

No new dental clinics were brought into operation during the year but approval was given to plans for providing a self-contained dental clinic at Farm Road (off Stratford Road) and for improving the dental clinic at Lancaster Street. It is hoped that these schemes can be put into operation during 1957.

### Hygienists

As has been stated already, one of the hygienists resigned at the end of 1955 and it has not been possible to replace her. The remaining hygienist has devoted most of her time to actual operational work in the mouth and to chair-side talks to mothers. It has been found beneficial

to refer all patients who attend for examination to her on their first visit, providing she is available, for instruction in oral hygiene. In the case of children she can do much to ease their approach to dentistry by talking and playing with them and polishing their teeth. There were 1,056 attendances for treatment by the hygienist and 474 scalings were completed.

### **Health Education**

The state of the nation's teeth continues to deteriorate and nowhere is this more noticeable than in the case of children. Much of this disease is preventable and modern research shows that a tooth or mouth brush can help very considerably. The emphasis is, however, on the time factor. The attack on the enamel of the teeth by acid, produced from sugar and starch, which clings around the teeth after eating, is at its maximum 10 to 15 minutes after eating. It is at this stage or earlier that the brush can be most effective and teeth and gums should be cleaned as soon after meals as possible. Failing a brush, the teeth can be cleaned by finishing the meal with a piece of apple or some other food which cleans the teeth naturally, or by merely rinsing the mouth with clean water.

The need for a country wide full scale campaign on Dental Health Education was underlined by the publication of the report on " Recruitment to the Dental Profession " (the McNair Report) in October, 1956.

Toothpastes are useful adjuncts to a toothbrush in cleaning teeth but can never do more than provide a mild abrasive material which helps in mechanical cleaning. Despite some claims which have been made the ability of any toothpaste to prevent decay has not yet been proved.

The day to day activities in connection with Dental Health Education have been detailed in previous reports. During 1956, however, it was felt that a special effort ought to be made and all the resources of the Health Education Section and the Dental Section were, therefore, concentrated on this subject in September. A fairly extensive programme was evolved which included displays at welfare centres, in the Public Health Department, Civic Centre, Housing Management Department's window, and in the Corporation Street window of the Information Department.

A special poster was prepared and copies were exhibited on the usual sites, at libraries, baths, etc., and in addition on a number of sites belonging to the Public Works Department and in all the schools in the City. An exhibit on dental health was arranged in the Branch Museum in Cannon Hill Park. This was shown during September and will be shown again from time to time. This Museum is visited by organised parties of school children and teachers in training.

Chemists in the City agreed to co-operate and to show a display of tooth cleaning materials backed by a display card supplied by the Department. Some attractive displays were seen, particularly in one or two shops in the City centre. It should be added that a very high percentage of chemists agreed to take part.

Lunch-time film shows in the Public Health Department were arranged on Tuesdays during September and two exhibitions were held, one at Small Heath Welfare Centre on the Coventry Road and the other at Monument Road Welfare Centre. Publicity was given to the film shows and the exhibitions by slides shown at a number of cinemas in the City. The exhibition was open at Coventry Road on Friday afternoon, 14th September and Saturday, 15th September, 1956, and at Monument Road on Friday afternoon, 21st September and Saturday, 22nd September, 1956. Some 500 people attended at these times when the centres were not otherwise being used. It is felt that this response was reasonably satisfactory and it is hoped to develop this type of activity further.

A special slogan was used in the postal franking machines of several Departments of the Corporation during September. These can, of course, be used again as opportunity occurs.

A press conference was held at the beginning of the campaign in September and as a result very valuable publicity was obtained. Thanks are due to the local press for their help in this matter.

The results are almost impossible to assess on a short term basis. Dental Health Education is bound to be a long term project if only because it is difficult to see any way of appealing to the emotions of the public in this matter. It seems obvious that much more time and energy will have to be devoted to this subject in the future.

## CARE OF THE UNMARRIED MOTHER

The proportion of live births which are illegitimate continues to increase, being 61.9 per 1,000 live births in 1956 compared with 53.2 in 1955. Although the death rate is much higher among illegitimate infants than among legitimate infants it is satisfactory to note that the illegitimate infant death rate in 1956 was slightly less than in 1955. (Table, p. 90).

Three whole time nurses, two of whom are health visitors, and one part-time health visitor are now responsible for the social services available for the unmarried mother. The increasing volume and complexity of the work necessitated the appointment of an additional whole time worker, who is a health visitor. Two of these nurses assist in the supervision of the day nurseries where many of the illegitimate children are cared for while their mothers are at work.

The number of women seeking assistance from the Department showed a substantial increase, being 912 in 1956 compared with 665 in 1955. Of the 856 illegitimate pregnancies, 165 were West Indian women.

	1956	1955
<i>Illegitimate pregnancies</i>		
Single women—first babies ... ..	560	393
with previous illegitimate babies	197	118
Married women ... ..	84	69
Out of City residents ... ..	15	15
<i>Legitimate pregnancies</i>		
Homeless ... ..	42	60
Other reasons ... ..	14	10
	912	665
	912	665

Of the 560 single women having their first baby, 361 were accommodated in their own homes during the pregnancy, 20 left the City before delivery, and the remainder were looked after in Mother and Baby Homes. This figure of 560 included 36 girls under the age of consent.

Of the 197 women who had previously had one or more illegitimate children, 165 were in their own homes during the pregnancy, 6 left the City before delivery and the remainder were in Mother and Baby Homes. In only 36 instances was the previous illegitimate child in the care of the mother, 100 being in the care of relatives, 26 had been adopted, 16 were in residential nurseries or fostered out and 19 had died. Ten of these women were living with the putative father and 9 were subsequently married to the father of the child. Of the 197 women, 34 had sought the assistance of the Department in previous pregnancies.

Of the 84 married women, 81 were separated, divorced or widowed and 3 were living with their husbands. One of the women was, in fact, found not to be pregnant. Thirty-seven women were living in their own homes with their babies, 16 had their babies adopted, 5 were living with the putative father, 2 were in Beechcroft with their babies, 4 babies were fostered and 3 babies died. Of the remainder, 7 left the City before delivery and 9 were undelivered at the end of the year.

Forty-two homeless married women applied to the Department for help, one of whom was admitted to Beechcroft, the rest being accommodated in hostels or with relatives or friends.

The Department works in co-operation with the Salvation Army Mother and Baby Home, with three social workers attached to the Church of England Diocesan Council for Moral Welfare, one social worker attached to the Catholic Welfare Society and one case worker from the National Council for the Unmarried Mother and her Child. The latter undertakes the responsibility of giving advice and help with Affiliation Order.

## Mother and Baby Homes

Owing to the heavy pressure on accommodation in the early part of the year, the Health Committee agreed as from January, 1956, to pay a grant to Lahai-Roi Mother and Baby Home for cases recommended by the Department for admission. Confinements take place in this Home and the Home is registered with the Local Authority as an Adoption Society.

There are three voluntary Mother and Baby Homes in which the confinements take place and to which cases are referred—two in the City run by the Salvation Army and a voluntary body respectively and one outside the City for Roman Catholic girls. There is a second Mother and Baby Home for Roman Catholic girls in the City where the mothers can be admitted six weeks before the expected date of confinement, have their confinement in hospital, and return to the Home for three months after the birth of the baby.

The Local Authority provides a Mother and Baby Home at Beechcroft with accommodation for 19 mothers and 12 babies. The number of women admitted during 1956 was 102, the same as in 1955. This included one homeless mother and baby who were given temporary accommodation for one week. The medical officer responsible for the medical examination of children to be placed for adoption now visits the Home and supervises the general health of the babies while there. As a result the preliminary examination of babies to be placed for adoption can now take place in the Home. Any baby who has a tuberculous family history or who will be placed in a home with prospective adopting parents, one of whom may have had tuberculosis in the past but is now cured, will be offered B.C.G. vaccination before placement, as a preventive measure. The mother cannot give her consent to the adoption of her baby until the baby is six weeks old, but preliminary arrangements for the placement of the baby are initiated as soon as the mother has made up her mind to part with the baby.

In order to help with the rehabilitation of the girls, sewing and cooking classes are held each week. A course of lectures on infant care was given by a health visitor. The vicar of a neighbouring parish visits the Home one evening weekly to talk to the girls. He occasionally brings films or gramophone records. During the antenatal period the girls attend the relaxation classes at King's Heath Infant Welfare Centre.

The health of the babies, mothers and staff has been good. Five mothers were admitted to hospital during the year; two during pregnancy for antenatal care and three after confinement. Of these, two had puerperal pyrexia and one had pleurisy. One baby was admitted to hospital with pyloric stenosis; a successful operation was performed and the baby was later placed for adoption. One baby with a congenital heart died in the maternity hospital. Nine of the babies weighed less than 5½ lbs.

at birth, three of them belonging to two sets of twins. There were 11 complicated labours. Two babies were born in lodgings, the mothers and babies being later transferred to hospital.

A personal and individual interest is essential if anything is to be accomplished with the unmarried mother as she is unhappy and worried and greatly in need of advice and help. The type of woman admitted at the present time is quite often of poor mental calibre—quite irresponsible, and much more difficult to help. There seems to have been an increase in the type of girl having her second or further illegitimate child.

Each mother is interviewed after her return to the Home following her confinement; her difficulties are discussed and all available help and guidance extended to her. The placement of the baby for adoption may be in the best interests of the baby and arrangements are made through the Children's Department or through voluntary adoption societies.

The medical officer personally interviewed 78 girls. Of these, 47 were having their first baby, 18 their second baby, 10 their third baby and 3 their fourth baby. In some instances the putative father is prepared to give financial assistance during pregnancy as well as after the birth of the child. In a group of 47 girls having their first baby, however, 40 received no financial assistance of any kind from the putative father. Two girls, one of whom married the putative father and one who left Beechcroft to live with the putative father, received full financial assistance. Other payments made were trifling.

Twenty-three of these 47 first babies were placed for adoption, including twins. During the three months probationary period one of the babies was found to be a spastic and one was found to be developing more slowly than normally. Nine children were placed in foster homes or residential homes and 15 were discharged with their mothers.

Of the 18 mothers having their second child, 14 of the mothers were responsible for their first baby. Of these 14 mothers, 8 offered their second baby for adoption, 3 of the babies were admitted to residential homes, 2 were transferred to foster homes and one mother took her second baby home with her. Of the remaining 4 mothers having their second baby, 2 of the first babies had been adopted and 2 were in children's homes. Of the second babies of these mothers, 3 were placed for adoption and one was taken home with the mother.

Of the ten mothers having their third baby, one was a single woman, five were divorced or awaiting divorce and the rest were married. In the case of the others, the woman usually returned to her husband, the baby being placed for adoption. Of the three women having their fourth baby, one was a married woman.

Forty-seven girls in this group of 78 had one or both parents dead or the parents were separated and 7 were brought up in institutions, having lacked a normal home life. Thirteen of the 18 married women were already separated from their husbands or were divorced. Three of the married women returned to their husbands, two of the babies being placed for adoption. The third baby had been placed for adoption, the mother stating her baby was illegitimate. The husband then appeared and demanded the return of the baby from the adopting home as he claimed to be the father.

Of 16 girls coming from apparently satisfactory homes, 4 of the grandmothers were already looking after another illegitimate child and 3 of them were willing to have their daughters back if the new babies were adopted. In three instances the parents of the girl had no knowledge of the pregnancy. Four of the girls had parents in Germany, and two had parents in Jamaica.

In fact because of death or separation, 54 of the mothers' homes could be designated as social failures.

From this small survey it would seem reasonable to infer that the disturbances in the girls' own family background may well have played a large part in providing the emotional factors which eventually led to the births of these illegitimate babies. Many of these girls, having been deprived of affection themselves for so long, find making the decision to part with their babies so very difficult. It may not always be wise to encourage the strong emotional attachment to her child by continuing breast feeding, and the longer the mother has her baby with her, the more difficult it is for her to make a decision. Many mothers are strongly influenced at this stage to keep their babies though it may well be in the interests of the children for them to be placed in prospective adopting homes.

Under the National Assistance Act the unmarried mother has to maintain her child unless there is a Court order against the father, but the number of Court orders granted each year in England and Wales is only about one-tenth of the illegitimate births.

Many of the girls admitted to Beechcroft are not entitled to their full maternity benefits and some have already spent their maternity allowance before application to the Department. To qualify for maternity benefit, the expectant mother must have actually paid 26 contributions for the period between the time of entering insurance and the expected date of confinement. Twenty-one girls interviewed in the Department were unable to pay a contribution towards their maintenance while in Beechcroft, either because they had exhausted their benefit or they were not entitled to claim.

Sixty-five of the 78 girls already referred to had received no financial assistance whatever from the putative fathers at the time of the interview though several were advised to consult the court worker with a view to applying for an Affiliation Order. Many of the girls are determined not to make any attempt to seek help from the putative fathers, especially when adoption proceedings have been agreed, but the court worker encourages the girls to do so, so that they can have some financial help during the probationary period of adoption—while perhaps the babies are in voluntary homes awaiting adoption, as payment is requested for their maintenance.

After placement of babies in the prospective adoption homes, it is possible for the prospective adopting parents to request the removal of the babies. Two of these adopting mothers are now trying to make a decision as to whether to keep the babies or not, one because of a spastic condition which has developed and one because of slow mental development. On the other hand, until the Adoption Order has been granted the natural mother can request the return of her baby.

Not all women with an illegitimate child apply to the Department for help. During the year a survey was carried out of 650 mothers with illegitimate babies born in 1955 who did not apply to the Department for advice and help during their pregnancy. It was interesting to note that in 300 cases the mother and child (or children) were living with the putative father as a complete family unit and in many cases had done so for years. But for the birth registration, the health visitor would not have known the children were illegitimate. Of those remaining, 72 had applied to other social agencies, 11 had attended infant welfare centres (two as married women), one was in prison up to the birth of the baby and 60 stated that they did know of the services available, but did not seek help. Ninety-six stated that they did not know of the services available but only one stated that she would have been pleased to have had further advice. In addition, 62 of the women had left the City and it was impossible to obtain any information about a further 48. In 8 cases the girls had had no antenatal care nor had any arrangements been made for the confinements.

In 1956 the situation of these 650 women was as follows. Sixty-two mothers had left the City, 55 babies were adopted, 32 babies had been admitted to residential nurseries and 7 babies were in foster homes. In 41 instances the parents had married, 60 babies were living with their mothers and family, 27 mothers were in lodgings or a residential post with their babies and 300 mothers were living with the putative father. Eighteen of the babies had died and it was not possible to trace 48 mothers.



## Statistics

During the year 870 cases were dealt with by this Department. Of these, 197 were multiple, 84 were married, 14 were legitimate pregnancies and 15 were resident outside the City.

<i>Arrangements for new cases in 1956</i>	<i>First cases</i>	<i>Multiple cases</i>	<i>Married women</i>
Mother and Baby Homes			
Beechcroft ... ..	42	17	14
Francis Way ... ..	39	4	1
Lahai-Roi ... ..	14	3	—
Lyncroft House ... ..	43	1	2
Woodville ... ..	26	—	1
Homes out of City ... ..	15	1	1
Own home entirely ... ..	7	3	7
Own home except for confinement ... ..	354	162	54
Left City before delivery ... ..	20	6	4
	<hr/>	<hr/>	<hr/>
	560	197	84
	<hr/>	<hr/>	<hr/>

<i>Situation at the end of year</i>	<i>No. of cases</i>	<i>Percentage</i>
Antenatal cases—		
(a) In homes awaiting delivery ... ..	51	6.0
(b) In own home awaiting delivery ... ..	173	20.6
Mothers and babies still in Homes ... ..	31	3.7
Babies having died, and stillbirths ... ..	30	3.6
Babies having been adopted ... ..	43	5.1
Babies with foster mothers ... ..	30	3.6
Mothers having married babies' fathers ... ..	73	8.7
Mothers living with babies' fathers ... ..	34	4.0
Mothers and babies having left City ... ..	63	7.5
Babies in Homes without mothers ... ..	59	7.0
Mothers at home with their babies ... ..	247	29.4
Not pregnant ... ..	5	0.6
Baby returned to Jamaica ... ..	2	0.2
	<hr/>	<hr/>
	841	100.0
	<hr/>	<hr/>

Home visits paid by health visitors <i>re</i> unmarried mothers ... ..	112
Mothers visited in hospital ... ..	61
Homes inspected <i>re</i> suitable lodgings with babies ... ..	9
Office interviews—applications ... ..	848
Office interviews—other than applications ... ..	923
Office interviews <i>re</i> V.D. ... ..	5
Number of women referred to Diocesan Workers ... ..	35

<i>Lodging money grant—</i>	
Amount spent ... ..	£2 0 0
Amount refunded... ..	—
	<hr/>
	£2 0 0
	<hr/>

*Girls under age of consent*

14 years old	...	...	...	...	...	...	...	2
15 years old	...	...	...	...	...	...	...	13
16 years old	...	...	...	...	...	...	...	21

*Multiple cases (excluding married women)*

1st child died	...	...	...	...	...	...	...	19
1st child in residential nursery	...	...	...	...	...	...	...	7
1st child adopted	...	...	...	...	...	...	...	21
1st child adopted by grandparents	...	...	...	...	...	...	...	5
1st child in care of relatives	...	...	...	...	...	...	...	100
1st child with mother	...	...	...	...	...	...	...	36
1st child fostered	...	...	...	...	...	...	...	9
								<hr/> 197 <hr/>

Of these 197 cases, 10 are living with the putative father, 9 are married to the putative father and 34 have been dealt with previously.

*Married women*

Separated from husband...	...	...	...	...	.....			63
Divorced	...	...	...	...	...	...	...	11
Widows	...	...	...	...	...	...	...	7
Living with husband	...	...	...	...	...	...	...	3
								<hr/> 84 <hr/>

*Of these—*

Living with putative father	...	...	...	...	...	...	...	5
Left City	...	...	...	...	...	...	...	7
In Beechcroft	...	...	...	...	...	...	...	2
Died	...	...	...	...	...	...	...	3
Own home with baby	...	...	...	...	...	...	...	37
Had baby adopted	...	...	...	...	...	...	...	16
Fostered	...	...	...	...	...	...	...	4
Antenatal	...	...	...	...	...	...	...	9
Not pregnant	...	...	...	...	...	...	...	1
								<hr/> 84 <hr/>

14 married women with legitimate pregnancies applied to the Department for advice and help. These were exclusive of homeless cases.

15 resident out of City cases were dealt with. 42 homeless married women applied to the Department for help during 1956. One was given temporary accommodation in Beechcroft.

## DAY NURSERIES

On the 1st January, 1956, there were 1,110 places for children in the 25 day nurseries and one 24 hour nursery maintained by the Committee.

Owing to falling attendances and expenditure cuts the day nursery at 46, Wordsworth Road, Small Heath, was closed on the 31st July, 1956. Children from this nursery were transferred to other nurseries and the staff were transferred to fill existing vacancies.

On the 19th March, 1956, the children and staff from the Settlement, Summer Lane, were transferred to the new nursery building at 185, Farm Street. The premises at 29, Elvetham Road, to replace the nursery at Islington Row, are in course of adaptation and alterations should be completed early in 1957.

The reasons for admission under priority groups 1 and 2 remain much the same as in previous years. Admissions under group 3 (non-priority) were fewer than in 1955. There was a reduction in the number of homeless mothers given temporary accommodation in the Welfare Department hostels, who applied for nursery accommodation for their children. Thirty-three children of 24 mothers were admitted during the year and their length of stay again varied from 2 days to 16 weeks. There was also a reduction in the number of children from problem families admitted at the request of the Mental Health Section of the Department or the Family Service Unit. Nineteen children have been admitted during the year. The length of stay varied from a few days to 9 months.

There is still a heavy demand for accommodation at the Somerset Road 24 hour nursery. Fifty-two children were admitted in 1956 during their mother's illness and 54 children when their mothers were due for confinement. Of the 52 children admitted during their mother's illness, 27 were long stay cases.

Inspectors of the Ministries of Health and Education visited the new nursery at 185, Farm Street, during the year and approved it as a training nursery for students in the full age range of 0—5 years.

The two year training course for the National Nursery Examination Board Certificate continues. Students attend Garrison Lane Training Centre for one day each week for vocational training and Bournville Day Continuation College or Brooklyn Farm Technical College for further education on another day each week. During 1956, 52 candidates were interviewed for selection for nursery training, of whom 29 were accepted and 13 taken on for a trial period. For 9 candidates training was postponed for six months. One decided to withdraw her application. At

the three examinations conducted in Birmingham for the National Nursery Examination Board Certificate the following results were obtained :—

April, 1956	...	...	...	...	4 passed	
July, 1956	...	...	...	...	11 passed	3 failed
December, 1956	...	...	...	...	13 passed	3 failed.

#### NUMBER OF CHILDREN ON DAY NURSERY REGISTERS, 1956

	<i>0—1</i>	<i>1—2</i>	<i>2—5</i>	<i>Total</i>	<i>Average daily attendance for 1956</i>
	<i>years</i>	<i>years</i>	<i>years</i>		
1st January, 1956 ...	145	252	677	1,074	799
31st December, 1956	142	215	555	912	

#### ANALYSIS OF CHILDREN IN THE NURSERIES ON 31ST DECEMBER, 1956

##### GROUP 1. Children whose mothers were the main or sole support :

Unmarried mothers	...	...	...	...	...	372
Widows	...	...	...	...	...	57
Women separated from husbands	...	...	...	...	...	279
Husbands in prison	...	...	...	...	...	21
Husbands sick or disabled	...	...	...	...	...	26
						<u>755</u>

##### GROUP 2. Children whose mothers were unable to look after them through illness, etc. :

Long term illness	...	...	...	...	...	37
Short term illness	...	...	...	...	...	21
Confinement	...	...	...	...	...	22
Mothers dead	...	...	...	...	...	18
Mothers deserted	...	...	...	...	...	14
Mothers in prison	...	...	...	...	...	3
Contacts of tuberculosis	...	...	...	...	...	19
						<u>134</u>

##### GROUP 3. Non-priority children :

National Service, deaf or blind parents, etc.	...	...	...	...	21
Problem families	...	...	...	...	1
Homeless families	...	...	...	...	1
					<u>23</u>

#### NUMBER OF PRIORITY CHILDREN ON WAITING LIST

	<i>0—1</i>	<i>1—2</i>	<i>2—5</i>	<i>Total</i>
	<i>year</i>	<i>years</i>	<i>years</i>	
31st December, 1955 ...	37	42	56	135
31st December, 1956 ...	47	34	63	144

## Daily Guardian Scheme

This scheme is for the registration of women taking children by the day, who do not come within the provisions of the Nurseries and Child-Minders Regulation Act, 1948. Each woman is paid £1 for each quarter in which she has looked after children. The premises are inspected regularly by medical officers and health visitors.

Number on register, 1st January, 1956	...	...	...	...	48
Number of persons resigned during 1956	...	...	...	...	16
Number of new registrations	...	...	...	...	16
Number on register, 31st December, 1956	...	...	...	...	48
Number of children accommodated	...	...	...	...	83

## Nurseries and Child-Minders Regulation Act, 1948

Eleven premises and 23 persons are now registered under the Nurseries and Child-Minders Regulation Act, 1948, and are inspected regularly by members of the medical staff. Two hundred and fifty-one places for children under the age of five years are available..

Any parents of children not eligible for day nursery places may apply to the Health Department, when the address of the nearest daily minder or private day nursery where there is a vacancy will be given to them. One of the main reasons given for mothers wishing to place their children in the care of daily minders, and go out to work, is that they may save enough money to have a home of their own.

	<i>Persons</i>		<i>Premises</i>	
	<i>Number registered</i>	<i>Places for children</i>	<i>Number registered</i>	<i>Places for children</i>
1st January, 1956 ...	21	84	11	125
New applications ...	8	36	1	15
Applications for additional places ...	—	—	—	17
Resignations ...	6	23	1	3
31st December, 1956	23	97	11	154

## HEALTH VISITING

(SECTION 24—NATIONAL HEALTH SERVICE ACT, 1946)

The number of health visitors employed on work in the field at the end of 1956 was 102 compared with 106 at the end of 1955. Although the visited child population under five years of age fell by 1,497, the average case load per health visitor rose from 796 to 812. The number of households visited was 80,666, an average of 790 per health visitor. Many of the households were visited more than once. In 49 per cent. of the households visited with children under the age of five years there were also children of school age.

### Care of Mother and Child

Owing to the rise in the birth rate the number of primary visits to infants has shown an increase. In spite of the decrease of four in the number of health visitors working in the field, the number of domiciliary visits to mothers and young children has shown an increase from 195,326 in 1955 to 200,835 in 1956. This increase in domiciliary visiting is reflected in a further increase in the proportion of visited children who attended the welfare centres.

### General Health Visiting

The number of visits, other than to children under five years of age and expectant and nursing mothers, rose from 10,494 in 1955 to 11,733 in 1956. The visits to adults rose from 852 in 1955 to 1,206 in 1956 and to schoolchildren from 407 in 1955 to 711 in 1956. These visits to adults were in addition to those paid by the health visitors specially appointed to visit aged persons. The work in connection with the tuberculosis survey also showed an increase. (See table page 154).

### Hospital Follow-up

The following extracts from the reports of the health visitors attached to hospitals are of interest :—

#### CHILDREN'S HOSPITAL

The main part of the work during the year 1956 consisted of primary visits to the homes of children who were still in hospital.

Reasons for visiting included social conditions—cases of ill-nourishment, physical neglect, or dirty bodily condition. Also, unsatisfactory housing, which many parents blame for the ill-health of children admitted to hospital. Advice has often to be given on re-arrangement of rooms to enable children to be nursed downstairs and also instruction regarding the preparation of special diets for children such as coeliac cases.

Certain children are frequently re-admitted to hospital within a short period of their discharge and it is necessary to investigate the circumstances leading to this. Where there have been cases of poisoning, advice is given to the parents concerning the care of medicine, tablets, spirit of turpentine and many other household items which may be left within the reach of a young child. Frequently, however, information is required in order to give a full picture of the medical history. Very often the parents omit to give full information at the time of the child's admission to hospital. Other cases present psychological problems where certain help is required. Advice is also given on feeding and general nursing care of children who have had some specific disease or malformation.

Many visits have been paid to children who have defaulted in attendance at out-patient clinics and concerning whom anxiety was felt by the medical officer in charge of the clinic.

Numerous enquiries regarding children admitted to the Children's Hospital were made by health visitors from different parts of the City and we were able to supply them with information regarding these children. Information concerning children in hospital was passed to the district health visitors.

#### DUDLEY ROAD HOSPITAL

More than half of the visits were to children suffering from respiratory diseases. A large number of these children are allergic to some outside irritant, particularly house dust and in consequence many of the visits made were in order to help and advise the mothers on the best ways of controlling this. A chest clinic has just been started and it is proving helpful to the physician for visits to be made to the homes and to give a report on actual conditions.

Feeding problems form the next largest group and by making a follow-up visit soon after discharge, the mother gains confidence and can be persuaded to attend the infant welfare centre.

#### GENERAL HOSPITAL (DIABETIC CLINIC)

The majority of visits were paid to new patients but an almost equal number were second or subsequent visits. Visits were also paid to general practitioners, home nursing centres, child welfare centres, day nurseries, etc. During the home visit diabetes is explained in a simple way. This is to show the necessity of keeping strictly to the diet. The diet is then checked over and any worrying or difficult details explained. Usually a number of foods are weighed and the patient or relative is encouraged to continue to weigh with care.

The patient's feet are normally seen and advice about their daily care given. When the patient is on insulin the equipment is seen and the method of caring for it checked over. Also the technique of giving the insulin is discussed and frequently demonstrated. Other things which have a bearing on the patient's health are discussed, for example, exercise, fresh air, cleanliness, eating habits of other foods and carbohydrates. During the home visit unexpected social problems often come to light, for example, lack of general care, either requiring contact with other members of the family or the home help supervisor, inability to buy extra protein because of a small income, when the National Assistance Board is approached.

During the hospital sessions at the clinic new patients are seen on their return visit and similar points are discussed as on the home visits. These, naturally, are mostly people who work during the day and cannot easily be seen at home.

Mrs. X is a diabetic of some years standing. She lives with her husband in a small back-to-back house. She has three children at school and three under five years of age. Mrs. X, who was four months pregnant, was due to be admitted to hospital for removal of an extremely painful lump on her right foot. Mr. X was also due in the Woodlands Hospital for an operation to his feet. Mrs. X's diabetes was uncontrolled due to carelessness with her diet. She was given a new diet sheet, her scales were found and set up and she was encouraged to make an effort to keep to her diet. It was arranged for the three young children to attend a day nursery. A society was contacted and promised to send a voluntary baby sitter so that Mrs. X could visit her husband in hospital. The maternity hospital was telephoned and promised to send Mrs. X the milk coupons for her present pregnancy. Mrs. X was subsequently discharged from hospital with above knee amputation of leg. She moves about the home on a crutch and the loan of a wheel chair was arranged so that she could be taken out. The home is now neat and clean and a sister visits to help with the housework.

Mr. Y was a fairly new patient who had always visited the clinic alone. He had just been put on to insulin but could not see well enough to give his own injections. He felt that the sister he lived with would not approve of a home nurse going to the house in uniform. A visit was paid in the evening and the equipment sterilised and laid out for daily use. Miss Y was shown how to measure the insulin and Mr. Y how to give it. The diet was checked over and it was found that it had increased from fifteen rations to eighteen, plus beer. Foods were weighed and Miss Y was shown how to do this in future.



## ROYAL ORTHOPAEDIC HOSPITAL

The following are the types of case visited :—

1. The homes of all patients who have spent three months or over in hospital, or if, on admission, they expect to be alone when they return home.
2. Homes in which the relatives need instruction on how to care for the patient or where nursing equipment may be needed before the patient leaves hospital.
  - e.g.* (a) fracture boards for patient in plaster spica.
  - (b) parents of a poliomyelitis case who is wearing appliances—do they know how to fix them ?
3. Children who default in treatment, or are ordered to wear appliances or to do exercises at home, and when seen by the surgeon are not doing so and the physical condition is deteriorating because of it.
4. Home conditions of children who have been in hospital many months :—
  - e.g.* tubercular spine—should they be sent to a convalescent home or allowed to return home ?
5. Cases originally referred to the Welfare Department by the hospital, where the Welfare Department ask advice about particular problems. These are usually chronic cases whose condition is deteriorating.
6. Children suffering from congenital dislocation of hip and being treated at the Children's Hospital, whose parents need advice on how to convert cots and prams and care of child in the home.

Over eighty per cent. of the patients discharged from the hospital, who have been there for at least three months, need either equipment or help in some other manner.

Housing problems are frequently found in the course of visiting. For example, a patient with a tubercular spine living in an upstairs flat needs an exchange ; ramps or bannisters needed for a patient to move around home ; and defects in property which landlord refuses to repair—(commonly—broken floors and stairs).

A problem may very well prove to be more different in reality to what it appeared to be when a visit was requested.

*e.g.* A difficult patient who took his own discharge from hospital was found, when visited, to have been in hospital for mental ill-health and, because of this trouble was acting strangely and would, if not discovered, have caused severe disablement to himself.

A poliomyelitis case, who had progressed satisfactorily in hospital, began to lose interest in himself and his progress when he returned home. The cause was found to be due to the fact that a chair offered by the Ministry of Pensions could not be supplied because of the difficulty of getting permission to erect a shed on spare land near his home.

A patient, aged 59, with spinal deformities from birth was living with her aged mother of 80 years. The patient moved around home pushing a kitchen chair, and, to add to her worries, suffered from severe gastric trouble. The mother had an accident and the general

practitioner wanted help for the daughter, or admission to a home. When visited, it was found that the daughter had use of her hands and to-day, except for cleaning floors and windows, completely runs the home from a Merlin chair, and has had no further gastric trouble.

Relatives and patients alike appear to welcome someone in their own home who will give them knowledge about problems which they felt remained a mystery in a busy ward. Questions like the following may be asked :—

- (a) When Tommy has his splint off, what is the next step ?
- (b) How is a plaster kept clean ?
- (c) Have I put my caliper on correctly ?
- (d) Why is my leg swelling, and will it do any harm ?

#### SEELY OAK HOSPITAL

As the number of admissions to the children's wards was smaller in 1956, it has been possible to visit most of the children after discharge.

There was a marked decrease in the number of feeding problems, but a slight increase in the number of poisonings in the under five age group. For example, two substances taken by young children were turpentine and paraffin which had been collected in "pop" bottles and the labels had not been removed—the children, seeing the familiar label, helped themselves. Various tablets and pills prescribed for members of the family are left lying about. In one case the young child had emptied a bottle containing some substance for the treatment of worms. The mother seemed surprised that the bottleful should have produced such an adverse effect !

Fourteen families had housing difficulties, some of which had arisen after rehousing in new property.

#### QUEEN ELIZABETH HOSPITAL

Visits are paid to prepare for discharge home, to make investigations for convalescence and financial help and to give special advice about diet and other special conditions. The cases are referred by the almoners or occasionally by ward sisters.

Two ward sisters have asked to be taken out visiting and the result has been a mutual broadening of outlook and respect. The new midwifery superintendent has taken up her post and has established contact on several occasions with the visitor. At her suggestion, the mothercraft has been taken over by the midwifery staff. They take the classes in breast-feeding, gas and air and birth atlas. The visitor continues to take the class devoted to the preparation for the baby. The class is large, which is a barrier to establishing the intimacy so desirable. When the antenatal clinic is completed at the Queen Elizabeth Hospital it is hoped that this situation will improve.

Towards the end of the year a new procedure was begun. Instead of telephoning the general practitioner or his receptionist, a letter has been sent giving the details of the visit. This was tried because so often time of the doctor and visitor was wasted especially if a mutually satisfactory occasion for consultation could not be found. Several general practitioners have written to express their appreciation of this method. Besides the sending out of these letters, there are the odd times when it has been necessary to telephone the doctor and there has also been the opportunity for personal interview.

The following case histories are examples of the sort of work undertaken :—

Mr. O was very miserable because of his disability and could see no improvement after two years. He wanted to do some work and, as he was only 58 years old, this did not seem unreasonable. Consultant, general practitioner, health visitor and the patients wife are co-operating to improve his attitude.

There are many cases of this type who would be greatly helped provided those in attendance appreciate the difficulties, both physical and psychological, with which the patient has to contend.

#### ACCIDENT HOSPITAL

The press headlines often quote " Child Burned " or " Child Scalded " and, apart from this scant information, the public have little or no idea concerning the nursing care and follow-up treatment which such an accident may entail.

It is true to say that in many cases even the parents of the injured child may be unaware of the seriousness of the injury and are shocked and distressed to find that, on discharge, the child still needs special care and, in some cases, further hospital treatment. This attitude stresses the need for follow-up work in order to explain matters to the parents. It is the task of the health visitor attached to the Burns Unit, to visit such homes and discuss with the parents any problem relating to their child.

During the past year 150 parents whose children have been in-patients were visited. Apart from the nursing aspect, a large percentage were social problems ; bad housing being top priority. The child recovering from burns or scalds must have a separate bed. Several families interviewed were known to other social workers in connection with problems of another kind. On the whole, when one explains to the parents what is needed to help in the resettlement of their child on its return home, one usually has full co-operation.

In the course of follow-up work, opportunity occurs for the spreading of home safety propaganda amongst neighbours and relatives.

Apart from the burns and scalds follow-up work, a number of children admitted to the children's ward are visited. These are mainly cases of head injuries—the youngest child visited last year was a two months old baby who had a fractured skull. Cases of poisoning are also followed-up. Frequently, children are admitted suffering from the effects of swallowing aspirins or drinking disinfectants.

The last addition to the work as follow-up visitor, has been in connection with the resettlement in their homes of some aged injured persons. In these cases, help is often required in providing beds, fireguards, domestic helps, etc.

#### LITTLE BROMWICH HOSPITAL

The greater part of the work has been the follow-up of children sent into hospital as cases of gastro-enteritis— of 112 cases visited, 70 were under six months of age.

Diarrhoea, often associated with a feeding difficulty, has been a common reason for a home visit, particularly as it is the deliberate policy to discharge very young children from hospital at the earliest possible moment.

During the early months of the year there was an outbreak of dysentery. Some cases of salmonella dysentery were drug resistant and were discharged with a positive stool swab, the children concerned being clinically well. The mothers of these children were visited before they were discharged and advice given to them on disinfection. No case has returned to hospital and no cases have occurred from being in contact with these children.

#### Resumé of Health Visitors' Work in 1956

<i>Year</i>	<i>Number of health visitors engaged in the field at 31st. December</i>	<i>Number of children visited under 5 years</i>	<i>Child case load per health visitor</i>
1943 ... ..	98	75,310	768
1944 ... ..	99	82,839	837
1945 ... ..	98	86,935	887
1946 ... ..	103	93,572	908
1947 ... ..	111	98,223	885
1948 ... ..	111	99,190	894
1949 ... ..	106	97,910	924
1950 ... ..	109	97,852	898
1951 ... ..	101	95,582	946
1952 ... ..	91	91,842	1,009
1953 ... ..	87	88,936	1,022
1954 ... ..	93	86,662	932
1955 ... ..	106	84,407	796
1956 ... ..	102*	82,910	812

\*10 part-time health visitors engaged for a total of 40 sessions weekly counted as equal to four full-time health visitors.

TOTAL NUMBER OF ROUTINE VISITS PAID TO CHILDREN UNDER  
5 YEARS

Primary visits ... ..	18,581	} Total	178,854
Routine visits—children 0 to 1 ... ..	40,041		
Routine visits—children 1 to 2 ... ..	36,636		
Routine visits—children 2 to 5 ... ..	83,596		

TOTAL NUMBER OF SPECIAL VISITS PAID TO CHILDREN UNDER  
5 YEARS

Children 0 to 1 ... * ... ..	7,991	} Total	16,285
Children 1 to 2 ... ..	2,699		
Children 2 to 5 ... ..	4,732		
Ophthalmia neonatorum... ..	863		

TOTAL NUMBER OF VISITS TO EXPECTANT MOTHERS

Antenatal first visits ... ..	2,586	} Total	5,275
Antenatal re-visits and antenatal special visits	2,689		

TOTAL NUMBER OF VISITS POSTNATALLY

(a) Postnatal visits ... ..	273	} Total	421
(b) Neonatal deaths ... ..	71		
(c) Stillbirths ... ..	77		

GENERAL HEALTH VISITING

(a) Scabies ... ..	102	} Total	11,733
(b) Domestic helps ... ..	86		
(c) Children of school age ... ..	711		
(d) Adults (other than antenatal and postnatal visits) ... ..	1,206		
(e) Old people (women 60+, men 65+) ... ..	937		
(f) To general practitioners ... ..	76		
(g) Re insanitary conditions ... ..	126		
(h) Housing ... ..	595		
(i) Tuberculosis follow-up survey ... ..	7,894		

Grand Total 212,568

Total number of useless calls ... .. 45,686

HOSPITAL FOLLOW-UP

	1956	1955
Number of sessions at hospital ... ..	619	541
Number of visiting sessions ... ..	651	669
Total number of home visits ... ..	2,546	2,657

HEALTH VISITORS' TRAINING CENTRE

**1. Health Visitors' Training Course**

The thirty-fourth course of training for the Health Visitors' Certificate of the Royal Society for the Promotion of Health commenced on the

1st September, 1956. The examination will take place in Birmingham on the 6th, 7th and 21st June, 1957.

The response to the advertisements for Birmingham assisted students showed a decrease on the previous year. Sixty-five enquiries were received and of these, 26 application forms were not returned. Of the 39 completed applications received, eight candidates failed the entrance test, eight candidates withdrew, three candidates failed the Committee interview and twenty candidates were accepted for training.

Eight local authorities submitted fourteen candidates for training and the Birmingham Education Department sent two, making a total of thirty-six students.

The theoretical aspect of the syllabus of training continues to be covered by 194 lectures and 126 tutorials. Tests and end of term examinations are held throughout the course. In view of the expanding mental health services of the City and the need for the health visitor to make a greater contribution towards the prevention of mental ill-health, it has been decided to reorganise and enlarge this field of her training. In addition to lectures, students will attend at case conferences and take part in case discussions.

Practical training is undertaken in the various sections of the City Public Health, Education and Children's Departments. This experience includes attendance at the various sessions held in the maternity and child welfare centres and the school clinics. The students also accompany the various visitors when home visiting. Here, they observe the manner of approach, the methods of interviewing and listen to the advice offered. This is followed up by instruction in record keeping. Visits of observation are, as usual, arranged to cover a wide field of interest to the student.

The Health Departments of the county councils and county boroughs in the West Midland Region kindly continue to offer facilities for the practical training of the students. Varied and interesting programmes are arranged, thus giving the students a wider knowledge of health visiting. Following the changing pattern of training, the students will now receive some experience in the mental health services of most of these authorities.

The County Councils of Salop, Staffordshire, Warwickshire and Worcestershire once again have made arrangements for students to be resident in their Counties for one week. This valuable experience gives the students an insight into health visiting in a rural community.

Forty-eight students of the 1955-1956 course entered for the Health Visitors' Examination in June, 1956. Forty-two students were successful, the other students re-entered for the examination in September and obtained the Health Visitors' Certificate.

## 2. Training of Health Visitor and District Nurse Tutors

In December, nine health visitor tutor students and one district nurse tutor student from the Royal College of Nursing, London, spent three weeks of their course in Birmingham. Among the health visitor tutor students were six from overseas. The countries represented were South Africa, Nigeria, Malaya, Jamaica and Burma. Their programme was planned to cover visits of observation and fifteen lectures which were given by administrative medical officers and other members of the Health and Children's Departments. Their practical work included attendance at special schools in the City, and listening to group teaching undertaken by the health visitors.

This year the students were accommodated in the Handsworth and Central District Nurses' Homes and the Selly Oak Nurses' Hostel, an arrangement which proved to be most satisfactory. At the conclusion of their visit to Birmingham the students expressed their appreciation of the facilities made available for their tuition and the kindness extended to them.

## 3. Training of Student Nurses in Public Health

During the year 1956, the training centre made arrangements for 147 lectures to be given to the student nurses in the Birmingham hospitals. The following list shows the allocation of these lectures :—

Dudley Road Hospital	...	...	...	...	...	...	37
Highcroft Hall, Monyhull Hall, Coleshill and Chelmsley Hospitals							60
Selly Oak Hospital	...	...	...	...	...	...	10
St. Chad's Hospital	...	...	...	...	...	...	10
The United Birmingham Hospitals	...	...	...	...	...	...	30

Reports from the sister tutors of these hospitals intimate the success of this scheme.

## HOME NURSING SERVICE

(SECTION 25—NATIONAL HEALTH SERVICE ACT, 1946)

The Home Nursing Service is one of the most rapidly developing sections of the Department. Whereas in 1949, which was the first full year in which the City Council was responsible for its administration, one in seventy-eight of the population received attention from the district nurses, in 1956 that figure had risen to one in fifty. Over the same period the average number of visits per patient has risen from 23·4 in 1949 to 30·8 in 1956.

The reason for this increase is two-fold. Owing to the increased number of home nurses now employed it is possible to give patients the skilled nursing they require. At the same time there has been a change in the type of case nursed. This is shown in the following table :—

	1950	1951	1952	1953	1954	1955	1956
Cardiac ...	1,215	1,333	1,516	1,624	1,765	1,810	1,883
Respiratory ...	1,091	1,834	2,386	3,677	3,038	2,981	2,549
Tuberculosis ...	457	659	996	1,237	1,181	1,088	836
Cancer ...	878	829	832	879	997	910	992
Senility ...	766	757	713	789	932	948	913

There has been an increase of no less than 50 per cent. in the number of heart cases nursed. The number of patients suffering from respiratory conditions rose steadily until 1953, when compared with 1950 the total was trebled. Even although there has been some falling off since then, the number nursed in 1956 was still two and a half times greater than in 1950. A similar increase is seen in the number of tubercular patients nursed which, reaching its peak in 1953, was, in 1956, still twice as great as in 1950.

On the other hand, a notable decline has been seen in the past year in the number of intramuscular injections of penicillin and streptomycin administered, the number falling from 92,907 in 1955 to 87,001 in 1956. This, no doubt, is due to greater discrimination in the use of antibiotics and also to the decline in the number of cases requiring streptomycin at home.



The home nurse attends the patient at the request of the doctor and the number of visits the patient will receive depends upon the treatment ordered and the general condition of the patient. Three rounds are made by the home nurses each day. These are undertaken in the morning and afternoon and a third late night round from 7 to 10 p.m. so as to ensure that seriously ill patients are visited as late as possible in order to make them comfortable for the night.

A completely new outlook on the medical and surgical care of patients has resulted in many changes in the pattern of nursing care. This is most marked in the treatment of the elderly and chronic sick patients who, at the earliest opportunity, are helped and encouraged to become as active as their physical condition allows. Through co-operation with the Welfare Department it has been possible for many of the severely disabled patients to be provided with gadgets which have enabled them to achieve a greater degree of independence.

The home nurse has many opportunities for health education in the homes she visits where she can teach prevention of illness and accidents in the home. In addition many home nurses are taking an active part in the City's health education programme.

The Home Nursing Service might well be used more widely than it is at present by the Hospital Service. The frequency of attendances at Out-patients' Departments, which often involve a long period of waiting after a fatiguing journey, might be reduced in number if the home nurse supervised the care of out-patients and carried out treatment between appointments at the hospital. In the same way more in-patients might be discharged from hospital at an earlier date to the care of the family doctor with the home nurse in attendance and thus make available additional hospital beds for urgent cases.

### Children's Home Nursing Service

The Children's Home Nursing Unit which operates in the centre of the City has continued its steady development. Five hundred and twenty-nine children have been attended in their own homes by the two Queen's nurses who operate this service and 5,746 visits were paid. The nurse attached to the Central Home attended 331 cases and paid 3,544 visits. The nurse working from the Moseley Road Centre attended 198 cases and paid 2,202 visits.

The 514 new cases were in the following age groups :—

0—1 year ... ..	123
Over 1—5 years ... ..	226
Over 5—14 years ... ..	165
	<hr/>
	514
	<hr/>

Of these, 479 were referred by general practitioners, 28 by hospitals and 7 by the Public Health Department.

The children were visited for treatment of the following conditions :—

Bronchitis, pneumonia, pleural effusion and asthma ...	222
Tonsillitis, otitis media, adenitis and laryngeal conditions	87
Abscesses, boils and other skin conditions ... ..	52
Gastro-intestinal conditions, including enemas given ...	74
Infectious diseases, including glandular fever ... ..	33
Diseases of central nervous system ... ..	4
Disease of kidney ... ..	1
Pyrexia ... ..	7
Post operative conditions ... ..	13
Orthopaedic conditions ... ..	8
Eye conditions ... ..	4
Burns ... ..	5
Illness of mother ... ..	4
Neglect ... ..	—
	<hr/>
	514
	<hr/>

## Staff

The number of staff engaged in home nursing continues to increase. At the end of 1956 the staff numbered 192, compared with 133 in 1951.

There is a greater desire for an independent way of life among nurses at present and only a minority now wish to live in district nurses' hostels. Of the total number of home nursing staff in 1948, 42 per cent. were resident and only 14·1 per cent. in 1956. There are eleven district nursing centres throughout the City. These all provided hostel accommodation for home nurses but in many this was not fully used and some, apart from the resident district superintendent, were empty. In view of this it was decided to convert a selected number of these hostels into flatlets for home nursing staff. These flatlets have many advantages. Not only do they favour recruitment but the nurses who occupy them usually appreciate them so much, they tend to make them their permanent homes. It also adds to the value of the service if the nurses are able to live in the area in which they work.

Several conversions have now been successfully carried out. Six flatlets have been made in the Washwood Heath Centre, seven in the Centre at Yardley, two flats have been made in the Aston Centre and a further two are to be provided at a later date. The Centre in Hall Green, which consisted of two semi-detached houses, is undergoing conversion and when completed in 1957 will consist of six self-contained flatlets. Besides the accommodation provided, each centre also contains a district room, a writing room and an office for the superintendent.

The Centre at Kingstanding was located in a small private house which was inadequate for the growing needs of the work. This was allocated to a married male nurse and two council houses on a nearby site were adapted, the ground floor of one being used for an infant welfare centre, with the administrative quarters for the home nurses on the first floor. The adjoining house was converted into two flatlets for the superintendent and two home nurses.

The residential district nursing centre at Selly Oak has been converted into a hostel for public health nurses and a housekeeper/warden has been appointed to take charge. District nurses and other members of the Public Health Department's staff have made use of this accommodation. A housekeeper/warden has also been appointed to the Training Centre at Summer Hill, where the accommodation is fully used as the majority of student district nurses prefer to be resident during the period of training.

The services of the home nurse being much in demand in the new housing estates, ten council houses on these estates have been made available for their use.

Three home nurses developed an allergic reaction after administering antibiotics. One was successfully desensitised, the other two are still receiving treatment.

### **Training of Student District Nurses**

During the year 28 candidates were trained and entered for the examination for the Queen's Roll. Twenty-seven were successful, one failing the written examination.

### **Refresher Courses**

Two superintendents and the District Nurse Tutor attended a course for administrators at Roffey Park. Eighteen members of the staff attended refresher courses in Cambridge and York and at the Royal College of Nursing in Birmingham. A one day refresher course for state enrolled assistant nurses was arranged by the staff of the Public Health Department and was held in Birmingham. Fifty state enrolled assistant nurses attended this course. Thirty-two were working as home nurses in Birmingham and 18 were sent by neighbouring authorities. Meetings of the home nursing staff were held regularly throughout the year. The nurses were addressed on the following subjects:—"Modern Drugs," "Recent Advances in Nursing Techniques," "Poliomyelitis, its recognition and treatment," and a demonstration of the Holger-Neilson method of artificial respiration was given.

## Student Nurses' Visits

Three hundred and five hospital student nurses accompanied the home nurses on their rounds.

## X-ray of District Nursing Staff

Forty-eight initial examinations of new entrants and 330 six-monthly re-examinations of present staff were made during the year. One nurse was vaccinated with B.C.G.

## Bathing Attendants

Fifteen bathing attendants visited a total of 5,555 persons and 18,575 baths were given.

## Statistics

### NURSING STAFF AT 31st DECEMBER, 1956

Senior Superintendent...	...	...	...	...	...	...	1
District Superintendents	...	...	...	...	...	...	10
District Nurse Tutor	...	...	...	...	...	...	1
Assistant Superintendent	...	...	...	...	...	...	1
Full-time District Nurses	...	...	...	...	...	...	153
Part-time District Nurses	...	...	...	...	...	...	26
							<hr/>
							192
							<hr/>

The staff includes 12 male nurses and 9 student district nurses, 2 of whom are males.

### *Analysis of cases attended*

Cases on books, 1st January	...	...	...	...	...	...	3,604
New cases attended	...	...	...	...	...	...	17,535
Total cases attended	...	...	...	...	...	...	21,139
Total visits paid	...	...	...	...	...	...	656,426

### *Referred by*

Doctors	...	...	...	...	...	...	15,520
Hospitals	...	...	...	...	...	...	1,615
Health Department	...	...	...	...	...	...	109
Transferred from other areas	...	...	...	...	...	...	263
Other sources	...	...	...	...	...	...	28

*Clinical classification of new cases*

*Medical*

Cardiac ...	...	...	...	...	...	...	...	...	1,883
Pneumonia ...	...	...	...	...	...	...	...	...	772
Bronchitis ...	...	...	...	...	...	...	...	...	1,777
Diabetes ...	...	...	...	...	...	...	...	...	515
Arthritis ...	...	...	...	...	...	...	...	...	262
Carcinoma ...	...	...	...	...	...	...	...	...	992
Senility ...	...	...	...	...	...	...	...	...	913
Strokes ...	...	...	...	...	...	...	...	...	866
Enemas ...	...	...	...	...	...	...	...	...	1,791
Other medical ...	...	...	...	...	...	...	...	...	4,101

*Infectious diseases*

Tuberculosis ...	...	...	...	...	...	...	...	...	836
Whooping cough ...	...	...	...	...	...	...	...	...	35
Measles ...	...	...	...	...	...	...	...	...	2
Pemphigus ...	...	...	...	...	...	...	...	...	1
Influenza ...	...	...	...	...	...	...	...	...	76
Other infectious diseases ...	...	...	...	...	...	...	...	...	34

*Midwifery and Gynaecology*

Puerperal fever...	...	...	...	...	...	...	...	...	8
Antenatal complications ...	...	...	...	...	...	...	...	...	27
Postnatal complications ...	...	...	...	...	...	...	...	...	84
Abortion ...	...	...	...	...	...	...	...	...	24
Pessary renewals ...	...	...	...	...	...	...	...	...	101
Uncomplicated puerperium ...	...	...	...	...	...	...	...	...	—

*Surgical*

Post operation ...	...	...	...	...	...	...	...	...	707
Operations, other than hospital ...	...	...	...	...	...	...	...	...	21
Ulceration of leg ...	...	...	...	...	...	...	...	...	269
Other dressings...	...	...	...	...	...	...	...	...	1,438

*Age groups of new cases—1956*

Under 5 years ...	...	...	...	...	...	...	...	...	1,122
5—14 years ...	...	...	...	...	...	...	...	...	922
15—64 years ...	...	...	...	...	...	...	...	...	7,947
65 years and over ...	...	...	...	...	...	...	...	...	7,544

*Age groups of cases on books on 1st January, 1957*

Under 5 years ...	...	...	...	...	...	...	...	...	30
5—14 years ...	...	...	...	...	...	...	...	...	29
15—64 years ...	...	...	...	...	...	...	...	...	1,256
65 years and over ...	...	...	...	...	...	...	...	...	2,289

## DOMESTIC HELP

(SECTION 29—NATIONAL HEALTH SERVICE ACT, 1946)

In the Report for 1953 a full account was given of the development of the Home Help Service since 1920, when the first home help was appointed, until that year. Following a decision taken in 1953 to decentralise the service by the appointment of eight district organisers, local offices were opened at the welfare centres at Yardley Wood, Selly Oak and Carnegie in 1953, at Lea Hall, Trinity Road and Washwood Heath Centres in 1954 and at Small Heath and a second office at Selly Oak in 1955. These measures resulted in an increased recruitment of home helps, which continued steadily and was only limited in 1956 by financial considerations.

This has been an exceptionally busy year. With the present administration it has been possible to feel confident that every home help has been used to the best possible advantage and that the great saving in hospital bed accommodation has been maintained. The eight district offices deal mainly with the supply of home helps to the aged, more often ill aged, and it is to this group of people the greater number of attendances by home helps are made, some home helps caring for two or three households every week, with often more than one ill person in each household; many of these cases are of long duration. From the central office a more mobile staff of full time home helps attend maternity cases, emergencies and problem families. Part-time clerks have been appointed to assist the organisers, thus releasing them to undertake more domiciliary visiting.\*

Twelve months ago recruitment of helpers was difficult. The position has now been reversed and, in fact, there is a waiting list of would-be helpers, as the Health Committee decided for economic reasons the number of employed should not exceed 800 during the financial year which ends on 31st March, 1957. It is probable that redundancy and automation are responsible for the changing position. More married women are obliged to seek paid employment if they wish to maintain a good standard of living. Fewer vacancies on the staff occur, and these are filled more satisfactorily from the long waiting list at our disposal, a great advantage, the basis of a successful scheme being the employment of the right kind of woman.

It has been found possible to arrange, for example, for the middle aged widow coming within an earnings limit to undertake early morning or evening duty in homes where young children would otherwise be on

\* See graph page 81 showing trend of use of this service.

their own, or, to bridge the gap in the homes of seriously ill persons living alone between the time of departure of the home help and arrival of the night watcher.

It is interesting to note that an increased payment of 3d. per hour to all home helps engaged in the homes of patients suffering from pulmonary tuberculosis has made no appreciable difference in the number of women volunteering to do this work.

The cost of the Home Help Service has been steadily rising, and therefore during the year it became necessary to revise the scale of charges. Special scales were prepared to meet both the long term and short term case, and although when the new scales were put into operation some repercussion was inevitable, eventually the new charges were accepted and difficulties became negligible. Indeed, in those cases of long term serious illness, the new scales are financially advantageous, thus mitigating hardship.

After consultation with members of the Bournville Works Council, the special arrangement applicable to Cadbury's employees ceased to operate. An agreement was reached with the National Assistance Board with regard to cases known to that authority.

The training of home helps has continued regularly, and thanks are extended to the Education Committee for all their help, to the Midlands Electricity Board and West Midlands Gas Board, all of whom combined to make the instruction really worth while.

One male home help has been appointed and there are five male night watchers. Their work is particularly valuable in the homes of disabled or elderly ill male patients.

Early in the year a most interesting meeting was held at the Queen Elizabeth Hospital, when hospital almoners met home help organisers to discuss their various problems. Throughout the year there has been good liaison and friendly co-operation between other departments, social workers and general practitioners, an important factor in the organisation of a service which does so much for the physical and mental well-being of patients ill in their own homes.

<i>A. Number of domestic helps employed</i>	<i>1956</i>	<i>1955</i>
Full-time (50 hours weekly) ... ..	80	73
Part-time (30 hours and over) ... ..	203	207
Part-time (under 30 hours) ... ..	534	445
Night watchers ... ..	24	25
	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
	841	750
	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>

B. *Number of households dealt with*

					1956	1955
Maternity cases	...	...	...	...	1,001	918
Ill housewife	...	...	...	...	781	627
Special cases	...	...	...	...	41	55
Lung tuberculosis	...	...	...	...	91	126
Old persons	...	...	...	...	2,396	2,108
					<u>4,310</u>	<u>3,834</u>

Number of ill persons in these households 5,184

C. *Visits paid by organisers*

Maternity cases	...	...	...	...	880	560
Ill housewives	...	...	...	...	2,019	1,704
Old persons	...	...	...	...	6,727	4,964
					<u>9,626</u>	<u>7,228</u>



## PREVENTION OF ILLNESS, CARE AND AFTER CARE

(SECTION 28—NATIONAL HEALTH SERVICE ACT, 1946)

### CARE OF THE AGED

The amount of work in connection with the care of the aged continues to be heavy and to make increasing demands on the facilities provided by the Health Department. During 1956 the special health visitors made 6,961 visits (including 1,328 new cases) to which should be added 937 visits made by the district health visitors in the course of their general duties.

Of the new cases visited the larger proportion were in the 75 and over and 74% were women; 31·7% were found to be living alone; 31·6% were living with relatives and 23·8% with their spouse, who was, in the majority of cases, in the same age group. 11·8% were found to be bedridden, and 7·5% of the total number were incontinent.

So far as the old person living alone is concerned, the situation frequently arises when hospital admission is not really necessary but fairly constant supervision is required. Included in this category are the frail ambulators who are a constant source of worry when they become forgetful and wander about the house at night, leave unlighted gas taps turned on, and may be subject to blackouts and falls. In many cases the provision of local authority domiciliary facilities does not solve the problem.

Two old people living together, whether they be husband and wife, two members of a family or two old friends, often present a bigger problem than an old person living alone. The couple need one another for the maintenance of independent domestic life and one is a support to the other. Illness in one partner, therefore, raises difficulties. If hospital admission is necessary, then arrangements will have to be made for the remaining partner to be looked after, whether this be temporary admission to a welfare home (which is often difficult) or domiciliary facilities being provided.

Experience in this work shows that there is a need for some accommodation, both temporary and permanent, where elderly people can be

admitted for the kind of care and attention which is beyond the scope of a welfare home, but which does not require the skilled nursing of a geriatric hospital.

The demand for home helps is still great, and there was still a small percentage of applicants not supplied by the end of the year.

The bathing of old people at the Department's cleansing station in Bacchus Road which was begun in July, 1955, has grown into a very useful and much appreciated service. The total number of baths given during the year was 489, and 60 individual old people had benefited from this service (34 women and 26 men). There are a few "regulars" who are taken to be bathed every 2-3 weeks, but the majority of them for various reasons such as ill-health, bad weather, etc., attend at less frequent intervals. This service does make a small contribution to the domiciliary care and attention of that particular group of old people who tend to deteriorate through lack of personal cleanliness, which in some cases has been forced upon them by lack of facilities in the home, and physical incapacity.

Number of cases on register on 1st January, 1956...	...	...	1,383
Number of new cases added during year	...	...	1,328
Number of cases remaining on register at end of year	...	...	1,548
Number of new cases requiring home helps	...	...	139
Number of home helps supplied	...	82	
Number of cases refusing home helps	...	38	
Number of cases still awaiting home helps	...	19	
Number of cases requiring night watchers	...	...	17
Number of night watchers supplied	...	12	
Number of cases supplied with nursing equipment	...	...	160
Number of cases supplied with bath attendant	...	...	65
Number of cases supplied with laundry service at request of health visitor	...	...	25
Number of cases admitted to hospital	...	...	641
Deaths	...	...	494
Number of cases referred to Welfare Department, of whom	28		
were admitted to welfare homes	...	...	45
Number of cases referred for voluntary visiting	...	...	14
Total number of visits paid by special health visitors	...	...	6,961
Total number of visits paid by health visitors on general duties			937

### LOAN OF NURSING EQUIPMENT

This service continues to grow and there is abundant evidence of its great value in caring for the sick and infirm in their own homes thus relieving the pressure on hospital accommodation. Whilst the bulk of the sick room equipment is loaned to patients nursed by the district nurses, it is also available for patients being nursed by their own families and the increase in the past year is largely due to the extended knowledge of this fact.

During the year the number of items on loan was 7,821 as compared with 6,787, an increase of 15.2% over the previous year, and the

amount contributed by patients as loan charges was £1,137 as against £951 in 1955.

Whilst there has been a general increase throughout the whole range of equipment, there has been a notable increase in :—

Walking aids from 64 to 118, an increase of 84·4%.

Lifting apparatus from 79 to 137, an increase of 73·4%.

The loan of tripod walking sticks to elderly patients recovering from strokes has been most helpful and, in addition, the equipment available includes four different types of walking machines which can be suited to the particular needs of patients. These have all been used with very satisfactory results. Such cases take up much time and trouble often involving consultations with a hospital or the patient's doctor to ensure that the right type of apparatus is made available and both doctors and patients are very appreciative of this.

The problem of suitable aids to lifting patients continues to receive special attention. The simple portable bed hoist referred to in the last Report has been tried out and found most satisfactory for certain types of patient. There are now 14 of these which are in continual use and it is thought that more will be needed in the ensuing year. This is not suitable for cases requiring a mobile hoist and enquiries are still being made for such a hoist which will lift the patient from the bed to a wheel chair.

Another difficulty encountered is that of bathing a disabled heavy patient. Experiments are proceeding with a new type of portable bath-lift by which the patient is lowered and raised in the bath by water pressure. This lift is already in use in some special hospitals and, at our suggestion, the manufacturers are investigating the possibility of modifications which will enable the lift to be used in the ordinary domestic bath without expensive alterations. If this can be achieved, the apparatus will be a valuable addition to the Department's equipment.

There has been a number of cases requiring special adaptation of standard equipment to the needs of particular patients and in all such cases the Manager of Works has been most helpful with suggestions and in carrying out the work.

During the year an additional self-operating tilting bed was purchased for a patient and there are now four of these beds in use. This bed was purchased as the result of an application from the doctor for some means of raising the patient to a vertical position gradually over a period of months.

The patient, a man of 50 years of age, had been lying on his back for 21 years suffering from rheumatoid arthritis. The condition had been static for some time and it is confidently hoped that, with the aid of this special bed, he may eventually be got on his feet again and walk. The bed has only been in use for 3 months but the patient himself is most

co-operative and enthusiastic and already there is a great improvement in his condition and the prospect of achieving the object in view is very hopeful.

AMOUNTS OF EQUIPMENT ON LOAN DURING EACH OF THE PAST THREE YEARS

	1954	1955	1956
Wheel chairs ... ..	708	790	867
Merlin chairs ... ..	148	169	170
Stairway chairs ... ..	25	25	22
Spinal carriages ... ..	12	12	8
Bedsteads ... ..	194	340	318
Special mattresses ... ..	99	139	182
Fracture boards ... ..	19	25	50
Lifting poles and chains ... ..	72	79	91
Self-operating tilting beds ... ..	3	3	4
Crutches, pairs ... ..	30	43	51
Walking sticks ... ..	32	53	99
Walking machines ... ..	7	11	19
Lifting apparatus ... ..	(Not separately recorded)		46

The aforementioned items are additional to the normal items of " sick-room equipment " the loans of which are shown below :

	1954	1955	1956
Air beds ... ..	75	75	39
Air rings and sorbo cushions ... ..	961	984	1,034
Back rests ... ..	459	490	613
Bedpans... ..	1,127	1,173	1,269
Leg cradles ... ..	148	164	260
Mackintosh sheets ... ..	1,078	1,108	1,230
Urinals ... ..	395	437	589
Sick feeders ... ..	73	67	83
Commodos ... ..	348	499	635
Bed chairs ... ..	1	3	8
Miscellaneous items ... ..	54	98	134

**Loan of Fireguards**

This service continues to expand and there was an increase of 38% over the previous year in the number of fireguards loaned. The figures for the past three years are :

	1954	1955	1956
Number of fireguards on loan,			
1st January ... ..	38	178	272
Number issued during year ... ..	160	169	207
	<hr/>	<hr/>	<hr/>
	198	347	479
Number returned, no longer required	20	75	102
	<hr/>	<hr/>	<hr/>
Number on loan, 31st December ... ..	178	272	377
	<hr/>	<hr/>	<hr/>

The great majority of fireguards are loaned free of charge but in a few cases the circumstances justify a small hire charge of 5/- per annum and £6 1s. 0d. was collected on this account during the year.

Many of the young families involved might be regarded as "problem" families and there is a great deal of indifference on the part of parents as to whether they have a fireguard to protect the children and when one is provided on loan it is often ill-used and soon discarded.

Experiments are still being made in an endeavour to overcome the difficulty of a satisfactory fixing for the many varieties of fire grates in use to-day. The British Standards Institute has recently issued a specification for a fireguard but the method of fixing prescribed presupposes facilities for fixing which are not practicable on most existing fireplaces, and the adoption of fireguards made to their specification is dependent upon the specified fixing device being incorporated in fireplaces at the time of manufacture.

### DOMICILIARY LAUNDRY SERVICE

The number of patients who received this service during the year was 646 as compared with 625 in the previous year. As will be seen from the following figures of the patients receiving the service, 82% are of pensionable age and of the remaining 18%, only 4% are under 40 years of age:—

<i>Age Groups of Patients</i>										
Women	over	60	years	of	age	...	...	...	...	57%
Men	..	65	..	..	..	...	...	...	...	25%
Women	under	60	years	of	age	...	...	...	...	8%
Men	..	65	..	..	..	...	...	...	...	10%

Whilst a few patients require the service over a prolonged period, the average duration of the service per patient is 16 weeks.

Owing to the financial stringency and the rising cost of linen, laundering and transport, it was decided early in the year, as an alternative to any restrictions in the service, to extend the upper limit of the charge to patients. This charge, which is based upon the patient's circumstances, had remained at 3d. to 2/- per bundle of linen laundered since the inauguration of the service in 1951 and in May last the upper limit was increased to 3/- per bundle. There is no evidence to indicate that this revision has caused any hardship.

In consequence the amount contributed by patients during the past year rose to £1,116 as compared with £828 in the previous year.

The number of articles laundered was 126,041 and the total weight of the soiled linen handled was 61 tons 11 cwt. 3qtrs. 10 lbs.

The following is a record of cases dealt with in the past three years :

	1954	1955	1956
Number of cases on books, 1st			
January ... ..	147	176	204
New applications during year ...	416	449	442
	<hr/>	<hr/>	<hr/>
TOTAL ... ..	563	625	646
Cases removed from books during year	387	421	448
(analysed below)	<hr/>	<hr/>	<hr/>
Cases still on books at 31st December	176	204	198
	<hr/>	<hr/>	<hr/>

#### ANALYSIS OF CASES for 1956

1956 Qtr. ending	No. of approved appli- cations	Service discontinued			Service not started			Total
		Died	Hosp.	Other reasons	Died	Hosp.	Other reasons	
31 Mar	150	77	64	9	6	—	1	157
30 Jun	87	45	38	10	18	4	1	116
30 Sep	87	36	24	15	2	1	—	78
31 Dec	118	42	41	11	3	—	—	97
	442	200	167	45	29	5	2	448

#### RECUPERATIVE CONVALESCENT CARE

The number of patients during 1956 availing themselves of the Health Committee's scheme for recuperative convalescence was 512 as compared with 525 in 1955 and 585 in 1954.

Although 545 applications were originally received by the almoners of the various hospitals in Birmingham for convalescent care in 1956, for various reasons 33 of these patients did not go to a convalescent home—6 through deterioration of medical condition, 23 because they eventually decided against leaving home, 2 because suitable accommodation could not be found and 2 died.

The cost of the convalescence for 512 patients was, in the first instance, met by the Public Health Department and, in accordance with their assessments, some repayment was later made by the patients.

Of the total number of recommendations for convalescence 342 (63%) were made by general practitioners and 203 (37%) by doctors working in hospitals.

The Birmingham Hospital Saturday Fund in 1956 made arrangements for the convalescence of 5,305 patients of whom 4,826 went to the Fund's own homes. In 1955 arrangements were made for 5,604 patients of whom 5,546 went to the Fund's own homes.

The Hospital Saturday Fund assists a number of contributors who have to take their convalescence under the Health Committee's arrangements. The Fund also accommodates patients in its own homes who are not contributors to the Fund but take their convalescence under the Health Committee's scheme and charges are made to the Health Committee for these individual cases. A yearly grant of £550 is made to the Birmingham Hospital Saturday Fund.

## HEALTH EDUCATION

The existence of an educated, interested and receptive public is necessary if we hope to become a really healthy community. No health programme can be effective unless it is brought to the people who need it and is acceptable to them. In other words the people must be informed of the services available and of the general principles of healthy living, so that they will avail themselves of these services to the best advantage.

The Health Educator is not merely an expert in selling a finished product of expert thinking. He or she is far more concerned in working with the people themselves, getting their intelligent co-operation, so that the health programme becomes their programme, and not something imposed on them from above.

Working with people can be exciting and so the communication of facts, ideas and feelings to other persons and to groups, while it may be a challenging undertaking, is never a dull, grim or sad one.

It would hardly be an exaggeration to say that to-day many people are ill because they do not know how to live within their incomes, with their families, with their neighbours, their environment and themselves. The Health Educationist must be prepared to help people how to develop a reasonable philosophy. This is a newer aspect of health education and a much more difficult one to achieve. It is not merely sufficient to teach people the right kinds of food to eat, how to avoid disease, how the body works, and so on. All this is of course necessary but in addition we must not forget the day-to-day worries and tasks which occupy attention at home or at work. Much depends on whether these obstacles are overcome and what effects the struggle leaves on the mind and body. These are the things that decide whether or not life is worth living. These are points which must be before the Health Educator and since health education is the function of many members of the Public Health Department it is the aim to encourage all those engaged in health education to view the problems of living with a much wider field of view and, apart from educating in their own special field to develop a broader outlook on the scope and aims of health education.

### Staff

There are six full-time health education staff who undertake the organisation of the programme. Such activities as preparation of

syllabuses, arranging for appropriate speakers to give talks, and supervision of equipment, is time consuming and, unless this work is made the primary responsibility of one or more individuals, health education is likely to be neglected altogether or carried out by a few enthusiasts whenever they can find the time. In addition to organising the programme, the full-time staff take part in it as lecturers. While a great deal of work devolves on the full-time staff, the programme of work could not be carried out without the assistance of many other members of the Public Health Department who undertake health education and it is the aim to involve as many as possible in this work.

During the year the Administrative Medical Officers of Health for Maternity and Child Welfare and for General Purposes, were responsible for the general organisation and an Assistant Administrative Medical Officer of Health was responsible for the day-to-day administration of the section.

### **In Service Training**

#### **The Summer School**

Two of the staff attended the annual Summer School for Health Education, the theme being teamwork and techniques in health education.

A one-day refresher course on discussion group technique was held in May. Twenty-two members of the staff attended, representing a fairly good cross section of the staff who undertake health education work. The course covered the aims and techniques of group discussion and time was also devoted to practice group discussion, so that all had an opportunity of putting into practice the principles laid down by the tutor.

As a follow-up to this day refresher course it was decided to disseminate some of the information and experience gained to other members of the staff. Further practice discussions were therefore held, with one of the staff who attended the course acting as leader and the group being made up of members of the various branches of the Department who had not attended the course, but who had been supplied with information on the principles of group discussion. The leader thus gained experience in group leading and the group, while discussing a subject of wide general interest, could also observe the techniques of group discussion. These meetings have been of considerable value. They have enabled members of the staff to discuss problems of mutual interest in relation to their work, and have stimulated interest so that more of the staff are now taking part in the health education programme.

Lectures on the value and aims of health education, with the audio-visual techniques used, continue to be given to student health visitors, home nurses, medical and dental students and post-graduate groups.

During the year a short induction course was instituted for new clerical entrants into the Department, which consisted of an account



of public health services, environmental and personal, the work carried out by the various sectional heads and an indication of the correct attitude to members of the public who seek information and help at a Public Health Department. The interest shown has been most gratifying and it is hoped to make this course a regular feature.

### Special Features of the Programme

#### Health Talks

In 1956 the number of talks and discussions given was 4,301, compared with 4,223 in 1955. Of the total 1,125 were given in out-of-duty hours in comparison with 878 in 1955.

#### HEALTH EDUCATION LECTURES, 1944—1956

Year	Total lectures	Lectures given to		
		Schools	Youth organisations	Adult organisations
1944	546	421	83	42
1945	728	501	139	88
1946	577	407	46	124
1947	1,053	745	135	173
1948	2,438	1,772	280	386
1949	2,579	1,819	320	440
1950	3,024	2,028	443	553
1951	3,500	2,278	617	605
1952	3,689	2,382	576	731
1953	3,514	2,259	499	756
1954	3,803	2,344	595	864
1955	4,223	2,342	514	1,367
1956	4,301	2,363	669	1,269

Visual aids of various kinds are widely used by speakers to illustrate their talks. Film shows are always very popular. During 1956 there were 192 film shows. The total number of films used was 336 (130 more than in 1955), about 75% of which were obtained from free sources. Film sessions are not prolonged so that time is permitted for questions and discussion.

#### Programme in Industry

A comprehensive programme for schools and adult groups is carried out by the Department as part of the general health education programme. Only a fraction, however, of the City's population are members of organised groups. In 1949 talks were commenced to young adolescents in continuation schools in certain industries. These are for young people who have just left school and a semi-school atmosphere is retained.

Not all late teenagers attend youth organisations, and an approach was made to education and welfare departments in certain industries with a view to including them in the scheme of work. The idea was

greeted with enthusiasm by the industrial managements and courses of lectures were arranged. These are designed to suit the age range 15-17 years in continuation and junior apprentice schools, and an advanced course for those aged 17½ to 21 age groups has also been arranged. The emphasis in these talks is on personal and public responsibility for health ; the approach being semi-informal. Short talks in a friendly, down-to-earth manner, with honest answers to subsequent questions are essential if interest is to be maintained. The statistical or technical approach to the subject is to be avoided.

Requests are received from time to time from factory managements for assistance in Health and Safety Week displays, and it is the policy to assist in every way possible. Some industrial firms hold educational courses which incorporate general health topics, using their own personnel as instructors. Assistance is always forthcoming from this Department in connection with any such programmes, by providing display material or visual aids, but no attempt is made to interfere.

### **Parents' Evening Meetings**

During 1956, thirty-three parents' meetings were held at infant welfare centres. A total of 1,294 parents attended, of whom 392 were fathers. One of the aims is to encourage a greater attendance of fathers and, since it is not always possible for both parents to attend, some of the meetings in 1956 were for fathers only, and these were well attended and proved very successful.

### **Winson Green Prison**

The general courses on health for men and women prisoners and the special course for women convicted of child neglect continued. It was, however, found necessary to discontinue the special parentcraft course for men owing to the inability on the part of the prison authorities to find suitable men to attend. This course had been designed for first offenders and young married men with or without families. Such prisoners are now no longer detained at Winson Green for any length of time and are transferred elsewhere.

In the past the programme for the general prison consisted of a series of lectures on subjects appertaining to health, which lasted for twelve weeks. It has now been decided to substitute group discussion on a subject of wide general interest but which has a health bias. Personal and family relationships are also dealt with in these discussions. A member of the Department leads the discussion and at the end of each term a new group of prisoners take part. The prison authorities have already expressed their approval of this new approach and feel that much more will be accomplished.

## **Schools**

The health education programme undertaken in schools continued as in previous years. The number of sessions carried out in schools showed a slight increase despite the fact that one of the health education staff had been off sick for six months. Health education lecturers have been invited to undertake health education courses in five new schools.

The courses at the approved schools, remand homes and probation hostels also continued.

## **Exhibitions**

On the 23rd June an exhibition was arranged at the Romsley Hill Sanatorium Open Day at the request of the Medical Superintendent, the main theme of which was the prevention of infection. A special feature was the inclusion of a demonstration on health in relation to diabetes for the patients in the special diabetic ward of the hospital and for friends visiting them.

In co-operation with the Birmingham Accident Prevention Council an exhibition on Home Safety was shown at Bingley Hall. A demonstration on the prevention of road accidents for children under five was also shown.

Other exhibitions were held at two large industrial concerns, and Offmoor Road Welfare Centre, which were well attended.

## **Midland Adult School Union**

The Spring Conference of the Midland Adult School Union was held in March and had as its subject "Focus on Health." The opening session consisted of a Forum at which a medical officer, health inspector, health visitor and health education organiser answered wide and varied questions on aspects of the public health services, sent in by members of the Adult Schools. An exhibition illustrating some of the activities of the Department was on show and attracted much attention.

The evening session consisted of a film show at which three films dealing with the work of the Public Health Department were seen. About 200 people attended the Conference.

## **Domestic Science Department, College of Technology**

Following a request from the Principal of the Oozells Street Domestic Science Department, of the College of Technology, three six-week courses on Home Nursing were given at the College as part of the general domestic science curriculum. While this Department undertakes the Infant Care Courses at Oozells Street, this was the first request received for a Home Nursing Course.

## **Posters and Projects**

Projects on various health topics were displayed in the Public Health Department, and also in a window of the Housing Management Depart-

ment. Posters were displayed at various public places throughout the City and also in industrial premises and general practitioners' waiting rooms and surgeries. There has been an increased demand for such posters during the year.

### Visitors

Persons from many parts of the world visited the Health Education section during the year, including Sweden, Afghanistan, Sudan, Ceylon, Trinidad, Italy, Malta, Australia, South and West Africa, Egypt, Yugoslavia, and Germany. The administrative and practical aspects of the programme are discussed and the hosts, in turn, hear of their visitors' problems and achievements, and are the wiser for their meeting.

### Dental Health

The health education section worked in close co-operation with the Senior Dental Officer in arranging talks and demonstrations. Posters, slides and exhibition material were designed as part of a dental health exhibition held in September. This is referred to in greater detail on page 135.

### The Clean Food Campaign

To supplement the work of the district public health inspectors, lectures have been given to trade associations and to groups of food handlers, while there has been a parallel effort to promote a conscience as to the need for food hygiene in the lay public, adult and adolescent.

Where appropriate, the films, "Another Case of Poisoning," "Food without Fear," "The House Fly," and "Hand to Mouth" have been shown.

The lectures given during the year are summarised as follows (1956 figures in brackets) :—

	<i>No. of lectures</i>	<i>Total attendance</i>
Food Traders ... ..	18 (18)	668 (504)
Lay Public ... ..	26 (22)	712 (653)

With the co-operation of the College of Technology, a part-time course in Food Hygiene was established, suitable for candidates for the Food Hygiene Certificate of the Royal Society of Health. This course consists of lectures (42 hours), demonstrations (28 hours) and a three-hour examination. Twenty students enrolled, ten out of twelve who entered, passing the College Class Examination. It is proposed to repeat this course in 1957.

When the Food Hygiene Regulations, 1955, became operative, it was soon realised that explanation and clarification of certain provisions would be essential if compliance was to be ensured. To assist both trader

and food handler, therefore, a booklet entitled "Your Guide to the Food Hygiene Regulations," supplied by the Central Council for Health Education, and a leaflet "To Do and Not to Do," prepared by the Chief Public Health Inspector, were issued to the occupiers of all food premises in the City, and at follow-up visits an opportunity was taken to ascertain that further explanation was not required.

### **The Clean Air Campaign**

The establishment of two smokeless areas during the year and the projected expansion towards a smokeless City has not so far led to an increased demand for talks, but it is true to say that the enthusiasm of both professional and lay audiences is now a feature of these afternoon and evening sessions which regularly last two hours.

Twelve lectures were given during the year, with a total attendance of 484.

This aspect of health education is an essential feature in the development of "smoke control," and it is proposed, as new "areas" are planned, to arrange talks in those parts of the City which will first be affected.

## **COMMUNITY RELATIONSHIP**

During the past few years, emphasis in Government and public statements, conferences, discussions, etc., has been laid on the need for co-operation, co-ordination and liaison between the bodies providing facilities under the National Health Service Act and kindred enactments dealing with the social service. In this City, much has been achieved in this respect. It may, therefore, be timely to focus attention on a particular aspect of this relationship which is important in the building up of the social service.

Of all the departments of a local authority, the public health department has perhaps the best opportunity to establish effective relationship with the community. Primarily this is done by personal contact with the family unit by members of the staff who visit families actually in their homes—health visitors, home nurses, midwives, social workers concerned with mental illness and those concerned with the care of the aged (health visitors in this Department), home help organisers, public health inspectors, housing inspectors, smoke and rodent inspectors, etc. These members, during the course of their visits, have an opportunity which is readily taken to advise and help all members of the family. This intimate contact develops in the community an interest in the work and affairs of the Local Authority, which has the effect of gradually breaking down the barrier of hesitancy or reserve which often arises when approaching officials on issues of personal concern. Health Education activities provide further opportunities of meetings between departmental officers and parent groups at welfare centres and numerous philanthropic, political, religious, voluntary and community organisations and with the pupils in City schools.

The situation thus created has brought the Public Health Department into closer touch with the daily life of the community. In consequence, members of the public very readily seek advice on all kinds of personal problems, many completely outside the scope of the Public Health Department, by approaching visitors in the home or by a personal call at the Department for help. At one time, departmental enquiry offices existed mainly for the receipt of complaints requiring action under public health law. There is now a profound need for these offices, not only to take complaints as and when they arise, but especially to afford assistance to people in need of help but who are not conversant with the manner in which this is to be obtained. It is the aim, therefore, to provide, in a sympathetic manner, help or advice on request to any citizen upon everyday problems of personal health or the conditions under which he may be living. The essential of an effective community relationship is the availability of adequately experienced staff to deal with the problems, many of them most unusual, that may arise throughout the day. Of equal importance to experience is that the staff should be sufficiently mature to appreciate the problems which arise in community life. Additionally this staff should have available to them senior members of the Department, both medical and technical, one or other of whom can answer authoritatively any question within the scope of the Health Department. As many questions now put to the Department fall outside its scope and these increase in number from year to year, it is of great importance that the officer dealing with the enquiry should have ready access, to local and national statutory and voluntary organisations from whom information can be obtained on behalf of the applicant.

The sense of " common purpose " which has been built up between the various bodies dealing with the National Health Service Act and those dealing with other social services, the many Corporation departments and voluntary organisations, has been the means by which information has been assimilated within the Department. This has enabled an arrangement to be made whereby questions can be authoritatively answered, or, if doubt exists, the person can be referred, by appointment, to a specific public body or organisation which, by telephone, it has been ascertained would be able to deal with the problem. It has been possible, by these means, to overcome, to a large extent, referral of members of the public from office to office, from department to department or from service to service, thus allaying the feeling of frustration of being " passed on " in an indefinite manner.

An amazing range of questions is placed before these offices and there are many problems arising out of mental illness and family disturbances, maternity and child welfare, prevention of illness, care of the aged, now increasing in topical interest, epidemiology and general hygiene.

It can be seen that these enquiry offices have much to offer in the daily service which a Public Health Department provides, and they form an integral part of the social services.

### PRIORITY IN REHOUSING ON MEDICAL GROUNDS (OTHER THAN TUBERCULOSIS)

Many claims for priority in rehousing because of ill-health continue being made and are all assessed after obtaining detailed information of the medical condition and of the home background. (For details see previous reports). Asthma and bronchitis and nervous conditions are again the principal grounds upon which priority is requested and indeed the proportional distribution of the various illnesses among the applicants varied little from last year.

#### PRIORITY IN REHOUSING ON ACCOUNT OF ILL-HEALTH OTHER THAN TUBERCULOSIS IN 1956

<i>Type of medical condition to which applicant has drawn attention</i>	<i>Points awarded</i>				<i>Immediate rehousing recommended</i>	<i>Totals</i>	<i>Percentages of Total</i>
	<i>Nil</i>	<i>10</i>	<i>20</i>	<i>30</i>			
Nervous conditions ...	254	402	118	29	9	812	24.2
General debility ...	82	153	29	30	—	294	8.8
Asthma and bronchitis	294	526	136	25	2	983	29.3
Wounds ...	9	6	1	1	1	18	0.5
Blindness ...	28	6	3	1	—	38	1.1
Arthritis and rheumatism ...	84	87	53	10	—	234	7.0
Orthopaedic conditions and paralysis ...	67	68	34	8	4	181	5.4
Heart and circulatory disease ...	95	88	105	41	3	332	9.9
Other physical disabilities, including fits ...	109	151	42	17	3	322	9.6
Gastric and intestinal conditions ...	49	72	14	3	2	140	4.2
<b>TOTALS ...</b>	<b>1,071</b>	<b>1,559</b>	<b>535</b>	<b>165</b>	<b>24</b>	<b>3,354</b>	<b>100%</b>

#### PRIORITY ON ACCOUNT OF TUBERCULOSIS (FOR COMPARISON WITH ABOVE)

<i>Points Awarded</i>				<i>Immediate rehousing recommended</i>
<i>Nil</i>	<i>10</i>	<i>20</i>	<i>30</i>	
				179
205	50	83	390	(These applicants were also among those awarded 30 points on health grounds in 1956 and previous years).

## MENTAL HEALTH

(SECTION 51—NATIONAL HEALTH SERVICE ACT, 1946)

The general expansion of the Mental Health Services of the Health Department noted in the previous Reports, has been maintained.

With the inception of the National Health Service Act, 1946, local health authorities were expected to carry out certain statutory duties under the Mental Deficiency, Lunacy and Mental Treatment Acts and in addition, provide some kind of after-care and preventive service. Here in Birmingham these last responsibilities were undertaken by a specially formed Psychiatric Social Service, acting as a general case-work filter and as an advisory body to other social agencies. In recent years, it has expanded and taken on a more definite shape, making further contacts with other organisations and in the past year forming a closer liaison with the local mental hospitals. It will be seen later in the Report that there has been a large increase in the number of referrals from the hospitals, indeed, all the case work for two of the large mental hospitals in the City is carried out by the Psychiatric Social Service.

It is not easy to predict where, in the field of social psychiatry, the greatest emphasis will finally be placed, but it is felt that where a local health authority has a well organised community care service it should be on developing co-operation with the hospital and general practitioner services.

In the Report of 1955, the thought was expressed that the Psychiatric Social Service might help in speeding the hospital discharge rate and in the general reduction of overcrowding. By the patient and painstaking activities of psychiatric social workers this pious hope has become a reality. Many people, following treatment in hospital, recover completely, whilst others remain chronically sick. It is this latter group where social atrophy with the outside world occurs, but it need not. They need not spend many aimless years waiting on a complete cure when, by education of the relatives and careful support in the home setting by skilled workers, they can be readmitted to the community. In the past year, a considerable number of middle-aged patients who have been ill for many years, and who are not responding to treatment but who are not dangerous, have been discharged following diligent social investigations and adjustments.

The close co-operation with other social agencies, which has been extended, is proving most useful. Particularly valuable information is



gained from monthly meetings where a common case-work approach to problem families is discussed. The relationship is especially close with the N.S.P.C.C., the doctors on the staff continuing to be at the disposal of the officers of this Society.

Within the Department itself co-operation is taking place between the psychiatric social workers and the health visitors, different psychiatric social workers being seconded to individual welfare centres to take part in case discussions to help the health visitor in her case-work approach. It is felt that the health visitor could readily be regarded, in the Public Health field at any rate, as the basic social worker, having at her disposal advice of workers more highly trained in certain specialities. This liaison is as yet only on an experimental level, but it is hoped to expand it as the Mental Health Service develops.

In the field of mental deficiency there has been a marked decrease in the number of cases on licence. This follows on the advice by the Board of Control in Ministry of Health Circular HM (56) 25 and at the present moment there have been no failures to report.

An attempt has been made in the past year to increase the activities of the Duly Authorised Officers who, by and large, have been restricted in the past to arranging the admission of patients to hospital under the Lunacy Acts. Now they have taken on the after-care of those discharged from hospital under Section 72 of the Lunacy Act, 1890, and the older type of patient.

All patients, other than voluntary, are admitted by the duly authorised officers under Section 20 of the Lunacy Act with the agreement and co-operation of the medical superintendent and the general practitioner. The 3-day period of detention can be extended where the patient is in need of further treatment and is unwilling to become voluntary. This method of admission has proved most satisfactory in that it avoids certification and allows an extended period, during which the patient can be observed and treated without recourse to certification. At the end of the period the patient may be sufficiently recovered to return home or have gained sufficient insight to accept treatment on a voluntary basis. The number of patients certified has decreased considerably.

The division of responsibility within the Mental Health Services of the Public Health Department is clearly along three lines. It is difficult to imagine that it could be otherwise in a large City. Nevertheless, all three Sections work in close co-operation with one another, each benefited from the ideas and experience of the others.

The administration and duties of the past year of the various Sections are given below :

## 1. ADMINISTRATION

- (a) Mental Health Sub-Committee of the Health Committee, composed of the Chairman and twelve members of the Health Committee. Monthly meetings are held.
- (b) Number and qualifications of staff employed in the Mental Health Service :

Responsible to the Medical Officer of Health for the Service, who in turn is responsible to the Mental Health Sub-Committee—Administrative Medical Officer of Health for Mental Health—M.B., Ch.B., D.P.H.

### Psychiatric Social Service

Consultant Psychiatrist (part-time), M.R.C.S., L.R.C.P., D.P.H.  
1 Senior Psychiatric Social Worker—holds degree in Psychology (London) and Philosophy and Economics (Oxford).

3 Psychiatric Social Workers.

5 Social Workers (3 hold a Social Science Degree and 2 hold a B.A. Degree).

Clerical Staff—2 shorthand typists.

### Parent Guidance Clinic

1 Consultant Psychiatrist, M.B., Ch.B., D.P.M.—4 sessions per week.

1 Psychiatric Social Worker.

1 Social Worker.

Clerical staff—1 shorthand-typist.

### Mental Deficiency Section

1 Certifying Medical Practitioner (part-time), F.R.C.S.I., L.R.C.P.I., D.P.M.

1 Chief Inspector	}	no academic qualifications but all possessing long experience.
1 Deputy Chief Inspector		
3 Inspectors		

Clerical staff—1 statistical clerk, 3 shorthand-typists, 1 junior clerk.

**Occupation Centres, Industrial Centres and After-Care**  
(Under management of Education Committee on behalf of Health Committee).

7 Supervisors (Occupation Centres).

(2 hold Diploma of National Association for Mental Health).

2 Male Supervisors (Industrial Centres).

1 Supervisor (Senior Girls' Centre).

14 Assistant Supervisors (three hold Diploma of National Association for Mental Health).

- 1 After-Care Officer (B.Com., London).
- 5 After-Care Visitors.  
(One is a M.A., Social Science Diploma ; one is a B.Com. (Sociology); one is a State Registered Nurse, Domestic Science Diploma; the others have no specific qualifications but have relevant experience).
- 3 Home Teachers.
- 10 Welfare Attendants.
- 8 Kitchen Attendants (part-time).

### **Lunacy Section**

- 10 Certifying Medical Practitioners (part-time).

M.C., F.R.C.S.E.

M.B., B.Ch., B.A.O.

M.B., B.Ch., B.A.O.

L.R.C.P., L.R.C.S., L.R.F.P.S.

L.R.C.P.I., L.M., L.R.C.S.I.

\*M.R.C.S., L.R.C.P., D.P.M.

\*M.D., D.P.M.

\*M.D., L.R.C.P., L.R.C.S., L.R.F.P.S.

\*M.B., Ch.B., D.P.M.

\*M.A., B.M., B.Ch., D.P.M.

\*These medical practitioners are of Consultant status. They also certify in cases where, having been called out in consultation, they find that certification is necessary.

- 1 Chief Duly Authorised Officer—Certificate of Poor Law Examinations.
- 1 Deputy Chief Duly Authorised Officer—no academic qualification but possessing long experience.
- 4 Duly Authorised Officers—two hold S.R.N. Certificate.
- Clerical staff—1 shorthand-typist, 1 junior clerk.

### **(c) Co-ordination**

- (i) with the Regional Hospital Board by regular consultations with the Board's officers in regard to the admission of mental defectives to institutions both under Orders and for short-term care in accordance with the Ministry of Health Circular 5/52. No arrangement has been made up to the present time for the joint use of officers.
- (ii) with the Hospital Management Committees continues to be good. There is an excellent relationship both with the mental hospitals and the mental deficiency institutions.

The Psychiatric Social Service continues to undertake the after-care services for Highcroft Hospital and All Saints' Hospital. The Mental Deficiency Section furnishes reports on the home circumstances of patients detained in institutions for whom application has been made for holiday leave, also relating to those patients who are considered suitable for licence, and supplying reports for the information of the Visiting Justices to assist them in carrying out their duties in accordance with Section 11 of the Mental Deficiency Act, 1913. The Local Health Authority undertakes the after-care and rehabilitation of patients on licence from mental deficiency institutions who are resident in their area, and periodic reports upon their progress are supplied to the Medical Superintendents.

(d) Duties delegated to Voluntary Associations—Nil.

(e) **Training of Mental Health Workers**

Whilst there is no fixed in-service programme for the training of workers as such, the University sends numerous students to the different Sections, social workers attending both the Psychiatric Social Service and the Parent Guidance Clinic and students attending the new Generic Course at the University have been helped in the same way.

## 2. ACCOUNT OF WORK UNDERTAKEN IN THE COMMUNITY

(a) **Mental Deficiency Section**

Under the Mental Deficiency Acts, 1913—1938 :—

(i) *Ascertainment*

The primary duties of the Local Health Authority under the Mental Deficiency Acts are to ascertain what persons are mentally defective and subject to be dealt with, to arrange suitable supervision, to arrange guardianship or institutional care where treatment is necessary and provide training and occupation for defectives who are under supervision or guardianship.

The majority of cases ascertained are those notified by the Education Authority pursuant to Section 57 of the Education Act, 1944. Other cases are notified by medical practitioners, relatives, hospitals, probation officers, magistrates' courts and welfare officers.

*Particulars of cases reported during 1956*

	<i>Under 16</i>		<i>Over 16</i>		<i>Total</i>
	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	
Reported by Local Education Authority under Section 57 (3) and (5) Education Act, 1944	65	67	8	16	156
Reported by Police or Courts	—	—	2	1	3
Reported by other sources	5	3	3	8	19
	<u>70</u>	<u>70</u>	<u>13</u>	<u>25</u>	<u>178</u>

*Admissions*

Number of cases admitted to Institutions during 1956	16	13	27	13	69
------------------------------------------------------	----	----	----	----	----

*Total cases on Authority's registers as at 31.12.1956*

Under Statutory Supervision	324	267	1,103	850	2,544
In Institutions	93	68	1,006	900	2,067
Under Guardianship	—	—	13	10	23
Awaiting admission to Institutions	67	36	15	15	133

(ii) *Guardianship*

There are 23 patients under guardianship, 14 of them are in receipt of maintenance grants paid by the National Assistance Board in accordance with the Ministry of Health Circular No. 177/48. The majority of these cases are of low intelligence, quite incapable of earning a living and have been in the care of relatives for many years. They are visited regularly by the Administrative Medical Officer of Health for Mental Health and the Inspectors.

(iii) *Statutory Supervision and Training*

	<i>Under 16</i>		<i>Over 16</i>		<i>Total</i>
	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	
Under Statutory Supervision	324	267	1,103	850	2,544
Approximate number of females gainfully employed					470
Approximate number of males gainfully employed					920

Cases under Statutory Supervision are visited by officers of the Education Authority, and the administration of the occupation and industrial centres is also carried out by the Education Committee on behalf of the Health Committee.

Facilities for the training of mental defectives under Statutory Supervision are provided at seven occupation centres, two industrial centres and one senior girls' centre, and home teaching is provided for a number of cases unable to attend centres.

Particulars of the centres are shown in the following schedule, together with the numbers attending.

*Occupation Centres*

	<i>Under 16</i>		<i>Over 16</i>		<i>Total</i>
	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	
Erdington ... ..	23	10	—	—	33
Glebe Farm ... ..	15	16	—	—	31
Kingstanding ... ..	14	15	—	—	29
St. Oswald's, Small Heath ... ..	16	18	—	—	34
St. Paul's, Balsall Heath ... ..	26	20	—	—	46
Weoley Castle ... ..	16	17	—	—	33
Wretham Road, Handsworth ... ..	16	15	—	—	31

*Industrial Centres*

*Burlington Hall, Aston ... ..	9	—	32	—	41
Moseley Road, Highgate ... ..	13	—	37	—	50
Senior Girls' Centre, Ellis Street ... ..	—	9	—	47	56

\* The tenancy of Burlington Hall terminated in September, 1956, and early in 1957 the Centre will be transferred to new premises, formerly occupied by Bristol Street Special School. There will be an improvement in the facilities available, and it is hoped at a later date that the Senior Girls' Centre, Ellis Street, will also be transferred to these premises.

The activities of the occupation centres cover elementary speech-training, word recognition, music and movement, habit training, domestic and sense training, physical training and handicrafts, whilst at the industrial centres the subjects are more advanced and include basket-making, leatherwork, rug-making, boot repairing, sewing, clay modelling and woodwork. The object of such training is to develop a sense of muscular co-ordination and capacity for manual work, and to enable the patients as far as possible to fit in with community life.

As in previous years, the children were taken on outings to places of interest and visited the pantomime. Each centre had an "Open Day" and a Christmas party, at which the children gave an entertainment.

During March and October, 1956, 98 mentally defective children attending the occupation and industrial centres, were provided with a week's holiday in the country, free of charge. The scheme, which has been in operation for

several years, is a great success, as it proved a benefit to both the children, many of whom would not otherwise have had a holiday, and to their relatives, who were able to have a well-earned rest from the responsibility of caring for the children at home.

Most of the defectives travel to the centres by public service vehicles and fares are paid by the Health Committee. Guides are provided where necessary. A number of physically handicapped mentally defective children are conveyed to the centres by private hire cars.

Forty-three defectives, who are unable to attend occupation centres, are provided with training by home teachers in their own homes.

During 1956, 120 cases, who were considered socially stable and secure and in respect of whom satisfactory reports had been received for some years, were discharged from statutory supervision.

(iv) *Short-term care under Ministry of Health Circular No. 5/52*

During 1956, 38 cases were admitted to institutions for short-term care, either enabling the parents to take a much needed holiday, or in instances where the illness of the parents has prevented them from giving the patients proper care and attention. The majority of children admitted for temporary care were on the waiting list for admission to mental deficiency hospitals and the short break has provided immense relief to the parents and has benefited the patients.

(v) *Licence*

On 31st December, 1956, there were 147 patients (78 males and 69 females) on licence from various mental deficiency hospitals resident in this area supervised by the Local Health Authority's Officers. One hundred and thirty three have been found suitable employment, are successfully earning their own living and generally proving stable members of the community; the remainder are either incapable of employment or are too young. Where there are no relatives available to give the patients a home they have been found lodgings with sympathetic people and, in some instances, two or three patients are living together; no less than 32 patients on licence are so placed. Examples of employment followed by these patients are as follows:

	<i>Males</i>	<i>Females</i>
Domestic service ... ..	—	23
Hotel service (resident) ... ..	15	—
Hospital domestic staff (resident) ... ..	—	21
Hospital domestic staff (not resident) ... ..	—	7
Factory workers ... ..	29	3
Laundry workers ... ..	—	2
Canteen workers ... ..	—	3
Corporation Salvage Department ... ..	3	—
Corporation Parks and Cemeteries Department ... ..	7	—
Corporation Public Works Department ... ..	5	—
Building trade ... ..	5	—
Miscellaneous ... ..	8	2

The number of patients on licence is the lowest for many years. This is partly explained by the number of discharges from licence during this year—103 (46 males and 57 females). Practically all were considered by the respective Hospital Management Committees, in accordance with Ministry of Health Circular HM (56) 25, which recommends that patients should be discharged after a trial on licence for twelve months at most, unless there are overwhelming reasons to the contrary.

Of the patients discharged, it is felt that some of them between the ages of 15 and 16, who have no home or relatives to help them, may have difficulty in readjusting themselves should they lose their present positions in residential employment. The Department, however, is endeavouring to attempt supervision of these ex-patients in order that some help may be given to them in case of emergency.

Arrangements were made during the summer for 13 males and 41 females on licence to have holidays. The majority of the girls went to boarding-houses at Brighton, Hastings, Eastbourne and Ramsgate, and were kindly supervised by the Guardianship Society, Hove. The men went to Rhyl, Skegness and Llandudno, mostly to holiday homes under the auspices of the Y.M.C.A. The expenses of the holidays were borne by the patients and in most instances they travelled unaccompanied in small parties of two or three, and stayed for a period of fourteen days. The change greatly benefited the patients and, except for one minor incident, no complaints were received regarding their behaviour while on holiday.

**(b) Under the Lunacy and Mental Treatment Acts, 1890-1930**

During the twelve months under review, it will be noted that the figures again show a considerable increase. This is particularly



noticeable with those patients admitted under Section 20 of the Lunacy Act, but the number actually certified is reduced. This has followed as a result of the method of admission adopted in the last year and has already been mentioned. Naturally, this manner of admission places a greater responsibility on the duly authorised officers but they have been much helped by the medical staff of the hospitals, as an excellent liaison exists between them. In cases of doubt the medical superintendents have expressed a willingness to visit the case and advise. Particularly in the case of senile dementia the duly authorised officer is able to make a very valuable contribution by advising the general practitioner and the family as to the best arrangements that can be made for the patient, usually an elderly relative. It is in this type of case that a short Order, followed by a period of rest is most helpful.

#### CASES DEALT WITH IN 1956.

<i>Classification</i>	Jan.	Feb.	Mar.	April	May	June	July	Aug	Sep.	Oct.	Nov.	Dec.	Total	1955
Certified ...	66	52	60	60	55	60	51	73	41	52	68	21	659	754
Voluntary ...	135	113	149	145	124	105	140	124	127	158	145	133	1598	1254
Temporary ...	—	—	1	—	—	1	—	—	1	—	—	—	3	4
Section 20, Lunacy Act ...	57	66	80	70	61	87	87	58	91	91	84	79	911	456
Section 21, Lunacy Act ...	13	23	22	16	15	17	25	23	25	26	11	14	230	253
Urgency Orders	—	—	—	1	2	—	—	—	—	—	—	—	3	39
Not Certified ...	1	3	2	4	2	4	4	9	3	6	4	2	44	83
Withdrawn ...	—	2	1	1	—	—	—	—	—	1	2	—	7	10
Magistrates Court Act (Sec. 30)	—	—	—	—	—	—	—	—	2	2	1	2	7	11
Cases investigated (not included in above categories)	76	79	95	89	76	67	98	98	76	84	98	97	1033	526
After-Care, com- menced April, 1956	—	—	—	20	22	20	20	10	15	23	30	17	177	—
Total cases dealt with in 1956 ...	348	338	410	406	357	361	425	395	381	443	443	365	4672	3390

The large admission rate imposes a great strain on the duly authorised officers. Nevertheless, they make every effort to make at least one domiciliary visit to all patients discharged from hospital on the application of a relative, primarily to see that the patient is receiving adequate care. This system has proved to be quite useful and appreciated by both parents and relatives. In many instances useful guidance has been given to make the best use of other agencies who may help the patients financially.

Many problems are presented by elderly persons :

*Example A.* Reported as having attacked her sister, was a woman aged 92, physically well preserved. She was so obstreperous on removal that it was thought judicious to ask the general practitioner to administer a sedative.

*Example B.* A widow aged 69, with no family, was reported as being uncontrollable. When seen she was entirely confused, shouting, and covered from head to foot in faeces.

*Example C.* A man of 78, reported at 1.30 a.m. as being quite uncontrollable, smashed windows, attacked his son and threatened suicide.

#### (c) **Psychiatric Social Service (Prevention, Care and After-Care)**

In the past year there has been a large increase in the number of referrals (513 as against 344 in 1955). Of the 513 new cases referred 288 have come by medical sources and two-thirds of these from mental hospitals. It would appear that the Service has become much more closely linked and integrated with the existing general practitioner and mental hospital services.

In Birmingham, recent developments, particularly with Highcroft Hospital and All Saints' Hospital, have encouraged the hope that in the coming year psychiatric social workers of the Psychiatric Social Service will be integrated more and more with the mental hospital in a service whose prime aim will be to get as many patients out of hospital as possible, after active treatment has been completed, and to keep them out as long as possible by supporting them in their own homes. A social worker engaged in this work can save the community the amount of his salary many times over.

The following is an illustration of how this Service is at present working :

In 1949, Mr. B, aged 69, was admitted as a certified patient to a mental hospital. He was very depressed, threatened to commit suicide and felt that people were against him. His wife had died four years previously and he had been living alone. He improved rapidly and was made a voluntary patient.

He was a quiet man and well behaved. He had frequent leaves from the hospital when he would visit his married daughter who lived nearby. He worked in the hospital gardens and was quite contented with hospital life.

COMMUNITY CASE WORK REFERRALS, 1956

<i>Source of Referral</i>	<i>Jan.</i>	<i>Feb.</i>	<i>Mar.</i>	<i>Apr.</i>	<i>May</i>	<i>June</i>	<i>July</i>	<i>Aug.</i>	<i>Sept.</i>	<i>Oct.</i>	<i>Nov.</i>	<i>Dec.</i>	<i>Total</i>
Public Health Dept. ...	6	9	12	11	3	8	7	11	5	18	18	8	116
Hospitals ... ..	10	4	5	6	12	5	11	38	20	18	18	12	159
Probation Dept. ...	4	3	—	—	1	1	—	1	—	1	2	—	13
Children's Dept. ...	3	2	7	3	1	1	—	3	1	3	1	—	25
Education Dept. ...	—	—	—	—	2	—	—	1	1	1	—	—	5
Housing Management Dept. ... ..	2	7	5	—	5	9	5	11	8	4	8	3	67
Marriage Guidance Council ... ..	—	—	—	—	—	1	—	—	—	—	—	—	1
Voluntary Agencies ...	—	3	3	2	1	1	3	5	2	11	3	3	37
General Practitioners...	2	1	1	—	1	1	1	1	1	2	1	1	13
Ministry of Labour ...	2	1	—	1	—	—	—	—	—	—	—	—	4
Child Guidance Clinic	—	—	—	2	—	—	—	—	—	—	—	—	2
National Assistance Board ... ..	—	—	2	2	1	2	1	—	—	—	2	3	13
Self, Relative or Friend	2	3	9	8	4	6	2	4	3	4	8	5	58
Total cases dealt with in 1956 ... ..	31	33	44	35	31	35	30	75	41	62	61	35	513

In July, 1956, the Local Authority psychiatric social worker approached Mr. B. to ask him whether he could live with his daughter, but he said that he liked it in hospital and did not really want to leave. He was encouraged to visit his daughter to discuss the matter with her. The psychiatric social worker also visited her and found that, although she was a little apprehensive about her father because she had two young children, she was prepared to have him home if he would agree to come.

The psychiatric social worker saw Mr. B in the hospital ward a number of times. He said that he did not want to leave hospital because he had no money and no clothes and was afraid

that if he went to live with his daughter she might get tired of him. He wanted reassurance that he could come back to hospital if he did not like it.

The psychiatric social worker promised to keep in touch with him if he was discharged and eventually, after three months, Mr. B agreed to go. He has now been out of hospital for five months and is seen regularly by the psychiatric social worker. When he was last seen he was asked: "You did not really want to leave hospital, did you?" His reply was: "No, I liked it very much but I think I like it at home much better."

The contribution the Day Hospital has made in easing the overcrowding problem has already been commented upon, but its success is essentially dependent upon collaboration with the local authority and hospitals.

During the year a small start was made at Highcroft Hospital with the co-operation of the Ambulance Service. Patients are discharged from the hospital but continue to attend daily, arriving at the hospital at about 9.30 a.m. and going home at about 5 p.m. The scheme was planned originally for elderly patients, as it was felt that many of them could be cared for at home by relatives in the evening and at week-ends but that they needed some kind of care and supervision during the day when perhaps relatives were at work. The scope of the scheme is being extended now to include patients who are recovering from a prolonged mental illness as a method of social rehabilitation for them. It is a means by which patients can slowly adjust themselves again to their families after a long absence. At the end of the year four patients were attending daily at Highcroft Hospital, but this number will be doubled soon. In addition, three patients have attended for a while and are now managing at home satisfactorily without further need to attend the hospital. The Psychiatric Social Service played an important part in investigating the home circumstances of patients to explore the possibility of their relatives accepting them home in this way. Psychiatric social workers have also continued to keep in touch with these relatives in order to advise and assist them.

It is expected that Day Hospital facilities will expand considerably in the coming year and psychiatric social workers from the Psychiatric Social Service are investigating the home conditions of suitable patients at Highcroft and All Saints' Hospitals.

In addition to work carried out in connection with the discharge of long-stay patients and the Day Hospital, the Psychiatric Social Service has continued to give a service equivalent to one full-time psychiatric social worker at Highcroft Hospital.

Details are given below :

HIGHCROFT HOSPITAL, 1956

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Social Histories, IN ...	11	16	23	25	22	23	17	7	17	23	12	8	204
Social Histories, OUT	11	13	14	11	13	9	14	4	14	18	14	13	148
After Care ... ..	3	1	4	12	12	6	5	1	3	3	7	2	59
On Trial— Pre-Discharge ...	2	6	14	4	—	1	7	5	3	5	4	—	51
Day Hospital ... ..	—	—	—	—	—	—	—	—	—	5	3	1	9
Miscellaneous ... ..	3	6	1	6	6	8	5	14	2	—	17	7	75
Total cases dealt with in 1956 ... ..	30	42	56	58	53	47	48	31	39	54	57	31	546

PREVENTIVE WORK WITH PROBLEM FAMILIES

This Section has suffered badly on the staffing side, losing two experienced workers, while demands from referring agencies have continued at a high level. This has resulted in the remaining workers having to carry too many cases and this in turn has meant that many families have not been given the intensive supervision they require, so that their problem state has continued virtually unchanged.

The main effort has again been in co-operation with the Housing Management Department, who refer all families with children under seven, that are about to be taken to Court for an Order for Possession, because of arrears of rent.

In 1956, 104 families were referred, as against 144 for 1955. Of these, 67 were referred during the first six months of the year and 37 during the second half. The drop in referrals in the second half of 1956 is encouraging and although there is almost certainly a number of factors involved, it is likely that the work of this Section has also helped to bring about this reduction, as there are a number of families who were formerly very poor and irregular payers, who have now maintained clear books for some time. This is reflected in the fact that only a very few of the new referrals for rent arrears were previously known to this Section.

Having now worked with over 200 families where rent arrears were serious enough to warrant Court action, it can be said that in over 95% of these cases it is possible to help the families so that, not only do they start paying their current rent regularly but, in addition, gradually pay off their arrears.

Most of these families when first visited are in a rut of hopelessness and many have become suspicious of all visitors, unable to believe that anyone is really prepared to understand and help them. So the social case-worker called in must first gain the confidence of the family and convince them that here is someone ready to help.

The next stage is to diagnose the causes that have led up to this trouble. Financial troubles, of which rent arrears are but a facet, although the most important one because of the possible consequences, are themselves rarely the only problem. Mental defect, mental illness, serious marital disharmony, child neglect, overcrowding, dirty homes with hopelessly inadequate furniture and bedding, are all frequently found, although perhaps less than a third of the families referred would rank as typical problem families.

It is not surprising to find that by far the commonest single cause of rent arrears is an inadequate amount of money being given to the housewife to provide for rent and normal housekeeping needs. This was found to exist in about 85% of the cases. Insufficient money for housekeeping may arise in a number of different ways :

- (a) Because the husband keeps a disproportionate amount of his income for himself—15%.
- (b) Because the husband does not earn sufficient, although he works regularly and gives his wife all he can—5%.
- (c) Because the housewife is a widow or separated from her husband, or an unmarried mother and not getting regular maintenance, or full National Assistance benefit—5%.
- (d) Because the husband works irregularly, loses time unnecessarily and changes his job frequently, with periods of unemployment when he is disqualified for Unemployment Benefit—60%.

Such families often have an income which over long periods averages less than National Assistance rates, and may, in between jobs, live for weeks on credit and Family Allowance.

In the remaining 15% the main fault lies with the wife, who gets behind with the rent because of poor budgeting and is afraid to tell her husband. Vainly hoping she will pick up arrears, the situation may get gradually worse. It is not difficult for a wife to keep her husband in ignorance even of a Court case for possession, and as the situation becomes more and more serious the woman's fears increase so that she will wildly promise anything to prevent her husband learning the truth. This is a difficult situation and it

requires a skilled case-worker to deal satisfactorily with it, particularly when the wife may threaten suicide or desertion if her husband is told.

In addition to work with families in danger of eviction the Section has received many referrals from health visitors and a start has been made at three welfare centres where regular meetings take place between health visitors and social workers, to discuss the various social problems which the health visitors have met in the course of their normal work. Here again only a minority of the families discussed are typical problem families.

The other problems cover the normal range of problems dealt with by a general family case-work agency. In the coming year it is hoped to extend these meetings to about half the City welfare centres. There is to-day a growing appreciation of the important part that the health visitor can play in the preventive mental health services, which are concerned with all means that reduce stress which may undermine the health of the individual and the stability of the home. More than any other social service the health visitor is likely to come in touch with social problems in their early stages.

#### REFERRED TO EDUCATIONAL PSYCHOLOGIST

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Reports for Magistrates	33	34	36	29	41	35	34	30	35	40	42	40	429
Reports on children in care of Children's Department ...	4	—	2	4	2	—	—	—	2	2	—	3	19
Reports to Mental Health Department	3	1	1	1	—	3	1	1	1	2	1	—	15
Total cases dealt with in 1956 ...	40	35	39	34	43	38	35	31	38	44	43	43	463

This is a diagnostic service carried out mainly in the remand homes where children are interviewed and given an individual intelligence test, and on the basis of this a full report is sent to the Juvenile Court and the Children's Department. This standardised interview also enables the psychologist to form some impression of the child's personality and frequently furnishes pointers to some of the causes that may have led to his appearance in the Juvenile Court, and puts the psychologist in a position where she may make useful suggestions regarding the disposal of the case, whether this be by recommending more supervision in the home, supervision and training

away from home, referring to the Education Department for ascertainment as to whether the child is in need of special school training, or referral to the Child Guidance Clinic for treatment.

Children in the care of the Children's Department provide another section of the work (see page 217). These include cases in children's homes, nurseries and in foster homes, who are presenting behaviour problems or where there is doubt about their mental ability. Children are also referred from the Parent Guidance Clinic where an ascertainment of the young child's intelligence is required.

#### **(d) Parent Guidance Clinic**

There was a small decrease in the number of cases referred to the Parent Guidance Clinic, being 178 against 223 in 1955. There was, however, a welcome increase in the number of self-referrals, showing that the Clinic is gradually becoming known, and talked about, amongst parents of young children other than those who attend the City's welfare clinics. The most remarkable of these was a mother who telephoned asking for an appointment and telling how her little girl had made a scene in the main shopping centre and a passer-by had stopped to tell her how much help in coping with a difficult child she had gained from attendance at the Parent Guidance Clinic.

Co-operation with other social agencies continues to be good. There is a specifically close link with the Marriage Guidance Council since many of the couples consulting them are in the early years of their marriage and this Clinic, by catering for the needs of the under school age child, has a high proportion of young parents consulting it. Where there is a very real psychological problem, such as frigidity, the Marriage Guidance Council counsellors are glad of psychiatric help and advice for their clients.

In addition to the day-to-day handling of individual cases presenting behaviour problems, there has been quite an extensive programme of lectures designed to teach a better understanding of the basis for laying down good mental health. Over 50 lectures have been given to groups of parents, or nurses, on the emotional development of young children, so that a better understanding of their needs can lead to wiser handling, and this might prevent the child having those traumatic experiences which could lay down a foundation for neurotic attitudes in later life.

Much of the work with parents too is designed to help them to a better understanding of the way in which young children react to parental attitudes. If parents can accept that their neurotic behaviour was adopted through contact with neurosis rather than



through inherited pattern, these parents have gone a long step towards being able to modify their own attitudes. This enables their children to grow up in an atmosphere less charged with neuroses and more conducive to mental health and breaks a pattern which might have continued with the next generation as part of a vicious circle.

Details of referrals are given below :

Infant Welfare Clinics	...	...	...	...	...	112
General Practitioners	...	...	...	...	...	10
Hospitals	...	...	...	...	...	4
Self referrals	...	...	...	...	...	16
Family Service Unit	...	...	...	...	...	3
Marriage Guidance Council	...	...	...	...	...	5
Speech Therapist	...	...	...	...	...	1
Public Health Department	...	...	...	...	...	2
Family Planning Association	...	...	...	...	...	1
Psychiatric Social Service	...	...	...	...	...	4
Nursery Schools	...	...	...	...	...	18
Child Guidance Clinics	...	...	...	...	...	1
Miscellaneous	...	...	...	...	...	1

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#### (e) Health Advice Bureau

The number of cases seen during 1955 was nine. Although the number was small it would appear that those referred obtained some benefit from the combined efforts of the doctor and clergyman concerned, and the continuation of this Clinic is justified.

### (3) EDUCATIONAL PROGRAMME

#### General Health Education Programme

Lectures were given at H.M. Prison, Winson Green, most hospitals in the City, training colleges, women's clubs and to the general public.

Total number of lectures given—67.

## AMBULANCE SERVICE

(SECTION 27—NATIONAL HEALTH SERVICE ACT, 1946)

As in each year since the inauguration of the Ambulance Service under the responsibility laid upon Local Health Authorities in 1948, there was again an increase in the number of patients conveyed by the Ambulance Service during 1956. The grand total (excluding those patients conveyed on behalf of the Service by members of the Hospital Car Service) was 344,608, an increase of 1,264, although it should be mentioned that this—the smallest increase yet recorded—was partly due to the severe curtailment of operations arising from the bad weather conditions during December. The increase would have undoubtedly been in the region of 3,000 but for these factors.

For the first time since 1948 there was a decrease in the annual figure of casualties conveyed by the Accident Section of the Service, consequently the increase referred to above was borne by the Hospital Removal Section, including ambulances outposted at the Infectious Diseases Hospitals. The number of patients conveyed by the Hospital Removal Section during the past four years is as follows—

<i>Year</i>	<i>Patients conveyed by Hospital Removal Service</i>			<i>Increase over previous years</i>
1953	...	...	303,451	25,551
1954	...	...	326,971	23,520
1955	...	...	328,561	1,590
1956	...	...	330,416	1,855

Detailed statistics under various classifications are shown in the following tables, which also give comparative figures for the past five years.

### HOSPITAL REMOVAL AMBULANCES COMPARATIVE ANNUAL TOTALS OF CASES CARRIED ACCORDING TO CLASSIFICATION

<i>Analysis of Cases</i>		<i>1952</i>	<i>1953</i>	<i>1954</i>	<i>1955</i>	<i>1956</i>
	Clinic cases	185,703	203,434	226,473	227,744	234,939
	Admissions	24,823	25,980	27,413	28,528	27,362
	Discharges	33,833	35,366	35,150	35,438	33,766
	Transfers	7,009	8,169	9,382	9,940	9,621
	Emergency Ma- ternity Service	113	140	134	93	110
	Maternity	8,249	8,428	7,965	7,627	8,320
{	Out- posted Units	738	939	1,001	1,109	1,337
	Little Bromwich					
	Infectious	2,610	2,165	1,612	1,822	1,563
	Yardley Green— Tuberculosis	13,633	17,284	16,266	14,693	11,902
	Miscellaneous	1,189	1,546	1,575	1,567	1,496
<b>TOTALS</b>		<b>277,900</b>	<b>303,451</b>	<b>326,971</b>	<b>328,561</b>	<b>330,416</b>

TOTAL NUMBER OF PATIENTS DIVIDED INTO STRETCHER AND SITTING CASES

	1952	1953	1954	1955	1956
Stretcher cases ... ..	63,265	65,921	66,371	73,492	74,886
Sitting cases ... ..	214,635	237,530	260,600	255,069	255,530
<b>TOTALS</b> ... ..	<b>277,900</b>	<b>303,451</b>	<b>326,971</b>	<b>328,561</b>	<b>330,416</b>

It will be noted that, following the pattern of recent years, there was a further slight decrease in the proportion of sitting cases to stretcher cases, as shown in the following—

RATIO OF SITTING TO STRETCHER CASES

1954	...	...	3.93	:	1
1955	...	...	3.47	:	1
1956	...	...	3.41	:	1

Principal variations in the classified analysis occurred as follows—

<i>Increases</i>	Clinic cases (all forms of out-patient treatment) ...	7,195
	Maternity cases (including E.M.S.) ... ..	710
<i>Decreases</i>	Admissions ... ..	1,166
	Discharges ... ..	1,672
	Infectious and Tuberculous Unit ... ..	3,050

### Accident Ambulances

Coinciding with the opening of the new fire station at Sheldon, the number of accident ambulances was increased by posting an additional ambulance to that station in order to give an improved cover for the eastern side of the City, and at the same time to put into effect a long-standing need to strengthen the accident ambulance arrangements, which up to the end of 1955 had shown an increase of over 50% since 1948 without any increase in the original cover of eight ambulances at seven selected fire stations. It was possible to effect this increased cover without any addition to the overall establishment of ambulances by withdrawing one ambulance from the Hospital Removal Section, and to ensure that this did not have an adverse effect upon the operations of this section, arrangements were made to modify the ambulance maintenance schedules in order to maintain the number of ambulances available during the day.

Crews and ambulances from the Hospital Removal Section (including voluntary personnel of the St. John Ambulance Brigade) provided augmented cover for accident calls on the special occasions when an increase in such calls could be anticipated.

There was a decrease in the number of calls and casualties carried by the Accident Section as compared with 1955, the respective figures being as follows—

	<i>1955</i>	<i>1956</i>
Calls ... ..	15,559	14,965
Casualties ... ..	14,783	14,192

Under mutual assistance arrangements with neighbouring authorities, this Service provided accident ambulances in response to 33 calls to incidents outside the City boundary—this was 15 less than in the previous year. The responses made to such emergency incidents are performed on a non-chargeable basis in accordance with an agreement between all local health authorities.

It was not found necessary to operate the procedure for dealing with a major disaster or catastrophe during the year.

A detailed analysis of location of calls, classified injuries, hospitals to which casualties were conveyed and the number of fatalities, with comparative figures for the previous year, is shown in the following tables—

#### ACCIDENT AMBULANCE CALLS

##### LOCATION OF CALLS

	<i>1955</i>	<i>1956</i>
Street accidents involving vehicles ... ..	3,453	3,350
Factory accidents ... ..	991	955
Private houses ... ..	4,477	4,249
Offices ... ..	45	90
Shops and restaurants... ..	372	415
Outdoor (other than street accidents) ... ..	4,073	3,953
Licensed premises ... ..	250	252
Schools ... ..	378	354
Cinemas and theatres ... ..	164	160
Other premises ... ..	1,291	1,122
False alarms (malicious) ... ..	65	65
	—————	—————
TOTAL ... ..	15,559	14,965
	—————	—————

## CLASSIFICATION OF INJURIES TO PATIENTS CARRIED IN AMBULANCES

	<i>1955</i>	<i>1956</i>
Fractures ... ..	2,117	2,042
Wounds ... ..	3,479	3,298
Collapse, fits, strokes ... ..	3,263	3,088
Abrasions and bruises ... ..	642	587
Gas poisoning ... ..	110	149
Drowning ... ..	7	8
Eye injuries ... ..	120	65
Dislocations and sprains ... ..	395	392
Hanging... ..	1	4
Concussion, shock ... ..	799	739
Haemorrhage ... ..	356	338
Scalds and burns ... ..	519	485
Poisoning ... ..	361	372
Not classified ... ..	2,614	2,625
TOTAL ...	<u>14,783</u>	<u>14,192</u>

## DESTINATION OF CASUALTIES

	<i>1955</i>	<i>1956</i>
Accident Hospital ... ..	4,578	4,349
General Hospital ... ..	6,496	6,394
Other Hospitals ... ..	3,605	3,354
Casualties actually carried in ambulances but not taken to hospital... ..	104	95
TOTAL ...	<u>14,783</u>	<u>14,192</u>

## FATALITIES

	<i>1955</i>	<i>1956</i>
Number of persons found dead on arrival of ambulances	219	205

The majority of accident calls received in the Control Room continue to be via the G.P.O. "999" telephone system. The following table gives an analysis of the methods used in transmitting calls to the Service during the year.

## METHOD OF TRANSMISSION OF CALLS

G.P.O. "999" system ... ..	9,622
Police Information Room ... ..	2,555
Exchange telephone ... ..	2,081
Private wire telephones ... ..	221
Street fire alarms ... ..	43
Messenger ... ..	391
Radio ... ..	34
Observed by ambulance crew ... ..	18
	<u>14,965</u>

The following table shows the incidence of accident calls during the day in relation to the age group of casualties—

ACCIDENT AMBULANCE CALLS, 1956  
 TABLE SHOWING NUMBER OF PERSONS OF VARIOUS AGE GROUPS CARRIED IN ACCIDENT AMBULANCES  
 DURING EACH HOUR OF THE DAY

Age Group	HOURS OF THE DAY																								Total
	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-00	
5 and under 5	16	10	6	5	5	2	1	13	22	48	51	79	87	81	73	102	109	102	80	75	44	29	24	21	1,085
6-10	5	4	2	2	—	—	3	3	20	38	39	76	113	97	83	87	141	108	74	62	63	36	18	9	1,083
11-15	4	1	4	2	—	1	2	16	27	52	74	95	91	105	97	94	109	72	85	82	67	61	29	12	1,182
16-20	47	15	12	7	8	5	7	36	73	61	47	55	58	75	67	63	83	96	68	57	64	72	90	82	1,248
21-25	57	33	11	16	14	6	18	32	41	56	50	64	78	56	63	72	73	72	65	62	71	54	136	141	1,341
26-30	52	28	16	13	10	7	10	34	42	28	52	51	42	44	49	70	52	64	67	48	47	44	122	89	1,081
31-35	54	16	17	10	9	1	6	26	30	44	40	39	48	39	62	62	58	60	47	48	43	41	96	99	995
36-40	33	16	14	6	4	3	12	21	25	39	26	45	43	38	51	55	41	45	42	39	39	26	95	66	824
41-45	36	19	9	6	3	8	11	35	25	43	36	42	50	39	46	51	56	49	41	41	27	29	71	65	838
46-50	16	12	9	4	5	4	10	25	42	36	52	41	58	48	65	51	34	53	48	42	42	43	63	65	868
51-55	19	6	8	4	6	3	3	25	29	30	30	35	62	41	47	39	46	47	44	27	22	30	46	37	686
56-60	22	1	6	3	3	3	7	28	28	36	41	50	48	53	50	53	57	45	42	31	19	33	63	45	767
61-65	13	11	8	3	3	4	6	15	22	34	39	40	45	30	38	47	24	33	32	23	20	22	52	24	588
66-70	8	3	2	3	3	3	3	15	19	30	35	35	44	33	35	33	28	29	51	14	26	25	23	21	521
Over 70	13	10	4	3	5	6	8	8	28	43	62	81	88	97	85	72	66	65	49	44	41	40	66	31	1,015
Unknown	3	—	—	—	—	—	—	6	5	2	1	3	1	5	4	6	4	2	5	1	5	5	7	5	70
TOTAL	398	185	128	87	78	56	107	338	478	620	675	831	956	881	915	957	981	942	840	696	640	590	1001	812	14,192

## **Control of Use of Ambulances**

Early in the year, when the whole Service was operating at full stretch during the winter peak period, it was considered necessary to again ask hospital authorities for their co-operation in controlling the use of the Service by careful reviewing of requests emanating from hospitals, which are the largest single users of the Ambulance Service. Before it was possible to make any assessment of the action taken, a Ministry of Health Circular (5/56) was issued to all local health authorities, hospitals and treatment centres, etc., incorporating more specific advice to all those responsible for ordering ambulance transport and a suggested notice to be brought to the attention of patients concerning the need for proper use of the Ambulance Service. Every effort was then made by the Service to ensure that this was given the widest publicity in hospitals to obtain the maximum co-ordination and economy in the use of ambulances.

## **Radio**

It has been anticipated that the ambulance radio programme would have been completed by the end of the year, but owing to supply difficulties, this was not possible, and therefore the scheme was only operated on a modified basis for a short period towards the close of the year. Owing to this limiting factor, which affected both the number of radio equipped ambulances and the period of operation, it was not possible to draw any firm conclusions at this stage. However, it has been possible to obtain ample confirmation of some of the anticipated advantages which should accrue from this new method of communication between Control and ambulance crews.

## **Outposted Ambulances**

The outposting of ambulances and staff for dealing with infectious diseases and tuberculosis cases at Little Bromwich and Yardley Green Hospitals respectively was continued during the year under review, and it will be noted from the comparative analysis table on a previous page that there was a decline in the number of tuberculosis cases conveyed by the Service. This appeared to be mainly due to the lessening of the need for domiciliary treatment as a result of the sanatoria becoming able to cope with the demand upon them.

Another outposted ambulance operates from Monyhull Hall Hospital and conveys patients for this and associated mental hospitals. During 1956 there was a further increase in the number of patients conveyed, viz., 1,337 as compared with 1,109 during the previous year.

## Ambulance Fleet

Despite a further increase in patients carried, the established strength of the ambulance fleet remained unaltered, and was again sufficient to meet the calls made upon the Service and, apart from new vehicles in the Replacement Programme, remained as in the previous year, viz.—

Dual purpose (stretcher) ambulances	...	...	...	...	72
Sitting case ambulances	...	...	...	...	27
Sitting case cars	...	...	...	...	3
Ambulance coach (20-seater)	...	...	...	...	1
					<hr/>
					103
					<hr/>

During 1956, seven new stretcher ambulances and six sitting case vehicles were put into commission, replacing worn out vehicles, which were disposed of. In the replacement of the dual purpose stretcher ambulances, an experiment has been made by the purchase of four ambulances on commercial chassis with an improved type of springing which may provide the necessary comfort for stretcher patients at a much lower cost.

## Conveyance of Patients by Rail

Arrangements for conveying patients by rail/ambulance were continued during the year, when there was again a slight increase in the number of such patients—854 as compared with 843 in 1955. The attention of doctors and others responsible for ordering transport in the medium and long distance cases is continually drawn to the advantages in comfort, speed and attention afforded by this form of transport when it is combined with the use of local health authorities' ambulances at each end of the journey.

Birmingham Fire and Ambulance Service ambulances were provided at the request of other local health authorities for meeting patients on incoming trains at the City railway stations and conveyed over 500 patients either to final destination or to another station for continuance of journeys.

## Mutual Assistance

In co-operation with other local health authorities, every endeavour is made to co-ordinate ambulance journeys under a mutual assistance scheme and these operations effect an economic use of ambulances between authorities when boundaries are being regularly crossed in the conveyance of patients from one area to another. Excellent co-operation has been maintained with other authorities, frequent references being made between various ambulance controls to ensure maximum co-ordination in the overall interests of the economy of the National Health Service. In addition to the accident ambulance over the border



assistance referred to previously, the following table shows figures relating to cases conveyed by ambulances of the Hospital Removal Section :—

	1955	1956
Patients conveyed from outside to places inside the City ... ..	21,004	20,501
Patients conveyed by ambulance to places outside the City ... ..	20,245	20,881

These figures show a slight increase over those for the previous year and include 352 patients conveyed on a chargeable basis for other local health authorities.

### **Maternity Services (including Emergency Maternity Service)**

The number of maternity cases conveyed from home addresses to the various maternity hospitals increased slightly during the year, when the total was 8,320. The Ambulance Midwives provided by the Service to accompany these cases were required to give professional attention in 172 cases, made up as follows—

Delivery at home prior to removal by ambulance ... ..	93
Delivery in ambulance <i>en route</i> to hospital ... ..	41
Cases where attention was given to the needs of mother and baby when delivery occurred prior to ambulance call or attendance	38

There was an increase in the number of calls for ambulances for the Emergency Maternity Service operated by Loveday Street Maternity Hospital during 1956, when the calls totalled 110, an increase of 17 over the figure for the previous year. The provision of this transport by the Ambulance Service is on a chargeable basis to the Hospital Authorities in accordance with a standing agreement.

### **Marston Green Maternity Hospital**

The ambulance coach operations for providing transport for out-patients attending Marston Green Maternity Hospital were continued during the year and 26,917 patients were conveyed, which is an increase of 399 over the figures for 1955.

### **Highcroft Hall Day Hospital**

Following a request from the Hospital Authorities, the Health Committee approved that the Ambulance Service should co-operate in a limited experiment for carrying certain selected patients to Highcroft Hall Hospital each morning and returning them to the care of relatives in the evening. All the patients involved in this experiment had previously been in-patients undergoing treatment for mental illness and it was hoped that by this form of "home rehabilitation" treatment it would lead to an earlier recovery and subsequent discharge from hospital treatment. It is understood from the medical aspect that the scheme is proving successful. This is an instance of a way in which the overall cost of the National Health Service (in this case in the hospital field) may be reduced, although at the expense of slightly higher costs falling upon the Local Health Authority's Ambulance Service.

## Mileage Statistics

A slight decrease in the total mileage covered by ambulances during 1956 was accounted for by decreases in both the Accident and Outposted Sections of the Service. The table below shows the division of mileage into the three sections of the Service over the past five years.

	1952	1953	1954	1955	1956
Hospital Removal					
Ambulances ... ..	1,436,803	1,520,837	1,553,092	1,577,312	1,581,413
Accident Ambulances ...	105,932	105,793	104,950	109,966	96,712
Outposted Ambulances ...	124,533	121,110	105,460	105,019	110,609
	<u>1,667,268</u>	<u>1,747,740</u>	<u>1,763,502</u>	<u>1,792,297</u>	<u>1,788,734</u>

## Staff

There was no alteration to the approved establishment of the Ambulance Service during 1956, and no significant change in the actual strength. Consequent upon the retirement of the Senior Midwife, there was a promotion of a midwife to this appointment. During the year, there were also four promotions from driver to leading driver, including a member of the female driving staff.

Details of the establishment and strength of the Ambulance Service at the end of 1956 are as follows—

<i>Operational and Depot Staff</i>	<i>Establishment</i>	<i>Strength at 31.12.56</i>		
		<i>Men</i>	<i>Women</i>	<i>Total</i>
Depot Superintendent ... ..	1	1	—	1
Staff Officer ... ..	1	1	—	1
Hospital Liaison Officer ... ..	1	1	—	1
Deputy Depot Superintendent ... ..	1	1	—	1
Traffic Foremen ... ..	10	10	—	10
Clerks ... ..	4	2	3	5
Storekeeper ... ..	1	1	—	1
Depot Drivers ... ..	3	2	—	2
Depot Assistants ... ..	4	4	—	4
Ambulance Cleaners ... ..	12	6	—	6
Cooks and Cleaners ... ..	5	—	6	6
Leading Drivers ... ..	10	8	1	9
Drivers and Attendants ... ..	168	129	29	158
Midwives ... ..	12	—	13*	13
<i>Ambulance Control</i>				
Control Duty Officer ... ..	1	1	—	1
Senior Control Operatives ... ..	6	6	—	6
Leading Control Operatives ... ..	4	—	3	3
Control Operatives ... ..	23	1	23	24
	<u>267</u>	<u>174</u>	<u>78</u>	<u>252</u>

\* Includes 5 part-time.

## Bed Bureau

For the first time since 1948, there was a decline in the number of requests placed with the Emergency Bed Bureau, which is operated by the Ambulance Service on behalf of the Birmingham Regional Hospital Board. Of the 12,528 requests which were placed with the Bureau by general practitioners, etc., it was possible to obtain beds for 11,787 patients. The figures for the previous year were 13,161 requests and 12,348 cases in which beds were obtained.

## Voluntary Services

### HOSPITAL CAR SERVICE

During 1956 there was an increase in the number of patients conveyed by the Hospital Car Service on behalf of the Ambulance Service. This organisation gives valuable assistance to the Ambulance Service and is controlled and organised by the British Red Cross Society. It was very satisfactory to note that the mileage incurred in the conveyance of these patients was again reduced; this was as a result of the policy of centralising all requests for the Hospital Car Service through the central Ambulance Control—a procedure which allows better co-ordination of journeys. The comparative figures (not included in the Ambulance Service figures) for the past two years are as follows—

							1955	1956
Patients	...	...	...	...	...	...	12,355	13,449
Mileage	...	...	...	...	...	...	122,653	114,766

### ST. JOHN AMBULANCE BRIGADE

There was a continuance during 1956 of the arrangements whereby volunteers of the St. John Ambulance Brigade assist the Ambulance Service by manning removal ambulances on a routine rota basis on certain evenings of each week, and also during the day on Sundays. Two crews also assist by manning accident ambulances at certain fire stations on Saturday evenings. Further assistance is always readily given when augmented accident ambulance cover is considered desirable and in all these aspects the St. John Ambulance Brigade provides a very useful supplement to the Ambulance Service.

Voluntary members of both the British Red Cross Society and St. John Ambulance Brigade are frequently used by the Ambulance Service as escorts for patients being conveyed by ambulance/rail; to a more limited extent similar assistance is afforded by members of the Women's Voluntary Service.

## NATIONAL ASSISTANCE ACTS, 1948 AND 1951

### COMPULSORY REMOVAL

During 1956 there was a further slight decrease in the number of patients referred for removal under the National Assistance Acts. Thirty-four cases (30 women and 4 men) were investigated. Eight were persuaded to enter hospital voluntarily, and three were removed to mental hospitals. In 17 cases no action was considered necessary, and in six it was possible to improve conditions by the provision of home help or district nurse. No one was removed compulsorily.

	<i>1955</i>	<i>1956</i>
Cases investigated ... ..	37	34
Cases removed under National Assistance Act, Section 47 ... ..	—	—
Cases removed under National Assistance (Amend- ment) Act ... ..	—	—
Other arrangements ... ..	7	6
No action ... ..	14	17
Admitted to hospital voluntarily ... ..	11	8
Certified under Lunacy Acts ... ..	5	3

### PROTECTION OF PATIENTS' PROPERTY

Cases frequently arise in which a person has been admitted as a patient to a hospital and it appears to the Local Health Authority that there is danger of the loss of, or damage to, moveable property belonging to that person owing to his temporary or permanent inability to look after it himself. If no other suitable arrangements can be made—such as a relative assuming responsibility for the care of the patient's moveable property—it is the duty of the Local Authority to take reasonable steps to prevent or mitigate the loss or damage.

During 1956, 179 cases were referred to the Public Health Department for attention under Section 48 (1) (a) of the National Assistance Act, 1948, which imposes this duty on the Local Authority. In such cases

responsible officers of the Public Health Department immediately visit the patient's house in order to assess the position. If it is found impracticable to make other suitable arrangements, the officers take charge of any money, jewellery, securities, etc., which may be found in the house and the premises are secured. Quite frequently considerable sums of money are found, amounting to as much as hundreds or, in a limited number of cases, even thousands of pounds. The money, securities, valuables, etc., are immediately deposited in a bank or strong room for safe custody and, in cases where the patient is incapable of giving directions as to the action to be taken in respect of his or her property, if considered necessary application is made to the Court of Protection for instructions. During the year under review, 19 such cases were referred to the Court and of these six were dealt with by the appointment of a senior officer of the Department as Receiver of the patient's estate, seven were dealt with by short procedure orders, five were still pending instructions of the Court at the close of the year, and in one case the patient recovered before an Order was made.

In cases in which the Court of Protection appoint a Receiver, it is the duty of the officer appointed not only to safeguard the property of the patient but to look after his interests generally within the terms of the Order. This usually involves the collection of income from various sources and the making of necessary payments on behalf of the patient during his incapacity. The total number of cases current during 1956 in which an officer of the Department was acting as Receiver was 56. The Receiver's authority to act in each case is granted by the Court of Protection, to whom he is directly responsible for all of his actions and to whom he is required to submit an annual financial statement in respect of each individual receivership.

Similar procedure follows regarding patients dealt with under the Mental Deficiency Acts who are possessed of property or are beneficiaries under the wills of relatives, etc. At the present time the Chief Inspector under the Mental Deficiency Acts is appointed Receiver of the estates of seven patients and is therefore responsible for looking after their interests and providing them with extra comforts from an allowance received from the funds in Court.

In one instance a patient is the owner of two rented houses and this involves the collection of rents, making necessary payments and keeping the property in good repair.

During 1956, two applications only were made to the Court of Protection on behalf of patients, and in each case the matter was dealt with by a short procedure order.

## INCIDENCE OF BLINDNESS

### DEFINITION OF BLINDNESS

For the purpose of registration as a blind person under the National Assistance Act, 1948, a blind person is "so blind as to be unable to perform any work for which eyesight is essential." The test is not whether the person is unable to pursue his ordinary occupation or any particular occupation but whether he is too blind to perform any work for which eyesight is essential.

### Statistics

At the beginning of 1956 there were in Birmingham, 1,658 registered blind persons—707 men, 891 women and 60 children.

#### *Additions to the Blind Register*

	During 1954	During 1955	During 1956
Certified blind ... ..	195	257	232
Immigrants to Birmingham ...	21	13	20

#### *Deletions from the Register*

Through death ... ..	113	163	150
Leaving Birmingham ... ..	20	28	27
Sight improved ... ..	4	1	3

<i>Aggregate Increase in Blind Persons</i>	79	78	72
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During the year the numbers of blind changed from

707 men	891 women and	60 children	... ..	Total	1,658 to
720 ..	949 ..	61 ..	... ..	..	1,730

an increase of 13 men, 58 women and 1 child. Total 72.

The experience of previous years has thus been repeated, the Blind Register continually increasing, but the increase affected women far more than men. The number of blind children remains relatively static. There were no cases of retrolental fibroplasia causing blindness in 1956.

Forms B.D.8 received in the Health Department and relating to newly certified blind persons and to those blind already who moved into Birmingham, fell into the following categories.

Primary senile cataract	42	Myopia ... ..	15
Cataract congenital ...	8	Local infection ... ..	5
Glaucoma ... ..	10	Trauma ... ..	4
Other congenital and hereditary defects ...	9	Diabetes ... ..	26
Other causes ... ..	111	(These included senility, hypertension, cause unknown, arterio sclerosis, cerebral tumour, constitutional, choroido vascular degeneration, cancer growth and optic atrophy).	

The following arrangements for the care, education and employment of the blind were in operation at the beginning and end of the year.

<i>1st January,</i>				<i>31st December, 1956</i>			
<i>1956</i>				<i>Men</i>	<i>Women</i>	<i>Children</i>	<i>Total</i>
1	Baby in Sunshine Home	...	...	—	—	—	—
—	Baby at School	...	...	—	—	—	—
11	Babies at home	...	...	—	—	8	8
—	Babies in Regional Board Hospital			—	—	1	1
2	Children school age in Sunshine Home	...	...	—	—	2	2
25	Children at school—resident	...	...	—	—	30	30
6	Children at school—day	...	...	—	—	5	5
13	Children of school age at home	...	...	—	—	11	11
2	Children of school age in Regional Board Hospitals	...	...	—	—	4	4
3	Adults in training—resident	...	...	—	5	—	5
12	Adults in training—day	...	...	5	4	—	9
6	Undergoing rehabilitation	..	..	1	—	—	1
3	Awaiting training for open employment	.....	.....	2	—	—	2
1	Adults in training for open employment	...	...	—	—	—	—
—	Trained for open employment but unemployed	...	...	1	—	—	1
128	Workers in open employment	...	...	114	15	—	129
194	Workshop workers	...	...	134	54	—	188
2	Adults employed in occupation centres	...	...	3	—	—	3
23	Other blind employees	...	...	11	9	—	20
31	Home workers	...	...	16	15	—	31
1049	Unemployables at home	...	...	385	728	—	1113
93	Unemployables in Regional Board Hospitals	...	...	33	69	—	102
30	Unemployables in Welfare Department Homes	...	...	15	25	—	40
23	Unemployables in Cowley Home	...	...	—	25	—	25
<hr/>				<hr/>			
1,658				720	949	60	1,729
<hr/>				<hr/>			

## Register of Partially Sighted Persons

### DEFINITION OF PARTIAL SIGHT

There is no statutory definition in the National Assistance Act, 1948, but the Ministry of Health has advised that a person who is not blind within the meaning of the Act but is nevertheless substantially and permanently handicapped by congenitally defective vision or in whose case illness or injury has caused defective vision of a substantial and permanently handicapping character be regarded as partially sighted.

At the beginning of 1956 the register contained the names of 173 persons, 60 men, 106 women and 7 children and at the end of the year 218 persons—80 men, 131 women and 7 children.

Forms B.D.8 received in the Health Department and relating to newly certified partially sighted persons or those registered already and who were coming to reside in Birmingham fell into the following categories of causes :—

Primary senile cataract	18	Myopia	...	...	...	5
Cataract congenital	...	1	Local infection	...	...	1
Glaucoma	...	3	Trauma	...	...	3
Other congenital and hereditary defects	...	4	Diabetes	...	...	3
Other causes	...	43	(These included senility, cause unknown, hypertension, cerebral haemorrhage, and constitutional).			

### Blind and Partially Sighted

The total number of Forms B.D. 8 received continues at a high level. The following table shows the ages of the patients to whom they related.

Year of receipt of B.D.8	under 5	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65-69	70-74	75-84	85-94	95 plus	Total
1953	6	5	1	3	5	10	10	22	26	30	55	24	1	198
1954	5	1	2	8	15	7	14	31	21	31	82	38	—	255
1955	7	3	—	1	10	8	22	38	33	44	111	47	1	325
1956	2	—	—	9	7	9	14	35	16	51	120	47	1	311

75.5% of the forms received in 1956 referred to patients over 65 years of age as compared with 72.6% in 1955, 67.5% in 1954 and 58.6% in 1953. The increase in the percentage of elderly persons among those with seriously defective sight is therefore continuing.



The causes of loss of vision and the treatment for the cases registered in Birmingham in 1956 were :—

	<i>Cause of Disability</i>			
	<i>Cataract</i>	<i>Glaucoma</i>	<i>Retrolental Fibroplasia</i>	<i>Others</i>
(i) Number of cases registered during the year in respect of which Section "F" of the form B.D.8 recommends :				
(a) No treatment ...	21	5	—	81
(b) Treatment (Medical, Surgical or Optical)	48	8	—	148
(ii) Number of cases at (i) (b) above which on follow-up action at the year end had received treatment ...	11	6	—	101

The 13 glaucoma patients prior to registration as blind or partially sighted had received treatment as follows :—

<i>Treatment Incomplete</i>	<i>Failed Treatment</i>	<i>No Treatment</i>	<i>Medical Unsuccessful</i>	<i>Surgical Unsuccessful</i>	<i>Failed Right Eye Successful Left Eye</i>
3	5	1	1	2	1

At the examination for registration it was recommended that eight glaucoma patients should receive treatment and, before the year end, six of them had in fact received it.

### **Ophthalmia Neonatorum**

(i)	Total number of cases notified during the year ... ..	539
(ii)	Number of cases in which :	
	(a) Vision lost ... ..	Nil
	(b) Vision impaired ... ..	Nil
	(c) Treatment continuing at end of year ... ..	34
	(d) Left City ... ..	9
	(e) Lost trace ... ..	2

## CEREBRAL PALSY

The following statement relating to Birmingham patients for the year 1956 is the result of the excellent work of the Midland Spastic Association which collaborates closely with the City Welfare Department and School Health Service.

### Children under 5 years

#### *Provision*

Attending normal nursery schools	4
Attending the cerebral palsy nursery unit at Carlson House School for Spastics	7
Attending the Midland Spastic Association play centre	2
At home (17 patients regularly attending hospital out-patient departments)	47
Total known cerebral palsy patients under 5 years	60
Estimated population under 5 years	86,600

### Children aged 5 to 15 or 16 years

#### *Provision*

Attending day school	
Cerebral Palsy School, Carlson House	24
Schools for physically handicapped	69
Other special schools (Deaf 8, E.S.N. 4, Open air 2, Partially sighted 1)	15
Schools primarily for normal children	77
Home tuition and training	12
Occupation centre	10
Attending Midland Spastic Association play centre	2
Attending residential schools	
Cerebral Palsy School, Carlson House	2
Schools for the physically handicapped	3
Other special schools (E.S.N. 1, Open air 1, Hospital school 2)	4
In institutions for mentally defective	19
Remaining at home—ineducable	33
Total known cerebral palsy patients 5-15 years	270
Estimated population, 5—15 years	183,700
Incidence per 1,000 population	1.5

## Persons over 15 or 16 years

Still at school or receiving home tuition	...	...	...	...	...	...	16
Normal work	...	...	...	...	...	...	71
Sheltered work	...	...	...	...	...	...	7
Outwork, part-time work, housewives	...	...	...	...	...	...	17
Attending occupation centre	...	...	...	...	...	...	14
Midland Spastic Association craft classes	...	...	...	...	...	...	12
Institution for mentally defectives	...	...	...	...	...	...	23
In cripples' or spastics' homes	...	...	...	...	...	...	4
In hospitals	...	...	...	...	...	...	4
At home :							
Capable of sheltered work	...	...	...	...	...	...	9
Capable of crafts only	...	...	...	...	...	...	30
Totally incapable	...	...	...	...	...	...	25
							<hr/>
Total known Cerebral Palsy Patients over 15 years	...	...	...	...	...	...	232
							<hr/>
NOT YET INVESTIGATED	...	...	...	...	...	...	9
TOTAL CEREBRAL PALSY PATIENTS OF ALL AGES IN BIRMINGHAM							571

The Welfare Committee of the City Council gave direct assistance in the following ways.

Spastics maintained in special homes	...	...	...	...	...	...	2
Participating in the Handicrafts Scheme for severely disabled persons	...	...	...	...	...	...	8
Having on loan a television set	...	...	...	...	...	...	4
Assisted with cost of holiday or adaptations in the home	...	...	...	...	...	...	2

The Birmingham Fellowship of the Handicapped provides a visiting service and many social activities for handicapped people. Seventy of its handicapped members are spastics.

## EPILEPSY

The Welfare Committee of the City Council gave direct assistance to epileptics in the following ways during 1956 :—

Epileptics maintained in colonies	...	...	...	...	...	...	18
Participated in the Handicraft Scheme	...	...	...	...	...	...	13
Outwork arranged by the Welfare Dept.	...	...	...	...	...	...	3
Having a television set on loan	...	...	...	...	...	...	3

There were sixteen epileptics who participated in the activities of the Birmingham Fellowship of the Handicapped.

In addition, at the end of the year, 29 children of school age were being maintained at residential establishments on account of epilepsy.

## MEDICAL CARE OF DEPRIVED CHILDREN

### CHILDREN ACT, 1948

The total number of children in the care of local authorities in England and Wales (Cmd. 9881) on 31st March, 1956 was 62,347 as compared with 64,560 in November, 1954. In Birmingham, the comparable figures are 1,320 on 31st March, 1956 as compared with 1,338 on 30th November, 1954.

The number of Birmingham children boarded out in terms of the Boarding Out Regulations are 439 on 31st March, 1956 as compared with 467 on 30th November, 1954.

In the period 1.4.55 to 31.3.56, 506 children were taken into care ; 526 were discharged from care, 401 returning to the care of their parents, guardians, relatives or friends, and 9 fit person orders were revoked.

The number of committed children licensed to parents or relatives for the same period has risen again from 19 in 1954, 50 in 1955 to 63 on 31st March, 1956 showing the excellent amount of rehabilitation that is being done, in returning the children to their homes at the earliest opportunity providing it is in the interests of the children so to do.

The Home Office return for England and Wales for the twelve months ending March, 1956, states that 63 per cent. of the children taken into care were admitted because of the illness (including temporary illness) of parent or guardian. In Birmingham the figure was 52 per cent. Many of these children come from good homes where they are wanted and would not ordinarily be classified as deprived children.

Dr. Stott, in his new book " Unsettled Children and their Families " (Ref. " Lancet " 24.11.56), states that the maladjusted child is the product of its life experiences and not the victim of inherited personality defects. Somewhere along the line of its emotional development, deprivation starts : the child feels that its membership of the family is in doubt—because of desertion, death or illness, or simply threats of desertion. Anxiety thus generated precipitates breakdown in terms of delinquent acts, truancy, inability to cope with school and other symptoms of unsettledness. He considers that nine-tenths of family troubles and consequent juvenile unsettledness can be cleared up with wise guidance and without specific psychiatric intervention. In his view children showing gross maladjustment and cruelty should of necessity be removed from unsatisfactory homes and committed to approved schools, but so long as

admittance to approved schools is the result of a Court Order, the stigma is likely to remain. This places emphasis on the fact that intelligence is enormously affected by emotional conditions and is far from being a constant invariable endowment.

A recent investigation in 1955 by the Department of Child Psychiatry, Ipswich, on the separation of children from their parents—brought about by the normal happenings of everyday life—did not support the belief that separation experiences were important factors in producing mental ill-health of the child. While it was agreed that home confinement, whenever possible, is clearly advantageous to the child as it not only prevents separation but allows the child to welcome the new baby instead of blaming the new arrival for taking the mother away from home, it was emphasised that if the mother has to leave home for any reason then harm can be minimised if there is adequate preparation of the child by a high quality of substitute care, if contact with the child is retained through visits of father and letters, if the period of separation is minimal and if there is the ready acceptance of the child on return.

In this investigation it was found that mental ill-health usually arose from adverse experiences with parents present rather than absent.

Home Office figures show that children admitted during the year ended 31st March, 1956, who had been abandoned, lost or deserted by the mother make up eight per cent. of the total number of deprived children. In Birmingham the figure is 14.4 per cent. but if other categories of social failure are added, the proportion rises to 41 per cent. compared with a national figure of 32 per cent.

Divorces in Britain average about 28,000 a year—four times the pre-war number, and anything up to 20,000 children a year are affected by the divorce of their parents. Support from National Assistance is received by some 75,000 women separated from their husbands. There are also the children of unmarried mothers who are unable to make suitable provision for their children. It is pertinent to ask how many of these thousands of children are likely to be subjected to unhappy and damaging experiences because of the instability of the family situation.

While, on the one hand, one must try to prevent any harmful effects of separation when they occur even although some of the ill effects will be temporary or minor, on the other hand, there are times when a child will benefit from a temporary or permanent change of care when the mother is handicapped by emotional problems and thus prevented from making the relationship she would wish with her child.

It is now universally agreed that the need for more accurate knowledge of the physical and mental development of normal children is required by all who work for the welfare of children. The foundations of social adjustment are laid down in the early years of childhood, as a result of the way in which the young personality develops in relation

to the opportunities for satisfaction and frustration which it experiences. So ubiquitous are the problems, particularly in the children coming into the care of the local authority, that all grades of staff in child care work are involved in them as part of their daily work.

Knowledge and skill in the right approach should be taught to all who have responsibility in this field, but the great danger now is that there are far too few "specialist" workers available. Unfortunately, too, there are not sufficient applications from persons willing to be resident and take up this work with children. This problem is not confined to any one authority nor to any one part of the country. In a city like Birmingham, higher rewards are offered in commerce, industry and other public services. Taking the long term view, what is required is a sustained campaign with the object of preventing deterioration in families socially unstable—guiding and assisting them where possible at an early stage in their difficulties.

The important part which the health visitor can play in achieving this is referred to in the section on Mental Health (page 182). No doubt it will take years of patient education of these families to show results in better socially adjusted parents and children, reduced demands for psychiatric treatment and fewer visits of parents and children to Juvenile Courts.

Many applications for children to be taken into care are not accepted. In 1956, of 1,404 applications or enquiries for admission involving 2,798 children, 595 were admitted. When a visit is paid to the home by the children's visitor following the application, by careful guidance and encouragement the crisis may be averted and family failure prevented. Attempts are then made to supply effective support to enable these threatened families to recover. Children's visitors and health visitors are doing very good work in their own particular spheres and very often in conjunction with each other. The work undertaken in the City to prevent family breakdown is referred to in the section on Mental Health.

The Boarding Out of Children Regulations, 1955, came into operation on the 1st January, 1956. The medical examinations of children in the care of the City are carried out as recommended in these Regulations. The arrangements for dental supervision of the children are also adequate. Preventive inoculation is given to the children in care, i.e., smallpox vaccination, diphtheria immunisation, B.C.G. vaccination (in certain cases) and now "polio" vaccination. Some of the general practitioners also protect the children in the nurseries against whooping cough.

The health of the children in the care of the Birmingham Children's Committee has been very good indeed throughout the year and there is nothing of outstanding interest to report. Well balanced meals, adequate sleep, plenty of recreation in the open air and all possible steps taken to prevent the spread of infection are the keynote in the building up of the children's resistance to infection.

In June, 1956, the allowance for children's spectacles was increased to £1 11s. 11d.

The arrangement whereby milk was supplied free of charge on a scale of one third of a pint per child per day to children in approved schools and remand homes and in certain children's homes provided under the Children Act, 1948, was discontinued from the 31st August, 1956. The Children's Committee, however, agreed to meet the cost of all milk supplied to their establishments from the 1st September, 1956.

## **Residential Nurseries**

### **Field House**

A child shortly after admission to the nursery developed whooping cough and 25 other children were affected. Five of the children had serious attacks and were admitted to Hayley Green Hospital but the other children were nursed in the nursery.

In the early part of the year there were several catarrhal infections among the children, and three cases of pneumonia and five quite severe cases of bronchitis were nursed in the nursery.

One child developed mumps but there was no further spread.

One nurse developed jaundice towards the end of the year.

Nine children were admitted to hospital : five children with whooping cough already mentioned, two to the Children's Hospital for the removal of tonsils and adenoids and two to the Children's Hospital for the correction of their squints. One of these children was returned to the nursery without the operation being carried out because of the onset of bronchitis in hospital.

Seven children have been immunised against diphtheria and ten have had smallpox vaccinations.

### **Flint Green**

In the early part of the year, five children developed symptoms of dysentery and were transferred to Little Bromwich Hospital.

When the first case of chicken pox occurred in the nursery he was sent to Little Bromwich Hospital in an attempt to prevent spread of infection but, unfortunately, 11 other children and a student nurse developed the infection. All were mild cases.

One child had his tonsils and adenoids removed at Moseley Hall Hospital.

### **Hawthorne House**

Six children were admitted to hospital throughout the year : one to Dudley Road Hospital with shingles, one to Little Bromwich Hospital with whooping cough (but there were no further cases) and four children

to the Children's Hospital, one with a urinary infection, one with unresolved pneumonia, one with persistent otorrhoea and one status epilepticus.

In the early part of the year twelve children had treatment for mild upper respiratory infections.

Twelve nurses and three children developed a virus infection, four of the nurses and one child being jaundiced during the attack.

### **Oaklands**

Five children were admitted to hospital: one for the removal of his tonsils, two to the Eye Hospital for correction of their squints, one to Bromsgrove Hospital with broncho-pneumonia and one, a Jamaican baby, to Worcester Royal Infirmary with dietetic difficulties.

Thirty-seven children developed chicken pox.

Several children had upper respiratory infections in the early part of the year. One child with pneumonia, one with pleurisy, two with bronchitis and five with tonsillitis were nursed in the nursery.

### **Pype Hayes**

In February, 19 children and six staff developed acute tonsillitis, vomiting being one of their main symptoms.

Three cases of tonsillitis developed again in November. One child had scarlet fever and three children had german measles.

Six children were admitted to hospital: two to the Children's Hospital for correction of their squints, one with tonsillitis and acute retention of urine, one to Moseley Hall for tonsillectomy and two to the General Hospital with concussion and abrasions following a street accident.

### **Wychbury**

A mild whooping cough epidemic broke out among the school children in May and altogether 15 children developed it, but all were nursed in the nursery.

In October a child developed measles following his return to the nursery from a weekend with his family and was admitted to hospital in the hope that an epidemic might be averted but 11 other children developed it and these were nursed in the nursery.

## **Children's Homes**

### **Erdington Cottage Homes**

Fourteen children have been admitted to hospital for various reasons: eight have had tonsillectomies. Two children were admitted to Dudley Road Hospital: one with Hodgkin's disease, and the second



with suspected appendicitis but was found to have both kidneys severely diseased.

Twenty children have been referred to the General Hospital for x-rays, stitches and the giving of anti-tetanic serum following accidents.

In spite of the large number of children here attending school regularly, the only infectious diseases occurring have been six cases of German measles and four cases of chicken pox.

### **Shenley Fields**

Twenty-five children have been admitted to hospital for various reasons, including nine for the removal of tonsils and adenoids.

Fifteen children have attended Selly Oak Hospital following accidents for x-rays, stitches and the giving of anti-tetanic serum.

The following infectious diseases occurred during the year: four German measles, one mumps, two scarlet fever, fifteen chicken pox, one measles and one Sonné dysentery.

### **Pebble Mill**

Four children have been admitted to hospital: two to the Eye Hospital for the correction of their squints and two to Selly Oak Hospital, one for tonsillectomy and one with a fractured nose caused by a fall at school.

### **Milton Grange**

This Home was opened for the admission of children on the 26th May, 1956. All children are medically examined at the Reception Centre prior to admission to this Home. The health of the children has been very good.

### **Family Homes**

On the whole the health of the children in the family homes has been excellent. Eighteen children in family homes attend special schools.

Ten children were admitted to hospital: two to Little Bromwich Hospital with whooping cough, three to Selly Oak Hospital, one for circumcision, one for the removal of a cyst and one for observation for appendicitis but no operation was performed, one to the Children's Hospital for a dental operation, one to Hill Top Hospital, Bromsgrove,

for bronchiectasis and it was decided that an operation was not necessary, one to the Woodlands Hospital for foot manipulation and two to the Eye Hospital for correction of their squints.

The only infectious diseases reported have been two cases of whooping cough (already mentioned), one case of German measles and one case of measles.

### **Copeley Hill Hostel**

Three boys have been attending the Orthopaedic Hospital, two for manipulation and exercises because of flat feet and one for exercises only.

The general health of the boys has been very good.

### **Remand Homes**

#### **Forhill and Moseley Road**

The general health of the boys has been excellent.

One boy showed extremely disturbed behaviour for long periods and was admitted to Moseley Road until a vacancy was made available for him in the Children's Psychiatric Unit at Tone Vale Hospital, Taunton.

#### **The Limes**

The health of the girls has been very good indeed.

One girl was admitted to Selly Oak Hospital for observation during pregnancy, one was admitted to the General Hospital for special treatment and one, owing to extremely violent uncontrollable behaviour, was transferred to Hollymoor Mental Hospital. This girl had been admitted to a mental hospital on two previous occasions prior to her admission to the Limes.

### **Boarded Out Children**

One boy, while on shore leave from the Merchant Navy, was admitted to Selly Oak Hospital for appendicectomy, another boy in a foster home was admitted to Dudley Road Hospital with acute rheumatic fever, one girl was admitted to Selly Oak Hospital for appendicectomy and the removal of a cyst and one child developed osteomyelitis of the knee and had prolonged hospital treatment followed by a period of convalescence. Several children have had varying periods of convalescence at Hillaway Homes, Devon.

### **Medical Examination of Children placed for Adoption**

When a request is made by the mother for her child to be placed for adoption, the mother is interviewed and the seriousness of her decision is discussed with her. When it is thought that it is in the best interests of

the child to initiate the proceedings for adoption, the child is medically examined at the Adoption Clinic to ascertain whether it is medically fit for adoption. Even after a satisfactory preliminary examination the mother may change her mind regarding adoption and decide to keep her baby.

Of the 73 preliminary medical examinations carried out in 1956, 70 children (20 with minor defects) were fit (see Table, page 225). The remaining three children were unfit for the following reasons—one with subnormal mentality, one with cerebral palsy and one with an extensive hairy mole on the leg and inguinal hernia. Lengthy treatment would be required for the last child but it may be fit later on.

Prospective adopting parents are not accepted by the Children's Department unless a satisfactory medical and x-ray report of them and their own children, if any, has been received.

A final detailed medical examination of the child is carried out later as a medical certificate of fitness is required by the Court for the final hearing of the adoption. This final examination is often carried out after placing the child in her prospective adopting home during the requisite three months' probationary period. This enables the prospective adopting parents to discuss with the medical officer any defects found at the examination before they finally decide to go ahead with the adoption application.

With certain cases the prospective adopting parents are advised to postpone their adoption application while the child's progress is watched and the medical officer reviews these children from time to time (Group C, page 226). Thirty-three such reviews were carried out in 1956.

Until the final adoption order is made in favour of the adopters, the natural mother, of course, is able to change her mind about adoption—but the prospective adopting parents are made aware of this difficulty when applying for adoption. The Adoption Act, 1949, however, empowers the Court to waive this claim in certain circumstances if the mother is unreasonably withholding consent.

Of the 139 final medical examinations which took place in 1956, 85 children were found to be healthy. There were 44 with minor defects and no contra-indication to adoption. Of ten with major defects, three were none the less adopted.

Of the 139 final examinations the children were placed for adoption as follows :—

(1) By the Children's Department ... ..	58	} 126
(2) By other adoption agencies ... ..	41	
(3) Private and third party placings ... ..	27	

At the end of the year, ten children were still in residential care and three were still with the natural mother.

The following is a report of the medical examinations carried out at the Adoption Clinic :—

A. Total examinations	...	...	...	...	...	...	...	245
(1) Preliminary examinations	...	...	...	...	...	...	...	73
Medically fit (20 with minor defects)	...	...	...	...	...	...	...	70
Medically unfit	...	...	...	...	...	...	...	3
(i) sub-normal mentality (3 years, 4 months), mental age 2 years								
Still boarded out.								
(ii) cerebral palsy (3½ months). With poor general health.								
Now in residential care.								
(iii) extensive hairy mole one leg (7 weeks). Also inguinal hernia. Lengthy treatment necessary. May be fit to place later.								
(2) Final examinations	...	...	...	...	...	...	...	139
Children's Department placings	...	...	...	...	...	...	...	58
Other adoption societies	...	...	...	...	...	...	...	41
Private and third party placings	...	...	...	...	...	...	...	27
In residential care	...	...	...	...	...	...	...	10
Still with natural mother	...	...	...	...	...	...	...	3
Healthy	...	...	...	...	...	...	...	85
Minor defects	...	...	...	...	...	...	...	44
Major defects	...	...	...	...	...	...	...	10

B. Defects found at final examination

10 medically unfit (major defects)

Not yet placed for adoption	{	(1) ? sub-normal mentality (4 months)—mother certified—boarded out.
		(2) Sub-normal mentality (11 months)—mother certified—in residential care.
		(3) Sub-normal mentality (11 months)—mother mentally unstable—in residential care.
		(4) Sub-normal mentality (3½ years)—mother and aunt mentally defective—in residential care.
		(5) ? Sub-normal mentality (4 months)—mental history—both parents—in residential care.
Adopted	{	(6) Sub-normal mentality (3 years)—mother feeble-minded—private placing—adopted none the less.
		(7) Slightly sub-normal mentality (16 years)—mother low mentality—boarded out 5 years, then adopted.
		(8) Sub-normal mentality (1 year)—mental history both parents—boarded out, then adopted by relative.
		(9) Severe scoliosis (4½ months)—having treatment—being adopted soon.
With natural mother	{	(10) Severe scoliosis (4½ months).

44 *Minor defects (no contra-indication to adoption)*

(i) *Respiratory and upper respiratory*

Bronchitis	...	...	...	...	6	}	9
Enlarged tonsils and adenoids	...	...	...	1			
Otorrhoea	...	...	...	1			
? Defective hearing	...	...	...	1			

(ii) *Genito-urinary*

Hydrocele	...	...	...	...	1	}	8
Phimosis	...	...	...	...	6		
Undescended testicle	...	...	...	...	1		

(iii) *Miscellaneous*

Enlarged thymus	...	...	...	...	2	}	27
General debility	...	...	...	...	1		
Eczema	...	...	...	...	3		
Strabismus	...	...	...	...	2		
Secondary anaemia	...	...	...	...	5		
Kyphosis	...	...	...	...	1		
Tongue-tie	...	...	...	...	1		
Loss of one eye (trauma)	...	...	...	...	1		
Pes cavus	...	...	...	...	1		
Trace hemiplegia (left arm and leg)	...	...	...	...	1		
Pes planus	...	...	...	...	1		
Torticollis	...	...	...	...	4		
Naevus...	...	...	...	...	4		

C. *Reviews of children originally examined 1951—1955*

- (1) 18 children finally adopted where longer probationary period advised in view of age of child.
- (2) 9 adopted children reviewed on account of defects found at time of final examination prior to adoption.
- (3) 4 backward children who were still unfit for adoption.
- (4) 1 with new defect since adoption.
- (5) 1 examined after operation for branchial cyst.

*Result of medical examination*

	Healthy	Condition improved	Condition stationary	New lesion
Satisfactory psychological achievement with child over one year at placing...	18	—	—	—
General debility ... ..	—	2	—	—
Slow development ... ..	—	2	2	—
Enlarged thymus ... ..	5	2	—	—
Branchial cysts ... ..	—	1	—	—
		(by operation)		
Metatarsus varus ... ..	—	—	—	1

## INSPECTION AND REGISTRATION OF NURSING HOMES AND NURSES AGENCIES

### Nursing Homes (Public Health Act, 1936)

At the end of 1956 there were 18 nursing homes on the Register. Three homes closed during the year, two for chronic cases with 10 and 16 beds respectively, and one home of 29 beds, which admitted medical and surgical cases. One home for chronic medical cases increased its accommodation from 22 to 25 beds.

The total number of visits to nursing homes paid during the year was 64 (52 by medical officers and 12 by supervisors of midwives).

#### FACILITIES AT END OF 1956

Total beds in homes	...	...	...	...	...	255
Homes which are equipped for surgical work	...	...	...	...	...	2
Homes which take chronic or senile cases only	...	...	...	...	...	13
Homes which take maternity cases only	...	...	...	...	...	3 (with 21 beds)
Homes which keep some beds for maternity work	...	...	...	...	...	1 (with 1 bed)

### Nurses Agencies (Nurses Act, 1943)

In accordance with the Nurses Act, 1943, and the Nurses Agencies Regulations, 1945, applications were received from three agencies, and renewals of licences were granted in each case.

The total number of visits of inspection paid during the year was six.

## STAFF WELFARE AND FIRST AID, MEDICAL EXAMINATIONS AND CREMATION CERTIFICATES

### First Aid and Staff Welfare

The work of this section has followed closely the pattern of previous years as indicated by the 5,672 surgery attendances as compared with 5,676 in 1955. In both years there was an average of 65 individuals given advice and/or treatment per week.

The appointment in May, 1956, of a State Registered Nurse holding an Occupational Health Nursing Certificate, as Sister-in-Charge of the nursing coincided with the opening of the reconstructed Council House Surgery which has been designed as the main centre for treatment.

The present improved facilities, restricted as they are in both manpower and accommodation, make only limited provision for the non-manual and manual staff employed by the 28 Corporation Departments. Nevertheless, on numerous occasions timely intervention in the early stages of an illness has undoubtedly prevented a breakdown in health.

Establishments of Corporation departments located in various parts of the City have been visited and improvement of their staff welfare and first-aid arrangements effected.

### Medical Examination of New Entrants to the Corporation Service

#### MEDICAL EXAMINATIONS

<i>Year</i>	<i>Non-Manual Employees</i>	<i>Manual Employees</i>	<i>Examinations on behalf of other Authorities</i>
1955	1,106	836	29
1956	905	894	25

The Medical Officer for Staff Welfare has, as one of his main commitments, the examination of all entrants to the non-manual staff of the Corporation, with the exception of the Education Department, which has its own arrangements. In addition he examines some of the new manual employees, the majority being seen by arrangement with a panel of outside doctors.

Such a thorough medical check is a rare event in adult life and, without it, some are found to be in urgent need of medical or dental attention which is arranged, frequently with most gratifying results.

## Cremations

### NUMBER OF CREMATIONS AUTHORISED

<i>Year</i>	<i>Lodge Hill</i>	<i>Yardley</i>	<i>Total</i>
1953	2,151	1,252	3,403
1954	2,524	1,503	4,027
1955	2,926	1,657	4,583
1956	3,040	1,721	4,761

Year by year the number of cremations is rising. Since 1st May, 1952, when the Health Department became responsible for authorising cremations, through the Medical Officer for Staff Welfare as Medical Referee, 18,771 bodies had been cremated by the end of 1956. The Referee, in checking that all requirements have been met before allowing cremations, sometimes needs to make urgent and detailed enquiries among general practitioners, hospital medical staffs, coroners and others ; a duty which can be most time consuming. Occasionally, the Cremation Regulations cannot be satisfied unless a post mortem is made.

As will be seen from the figures, cremation is becoming more practised and this mode of disposal of the dead is adopted in about 20 per cent. of all deaths in Great Britain as a whole. In Birmingham, however, the figure is approaching 30 per cent.



## FOOD AND DRUGS

When the Food Hygiene Regulations, 1955, became operative, only in part, on 1st January, 1956, the remaining provisions being deferred for a period of six months, an intensive survey of all food premises began with the object of assisting the food trader in meeting his obligations.

Steps taken to facilitate understanding of these Regulations are set out elsewhere under the Clean Food Campaign, and it may be said that little difficulty has in general been met in obtaining compliance.

There is, however, one aspect in which the Regulations have been shown to be inadequate—the notification, by the occupier, of infection in the food handler to the Medical Officer of Health. This is carried out faithfully and in accordance with Regulation 11 by a few of the larger firms, but there can be no doubt that many staphylococcal infections exist, but do not come to light, except rarely and through investigation of some food poisoning incident. Again, where salmonella infections are notified by the general practitioner, such notifications are confidential and there is no provision for the notification back to the employer by the Medical Officer of Health, as in the Milk and Dairies Regulations, 1949, (Reg. 18 (2)).

Neither the average food trader nor his employees are as yet sufficiently health conscious.

A more widespread appreciation of the health risks involved will be necessary if this Regulation is to have the effect desired—the prevention of food infection—and amendment on the lines of the Milk and Dairies Regulations would do much to close the loophole meantime.

### **Eating Houses and Catering Premises**

Section 54 of the Birmingham Corporation Act, 1935, requires the registration with the Corporation of all premises substantially or mainly used for the sale of food to members of the public for consumption on the premises. At the end of the year there were 1,158 registered eating houses compared with a figure of 1,171 eating houses at the end of 1955.

Such registered premises include unlicensed restaurants, cafes and snack bars, but exclude civic restaurants, school meals centres, works and office canteens and licensed houses. The Food Hygiene Regulations,

1955, are applicable to all these premises, however, and visits have been made to ensure the observance of the food handling laws and that good food hygiene is maintained.

During the year inspectors made a total of 9,502 visits to premises as follows :—

Visits to cafes, hotels, restaurants, eating houses, clubs, school meals centres, etc.	...	...	...	...	...	...	6,724
Visits to factories	...	...	...	...	...	...	1,939
Visits to bakehouses	...	...	...	...	...	...	395
Visits to licensed premises where food is sold	...	...	...	...	...	...	444
							9,502
							9,502

The figure for visits to food premises compares with a total of 8,764 visits for the year 1955. This increase of 738 visits was a direct result of the coming into force of the Food Hygiene Regulations, 1955, and included special visits of explanation and advice on the application of the new legislation. Explanatory pamphlets were delivered to each of the food premises in the City at the beginning of the year. All premises were checked against the requirements of the Regulations, any deficiencies noted and letters were sent to the occupiers. This involved a considerable amount of extra work and it was not possible to recheck before the end of the year. It may be, therefore, that in some cases compliance with the Regulations has not yet been achieved, but it is considered that in the vast majority of food premises in the City both the letter and spirit of the Food Hygiene Regulations, 1955, are being observed.

The general level of food hygiene was found to be well maintained within the legal standard and in no case during the year was it necessary to institute legal proceedings.

### Mobile Canteens

Seven new applications were received and approved during the year, bringing the total up to 40 operators of mobile canteens registered under the provisions of Section 42 of the Birmingham Corporation Act, 1948. Under this section no one, other than a person keeping open shop for the sale of food, shall either by himself or by any person employed by him sell, offer or expose for sale any food from any cart, barrow or other vehicle or from any basket, pail, tray or other receptacle unless he is registered with the Corporation. In addition if it is necessary to use premises for the storage of food intended for such sale from any cart, barrow, etc., then these premises must also be suitable and registered by the Corporation.

The general standard of food hygiene observed by the operators of mobile canteens was found to be uniformly good and they readily co-operated with inspectors in remedying any deficiencies.

## Factory Canteens

The same high standard of hygiene has been observed in the running of factory canteens as has been revealed in previous years and, as catering establishments, they have compared very favourably with many "eating houses." There was a slight reduction in the number of canteens operating which at the end of the year totalled 804 as compared with a figure of 810 at the end of 1955.

## Bakehouses

There was a sharp reduction in the number of bakehouses operating in the City and at the end of the year there were only 129 bakehouses as compared with a figure of 155 at the end of 1955. Approximately one-third of these bakehouses were solely engaged in the manufacture of cake confectionery and of the remainder only nine restricted their baking to bread.

The factors having bearing on the reduction in number of operating bakehouses are thought to be two-fold and probably arise from the following circumstances :—

- (a) increased operating costs, including in some cases, the expenditure likely to be involved in complying with the new Food Hygiene Regulations, 1955 ;
- (b) the effect of slum clearance and the City's Development Plan, involving, as far as the Central Areas are concerned, the temporary or permanent loss of local customers and in some cases, the actual demolition of the bakehouses themselves.

Inspectors have visited the bakehouses approximately every four months during the past year and generally a good standard of hygiene was found to be maintained.

## Other Food Premises inspected included :—

Breweries	...	...	...	...	...	...	...	6
Sweet manufacturers	...	...	...	...	...	...	...	8
Biscuit manufacturers	...	...	...	...	...	...	...	2
Mineral water factories	...	...	...	...	...	...	...	6
School canteens	...	...	...	...	...	...	...	193

Satisfactory conditions were found generally.

## Licensed Premises

Licensed premises where main meals are served are already subject to periodic inspection as catering establishments. Since beer is a food, the Food Hygiene Regulations, 1955, apply to all licensed premises and following their consideration of a report on the matter the Health Committee authorised the carrying out of certain special inspections. These inspections took the form of an evening visit at peak trading hours, followed by a full inspection of the premises the next day.

Owing to the acute shortage of inspectors and the pressing demands of other essential work inspections were not commenced until August and

between then and the end of the year 138 premises were so visited out of a total of 947 "on-licence" premises in the City. Generally, conditions were found to be good but in 12 cases it was necessary to write to the management or brewery concerning undesirable practices observed. In addition at 82 premises deficiencies of equipment or other conditions were the subject of letters to the respective breweries.

The purpose of the inspections has been two-fold—firstly, to ensure that the requirements of the Food Hygiene Regulations, 1955, have been met and secondly, to examine methods of handling and serving drinks with special attention being paid to the collection and disposal of waste beer. The problem presented in the disposal of spilled beer is not a straightforward one. It might be supposed that the giving of instructions to pour waste beer down a drain would suffice, but it must be borne in mind that excise duty has already been paid on the beer with no allowance or refund for such spillage. In the average public house it is estimated that between a half and one and a half gallons of overspilled beer may be collected daily. There is every inducement, therefore, for the licensee to save and sell as much of this spillage as possible. Apart from the risk of bacteriological contamination of this overspilled beer, the practice is undesirable on aesthetic grounds alone.

The solution is not easy to find in view of the factors involved, but it is felt that the use of glasses with line measures instead of the present brim measures would be a major improvement and would reduce spillage. This view is already supported on hygienic grounds in their Report by the Committee on Weights and Measures Legislation, 1951.

### MILK AND DAIRIES

The supervision of milk and frozen confections and imitation cream and eggs used in confectionery bakeries, has continued in the hands of five full-time inspectors, assisted by two samplers, working under the direction of the Administrative Medical Officer of Health (General Purposes).

The work of the Section is summarised as follows:—

Visits to pasteurising plants	...	...	...	...	...	733
Visits to sterilising plants	...	...	...	...	...	694
Visits to wholesale purveyors	...	...	...	...	...	582
Visits to retail purveyors	...	...	...	...	...	840
Visits to ice cream manufacturers	...	...	...	...	...	1,151
Visits to ice cream dealers	...	...	...	...	...	5,010
Visits to iced lollipop manufacturers	...	...	...	...	...	548
Visits to iced lollipop dealers	...	...	...	...	...	4,903
Visits to milk bars	...	...	...	...	...	232
Visits to principal bakehouses (bread and confectionery)	...	...	...	...	...	749
Other visits	...	...	...	...	...	437
Unsuccessful visits	...	...	...	...	...	639
Interviews	...	...	...	...	...	226

In addition public health inspectors made 2,993 visits to milk shops, mainly for registration purposes.

## Milk Licences

The following licences were in operation at the end of the year :—

Pasteurising Plant—H.T.S.T.	...	...	...	...	...	7
Holder	...	...	...	...	...	2
Sterilising plant	...	...	...	...	...	9
Wholesale and Retail Milk-Distributors and Depots	...	...	...	...	...	61*
Dealers' Licences (Shop retail trade)	...	...	...	...	...	2,568
Tuberculin-tested Licences issued to producers of pasteurised milk for the production of T.T. (Pasteurised) Milk...	...	...	...	...	...	8

\* Six wholesale and retail purveyors went out of business during the year, and were removed from the Register.

## Churn and Bottle Washing

As a check upon the efficiency of churn and bottle washing, a small number of samples were taken, with the following results :—

<i>Samples taken</i>		<i>Estimated Baterial Count per Churn or Bottle</i>			
		<i>Nil</i>	<i>Under 1,000</i>	<i>1,000—10,000</i>	<i>10,000—100,000</i>
Churns (13)	...	Nil	6	2	5
Bottles (13)	...	Nil	9	4	Nil

## Complaints

The following complaints were received during the year :—

Dirt and foreign matter in bottles	...	...	...	...	...	22
Watery sterilised milk	...	...	...	...	...	3
Insect infestation ( <i>Drosophila busckii</i> )	...	...	...	...	...	2
General complaints from schools, mainly in regard to defective bottles	...	...	...	...	...	16

Reference must once more be made to the dirty condition in which so many bottles are returned to the dairy from factories, schools and individual customers. There is clearly need for education of the public in this respect, and it says much for the efficiency of washing plant and supervision that so few complaints are received. The cost of replacement of bottles found to be incapable of cleansing, however, is inevitably heavy.

Two more dairies extended their activities to the bottling of diluted orange juice for retail sale by milk roundsmen. Special accommodation and equipment is set apart for this purpose by the dairies concerned.

## Milk Sampling

Arrangements for the sampling of milk in store and during delivery continued.

These resulted as follows :—

### RAW MILK

	<i>Total No. of samples taken for Methylene Blue Test</i>	<i>No. failed</i>
Tuberculin tested ... ..	126	4 (3·17%)

### PASTEURISED MILK

	<i>Methylene Blue Test</i>		<i>Phosphatase Test</i>	
	<i>No. submitted</i>	<i>No. failed</i>	<i>No. submitted</i>	<i>No. failed</i>
From Dairies inside City :				
Taken from rounds	742	5 (0·67%)	726	Nil
Taken from schools	302	5 (1·65%)	304	Nil
From Dairies outside City	264*	Nil	264	2 (0·76%)

\* Two of these samples were " Tetrapak " Tuberculin Tested (Pasteurised) Milk supplied to a works canteen in the City.

Biological tests carried out on the two samples failing the phosphatase test gave negative results.

### STERILISED MILK

	<i>No. of samples taken for Turbidity Test</i>	<i>No. of failures</i>
From Dairies inside City during delivery	93	Nil
From Dairies outside City ... ..	44	Nil

A report was received from an outside authority that a sample of sterilised milk produced in Birmingham had failed to pass the turbidity test. Investigations at the dairy concerned showed no apparent cause for this failure and a check sample taken from the same day's production and examined in the dairy laboratory had proved satisfactory.

### Cream

Although it is not required that fresh cream, retailed in a " specified area," should be subject to special designation, it is common practice in the City dairies to pasteurise cream after separation.

Two hundred and three samples were submitted to the methylene blue test, 10 failing to pass the test. Three of these had been pasteurised, but no information was available as to treatment of the remainder which emanated from sources outside the City.

Two of the failures recorded also showed B.coli to be present, less than 50 in 1 c.c.

Frozen cream from a source outside the City was also examined, B.Coli being found in two out of three samples, the colony counts being 6,300, 298,000, and 500. The authority concerned was informed.

## FROZEN CONFECTIONS

### Ice Cream

During the year, eleven manufacturers ceased to make ice cream and were removed from the register, eight transferring to sale only, two losing premises through demolition and one giving up trade, leaving a total of 104 manufacturers on the Register at the end of the year.

The number of premises registered, for sale only, was 2,953 at the end of 1956, as compared with 3,026 at the end of 1955. There were 158 new registrations and 231 cancellations, the premises in some instances being demolished through redevelopment procedure, while in others retail sale was discontinued.

Six temporary registrations were granted for the sale of ice-cream at fêtes, shows and exhibitions.

Twenty-four applications for registration for sale were withdrawn when the unsuitability of the premises, by reason of sanitary defect or the nature of the main business, was explained to the applicant.

Sampling both as routine and in following up unsatisfactory results has been continued as formerly, samples being submitted to the modified methylene blue test with results as follows :—

<i>Provisional Grade</i>	<i>Samples of ice cream manufactured on premises in the City</i>	<i>Samples of ice cream manufactured on premises outside the City</i>	<i>1956 Total samples</i>	<i>1955 Results</i>
1	285 (90.47%)	246 (93.54%)	531 (91.87%)	585 (92.86%)
2	17 (5.40%)	11 (4.18%)	28 (4.84%)	27 (4.29%)
3	12 (3.81%)	3 (1.14%)	15 (2.60%)	5 (0.79%)
4	1 (0.32%)	3 (1.14%)	4 (0.69%)	13 (2.06%)
	<hr/> 315 <hr/>	<hr/> 263 <hr/>	<hr/> 578 <hr/>	<hr/> 630 <hr/>

## FOOD STANDARDS (ICE CREAM) ORDER, 1953

Two hundred and eighteen informal samples were taken, giving the following results on analysis :—

	<i>No. of samples</i>	<i>No. falling below standard</i>
Manufactured inside City ... ..	157	2
Manufactured outside City ... ..	61	Nil

The two samples reported as falling below standard showed results as follows :—

<i>% Fat</i>	<i>% Sucrose</i>	<i>% Milk solids not fat</i>
7.6	9.5	7.1
7.6	12.8	6.0

Analysis of subsequent samples from the manufacturer whose sample showed a deficiency of sucrose and milk solids not fat proved satisfactory. The other manufacturer ceased production for the season before another sample could be obtained.

A high standard of purity and quality was thus maintained throughout the year, and it is satisfactory to record that no instance of infection was attributed to the consumption of ice-cream.

### Iced Lollipops

Five applications for registration for the manufacture and sale were approved during the year, while two premises were removed from the register, one occupier giving up manufacture and reverting to sale only, and the other giving up trade altogether. The number on the Register was 41 at the end of the year.

The number of premises registered for sale only, at the end of the year, was 2,667, as compared with 1,814 at the end of 1955. There were 918 new registrations, and 65 cancellations during the year.

It is to be noted that registration, which is obligatory under the terms of Section 58 of the Birmingham Corporation Act, 1954, relates to both occupier and premises, and if, therefore, an occupier gives up manufacture or sale, his name and premises are automatically removed from the Register, except where a new occupier wishes to take over the existing business when he must apply for transfer of the registration to him.

### PURITY

One hundred and eighteen samples were submitted for bacteriological examination.



All were investigated for presence of *B.coli*, a negative report being received in respect of 115 of these.

Forty-six of these were also submitted to the methylene blue test, with results as follows :—

<i>Grade</i>	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>
	43	1	2	0

The remaining 72 were examined by plate count, with the following results :—

<i>Colony count per 1 ml. of lollipop after 48 hours at 37°C.</i>								<i>No. of samples</i>
Nil	...	...	...	...	...	...	...	3
Under 50	...	...	...	...	...	...	...	61
50—100	...	...	...	...	...	...	...	4
101—300	...	...	...	...	...	...	...	3
Uncountable	...	...	...	...	...	...	...	1
								72
								72

The three samples showing *B.coli* to be present came from the same source outside the City as two of those giving a plate count between 101 and 300 and the one reported as uncountable. The Medical Officer of Health in the area concerned was informed and no further samples from this particular source had been received by the end of the year under review.

Forty-eight samples were also submitted for investigation to determine the amount of metallic contamination. Four of these samples, three from manufacturers inside the City and one from a source outside the City showed greater proportions of lead present than the 1 p.p.m. recommended by the Food Standards Committee as the maximum amount permissible. Of the three manufacturers concerned inside the City, two have ceased the manufacture of iced lollipops and in the other case the moulds concerned were withdrawn for re-tinning and subsequent samples proved satisfactory. The Medical Officer of Health of the area concerned in the one case from outside the City was communicated with but no further opportunity for sampling from this particular source occurred.

#### COMPLAINT

A registered vendor having complained that his iced lollipops had an unpleasant odour, investigation showed brown staining of the frost which had accumulated on the inner lining of his conservator and of cartons containing iced lollipops. This was subsequently shown to be frozen cat urine, and it transpired that while no cats were noted at the time of registration, there were two on the premises, both of which habitually slept in the shop. Remaining stocks were seized, the conservator was disinfected and the occupier disposed of his cats.

## CONFECTIONERY BAKERIES

The general hygienic standard is high, and no difficulty has been experienced in securing compliance with the Food Hygiene Regulations, 1955, as a result of the co-operation of managements. The success of these Regulations must ultimately depend, however, upon the goodwill and conscience of the individual food handler, for no amount of capable supervision of good premises will of itself eliminate risk of food infection. To that end, therefore, a brochure prepared by the Central Council for Health Education, and an explanatory leaflet prepared by the Chief Public Health Inspector, were issued to all food premises at the beginning of the year for the guidance of management and staff.

### Imitation Cream

The larger premises, in which this commodity is extensively used, are supervised by the Milk and Dairies Inspectors, smaller premises being under the control of the Chief Public Health Inspector.

The closest supervision of this commodity, and of its handling in the bakery, is carried out, and frequent samples are taken, from both unopened container and mixing bowl.

The results of sampling have been as follows :—

#### (a) LARGE CONFECTIONERY BAKERIES

<i>Colony count per 1 ml. after 48 hours at 37°C.</i>	<i>No. of samples from unopened containers</i>	<i>No. of samples from mixing bowls</i>
Nil	24	21
1—1,000	48	60
1,001—10,000	5	2
10,001—100,000	2	2
100,001—500,000	Nil	1
Over 500,000	1	Nil
	<hr style="width: 50%; margin: 0 auto;"/>	<hr style="width: 50%; margin: 0 auto;"/>
	80	86
	<hr style="width: 50%; margin: 0 auto;"/>	<hr style="width: 50%; margin: 0 auto;"/>

#### (b) SMALL CONFECTIONERY BAKERIES

<i>Colony count per 1 ml. after 48 hours at 37°C.</i>	<i>No. of samples from unopened containers</i>	<i>No. of samples from mixing bowls</i>
Nil	21	16
0—1,000	58	65
1,001—10,000	7	12
10,001—10,000	13	9
100,001—500,000	3	4
Over 500,000	7	6
	<hr style="width: 50%; margin: 0 auto;"/>	<hr style="width: 50%; margin: 0 auto;"/>
	109	112
	<hr style="width: 50%; margin: 0 auto;"/>	<hr style="width: 50%; margin: 0 auto;"/>

All the above samples were examined for presence of *B.coli*, but none were found.

## Egg and Egg Albumen

The sampling of dried and frozen whole egg and egg-albumen has been continued at confectionery bakeries and cold stores.

The results have been as follows :—

<i>Country of origin</i>	<i>No. of samples taken</i>	<i>No. showing Salmonella (exclusive of S. pullorum)</i>
<b>A. WHOLE EGG</b>		
<i>(a) Frozen Whole Egg</i>		
China ... ..	59	3
Australia ... ..	184	4
Poland ... ..	117	Nil
New Zealand ... ..	3	Nil
England 1 ... ..	180	81
" 2 ... ..	158	22
" 3 ... ..	14	Nil
Unknown ... ..	3	Nil
<i>(b) Dried Whole Egg</i>		
China ... ..	37	1
America ... ..	8	Nil
Unknown ... ..	6	1
<i>(c) Unfrozen Whole Egg</i>		
England ... ..	8	Nil
<b>B. FROZEN LIQUID EGG ALBUMEN</b>		
China ... ..	99	1
Argentina ... ..	1	Nil
Germany ... ..	1	Nil
Ireland ... ..	2	Nil
Unknown ... ..	1	Nil
<b>C. EGG ALBUMEN CRYSTALS AND POWDER</b>		
China ... ..	37	Nil
Holland ... ..	1	1
Sweden ... ..	5	Nil
Denmark ... ..	7	Nil
British 1 ... ..	22	Nil
" 2 ... ..	85	2
" 3 ... ..	7	Nil
" 4 ... ..	33	1
" 5 ... ..	4	Nil
" 6 ... ..	5	Nil
" 7 ... ..	1	Nil
" 8 ... ..	4	Nil
" 9 ... ..	7	Nil
" 10 ... ..	6	Nil
" 11 ... ..	2	Nil
" 12 ... ..	1	Nil

## SHELLFISH

Six samples of oysters and 94 samples of mussels, of which one was a sample of Danish Canned Mussels, were taken by the Food Inspection Department for bacteriological investigation during the year.

All six samples of oysters were satisfactory, five showing no Type I *B.coli* per 1 ml. of fish, and the remaining one giving a reading of 0.25.

Of the 94 samples of mussels, all but two came from one of the three main sources, as shown below. The remaining two related to a new source of supply, the first sample being most unsatisfactory and the second, following the establishment of a system of purification on the lines of the Conway method, being sufficiently satisfactory to warrant perseverance with this source.

The results of examination of mussels have been as follows :—

<i>B.coli</i> Type I per 1 ml. of fish	<i>Sources of Supply</i>				<i>Total</i>
	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	
Nil ... ..	20	15	18 (1 canned)	—	53
0.25—0.5 ... ..	7	7	6	—	20
0.75—1.0 ... ..	4	1	—	1	6
1.25—5.0 ... ..	5	5	1	—	11
Over 5 and under 10	1	—	—	—	1
Over 10 ... ..	—	2	—	1	3
	37	30	25	2	94

The standard of Supply C mussels has continued to be exceptionally high, while that of the "A" supplies, if not of quite such a high standard, has given no cause for concern.

Mussels from Source B. however, have given variable results and it is worthy of note that on two occasions the Type I *B.coli* figure averaged well over 30 for the two pools of five mussels each. Such results in mussels which have been purified and are almost invariably satisfactory when examined at the source after purification, suggest strongly that transit arrangements with attendant delays are responsible. Efforts have, therefore, been made to speed up delivery from the port of entry of these mussels.

No infection has resulted from the consumption of shellfish during the year, although in one case of suspected food poisoning, special investigations were carried out. Detailed investigation, however, did not confirm the diagnosis.

## INSPECTION OF MEAT AND OTHER FOODS

(Report by C. G. Allen, M.R.C.V.S., D.V.S.M., F.R.S.H., Chief Veterinary Officer and Chief Inspector of Meat and Other Foods).

The Food and Drugs Act, 1955, the Food Hygiene Regulations, 1955, and the Byelaws made by the City Council, enable the Food Inspection Staff to exercise their powers of inspection and seizure, and to maintain a close supervision of the City's supplies of meat and other foods.

Applications for the renewal of slaughterhouse licences continued to be subject to annual review. The licences of 25 slaughterhouses (15 of which were connected with bacon factories) were renewed as from 1st February, and also the licence in respect of one knacker's yard.

### Meat Supplies

Slaughtering in the City is mostly centralised and continues to depend mainly upon public slaughtering facilities at the City Abattoir. There are also large refrigerated stores at the Abattoir where imported meat is stored until distributed to retail shops.

The supervision of meat supplies from the Abattoir is maintained throughout the various supply channels to the retail shops, school meals centres, canteen and food preparation premises.

SLAUGHTER OF ANIMALS AND INSPECTION OF MEAT, ETC. The slaughtering or stunning of animals in a slaughterhouse or knacker's yard is prohibited except under licence granted by the local authority.

The meat inspection staff at the Abattoir comprises qualified veterinary and food inspectors, who examine animals before and after slaughter, to ascertain their fitness for human consumption. These inspectors also supervise the slaughtering carried out by licensed slaughtermen, there being 207 slaughtermen's licences in force at 31st December, 1956.

The vehicles used in the City for the transport of animals and of meat are subject to inspection.

A laboratory is maintained at the Abattoir to assist in the diagnosis of various diseases.

BACON FACTORIES. Inspectors are constantly engaged examining the carcasses of pigs slaughtered at the 15 bacon factories in operation in the city. These inspectors also examine meat supplies on sale in the pork shops connected with the bacon factories. For such purposes 3,053 visits were made.

PRIVATE SLAUGHTERHOUSES. There are 10 private slaughterhouses in use in the City, and all carcasses are inspected by the district food inspectors. 960 visits were made during the year.

## ANIMALS SLAUGHTERED

	<i>Beasts</i>	<i>Calves</i>	<i>Sheep</i>	<i>Pigs</i>	<i>Total</i>
Public Abattoir ...	46,209	92,103	225,751	98,491	462,554
Pigs slaughtered in bacon factories ...				231,359	231,359
Private slaughterhouses	1,952	350	12,517	1,482	16,301
<b>TOTAL 1956 ...</b>	<b>48,161</b>	<b>92,453</b>	<b>238,268</b>	<b>331,332</b>	<b>710,214</b>
<b>TOTAL 1955 ...</b>	<b>42,809</b>	<b>78,044</b>	<b>216,141</b>	<b>404,251</b>	<b>741,245</b>

NOTE.—255 cases of cysticercus bovis (measly beef) were found at the abattoir during the year, and 4 at private slaughterhouses.

Since the area plan for the eradication of bovine tuberculosis was introduced in 1950, the percentage of cattle slaughtered at the Public Abattoir, affected with tuberculosis, has fallen steadily :

	<i>Percentage of cattle killed at Abattoir, affected with tuberculosis</i>	<i>Percentage of cattle certified as free from tuberculosis to total cattle for Great Britain</i>
1950 ... ..	27·1	22·1
1951 ... ..	24·1	31·2
1952 ... ..	21·1	39·8
1953 ... ..	19·2	43·7
1954 ... ..	15·0	49·8
1955 ... ..	10·2	60·0
1956 ... ..	8·1	67·0

**Fish, Poultry and Vegetable Supplies.** The wholesale supplies of fish, poultry, fruit and vegetables in the markets, are subjected to regular daily inspection. In the case of shellfish and watercress, samples are taken for bacteriological examination, and supplies which do not conform with required standards of cleanliness are prohibited from being sold in Birmingham.

The fish market supplies an area within a radius of approximately twenty miles from the City centre.

**Hawkers.** Bull Ring hawkers of foodstuffs who purchase their goods in the wholesale markets, are regularly visited by a food inspector. Section 42 of the Birmingham Corporation Act, 1948, provides for the registration of hawkers of food and of their storage premises, and at 31st December, 1956, registration had been effected in 311 cases. During the year street hawkers were visited 30,483 times.

**Retail Food Shops and other Premises.** After foodstuffs have been distributed from the wholesale markets to retail shops, they are still under the supervision of the district food inspectors, for which purpose the City is divided into nine districts.

The Food Hygiene Regulations, 1955, were made under the Food and Drugs Act, 1955, and are concerned with the construction, repair and cleanliness of food premises, stalls, vehicles and equipment, and the hygienic handling of food generally. Since the Regulations came into force on 1st January, 1956 (with the exception of certain regulations, the operative date of which was delayed six months), the district food inspectors have taken steps to ensure that they are complied with: whilst making visits in this connection they distributed copies of a booklet "Your Guide to the Food Regulations, 1955."

The food inspectors also draw the attention of shopkeepers and others to the requirements of the Marking Orders relating to foodstuffs made under the Merchandise Marks Act, 1926.

The following retail shops were visited:—

	<i>Number</i>	<i>Visits during 1956</i>
Beef and Pork Butchers ... ..	1,000	21,995
Grocers ... ..	1,423	6,079
Greengrocers ... ..	1,189	8,481
Hucksters ... ..	4,071	638
Fish Friers ... ..	450	683
Fishmongers ... ..	615	6,551
Horseflesh ... ..	2	18
	<hr/>	<hr/>
	8,750	44,445
	<hr/>	<hr/>

The following food premises, registered under Section 16 (1) of the Food and Drugs Act, 1955, were visited:—

	<i>Number</i>	<i>Visits during 1956</i>
Sausages, cooked meat and pork pie manufacturers	288	} 8,742
Jam manufacturers ... ..	2	

Three registered food preparation premises changed hands and the register was amended accordingly.

**Inspection of Meat, Fish and Other Foods, at School Meals Centres, etc.** The premises visited included:—

	<i>Number</i>	<i>Visits during 1956</i>
Institutions and Residential Homes ... ..	55	531
School Meals Centres ... ..	216	2,220
	<hr/>	<hr/>
	271	2,751
	<hr/>	<hr/>

In cases where food supplies or storage conditions are found to be unsatisfactory at school meals centres, reports are sent to the Education Department.

Supervision is also maintained of meat supplied to institutions, schools, etc., and a check is made for quality and prices according to the conditions of contract.

**Complaints and Request Inspections.** During the year 1956 complaints and request inspections numbered 3,707.

**Foods judged as unfit.** Condemned meat and offal are not used for human consumption in any form, but are utilised by the Corporation Salvage Department and manufactured into fertilisers, meat and bone meal, etc. Other condemned foodstuffs are disposed of by burning.

#### RETURN OF FOODS JUDGED AS UNFIT

<i>Number of Surrenders</i>	<i>Class of Foodstuffs</i>	<i>T.</i>	<i>c.</i>	<i>q.</i>
10,354	Meat and Offal ... ..	512	9	2
587	Fish ... ..	41	17	0
184	Poultry, Rabbits, etc. ... ..	2	7	0
472	Fruit and Vegetables ... ..	276	2	2
1,865	Miscellaneous ... ..	78	5	0
<hr/>				
13,462		1956	911	1 0
<hr/>				
14,255		1955	856	7 3
<hr/>				

#### **Byelaws requiring the Sterilisation of Animal Feeding Meat.**

Byelaws made under Sec. 43 of the Birmingham Corporation Act, 1948, requiring the sterilisation of animal feeding meat, have been in operation since 1st December, 1950.

#### **Prosecutions**

Byelaws made under Sec. 43, Birmingham Corporation Act, 1948 :	<i>Fine</i>
Sale of unsterilised animal feeding meat ... ..	£1



CARCASSES AND OFFAL INSPECTED AND CONDEMNED IN WHOLE  
OR IN PART

	CITY MEAT MARKET					BACON FACTORIES
	<i>Cattle</i>	<i>Calves</i>	<i>Sheep &amp; Lambs</i>	<i>Pigs</i>	<i>Horses</i>	<i>Pigs</i>
Number killed ...	46,209	92,103	225,751	98,491		231,359
Number inspected ...	46,209	92,103	225,751	98,491		20%
<i>All Diseases except Tuberculosis &amp; Cysticerci</i>						
Whole carcasses condemned ...	41	658	466	233		157
Carcasses of which some part or organ was condemned ...	630	248	8,225	1,115	None slaughtered in Birmingham for human consumption	2,024
Percentage of the number inspected affected with disease other than tuberculosis and cysticerci	1.45	0.98	3.85	1.37		0.94
<i>Tuberculosis only.</i>						
Whole carcass condemned ...	131	11	—	45		45
Carcasses of which some part or organ was condemned ...	3,621	29	—	3,498		10,982
Percentage of the number inspected affected with tuberculosis ...	8.12	0.04	—	3.60		4.77
<i>Cysticercosis.</i>						
Carcasses of which some part or organ was condemned ...	255	—	—	—		—
Carcasses submitted to treatment by refrigeration ...	255	—	—	—		—
Generalised and totally condemned	—	—	—	—		—

CARCASES AND OFFAL INSPECTED AND CONDEMNED IN WHOLE  
OR IN PART

	PRIVATE SLAUGHTERHOUSES				
	<i>Cattle</i>	<i>Calves</i>	<i>Sheep and Lambs</i>	<i>Pigs</i>	<i>Horses</i>
Number killed ...	1,952	350	12,517	1,482	
Number inspected ...	1,952	350	12,517	1,482	
<i>All diseases except Tuberculosis &amp; Cysticerci</i>					
Whole carcasses con- demned ...	—	—	7	—	
Carcases of which some part or organ was condemned ...	84	—	31	20	None slaughtered in Birmingham for human consumption
Percentage of the number inspected affected with di- seases other than tuberculosis and cysticerci ...	4.30	—	0.30	1.40	
<i>Tuberculosis only.</i>					
Whole carcasses con- demned ...	—	—	—	—	
Carcases of which some part or organ was condemned ...	117	—	—	46	
Percentage of the number inspected affected with tuber- culosis ...	5.99	—	—	3.10	
<i>Cysticercosis.</i>					
Carcases of which some part or organ was condemned ...	4	—	—	—	
Carcases submitted to treatment by refrigeration ...	4	—	—	—	
Generalised and totally condemned	—	—	—	—	

## THE MILK SUPPLY

(Report by C. G. Allen, M.R.C.V.S., D.V.S.M., F.R.S.H., Chief Veterinary Officer).

### City Dairies

Regular monthly veterinary inspections are made of all City dairy herds: 558 visits were made to cowsheds during the year ended 31st December, 1956.

At the end of 1956 there were 15 dairy farms housing 363 milch cows in 43 sheds, viz. :—

Attested herds	...	...	...	...	...	...	...	7
Non-designated herds	...	...	...	...	...	...	...	8

**DAIRY HERDS.** The cows were examined for any evidence of disease and uncleanness, and for preventing danger to the public from the sale of infected milk. The health and cleanliness of cows in city dairy herds were generally good.

**MASTITIS.** During the year four cows were found to be affected with acute catarrhal mastitis, and the milk produced by these cows was prohibited from sale.

**TUBERCULOUS MILK INVESTIGATION.** In addition to the clinical examination of dairy cows, 46 bulk samples of milk were collected from City dairy herds for biological testing. None was found infected with tuberculosis.

Individual samples of milk and sputum samples are also taken and examined in our own laboratory by the veterinary inspector dealing with the investigations.

**TUBERCULOSIS ORDER.** There were no cows in city dairies dealt with under the Tuberculosis Order.

**INSPECTIONS—MILK AND DAIRIES REGULATIONS 1949 (PART IV).** Inspections were made on behalf of the Ministry of Agriculture, Fisheries and Food, and certificates of freedom from disease were issued in respect of 72 cows in 3 non designated herds.

In connection with the Ministry's voluntary scheme for vaccination of heifer calves against contagious abortion, 19 calves have been vaccinated.

**COWSHEDS** Any conditions relating to the buildings and water supplies, coming to the notice of the veterinary inspector, affecting or

likely to affect the health and cleanliness of cattle, are reported to the Ministry of Agriculture, Fisheries and Food. No such complaints were made during the year.

A fairly high standard of cleanliness is being maintained.

All the cowsheds have been limewashed or sprayed with lime at least twice during the year.

The following cowsheds were discontinued :— Shenley Fields Farm, Northfield, Lower Barn Farm, Sheldon, Dowery Farm, Rubery.

### Tuberculosis and the Milk Supply

In order to detect the source of tuberculous milk and to eliminate the infected cattle, four dozen samples of milk are collected weekly and submitted for biological test. In addition to the samples of milk taken at depots, samples are also collected from city dairy herds.

The supplies continue to be handled mainly by large milk depots, from approximately 3,000 farmer producers.

The system is to sample as far as possible each source of supply, and samples are obtained from raw milk before heat treatment. Each sample represents the mixed milk of the cows of a single herd, and to deal with the whole of the City's milk supplies takes about sixteen months at the present rate of four dozen samples a week.

The following return shows the number of samples of milk taken and submitted for biological examination during 1956 :—

<i>Origin of milk</i>	<i>Samples taken at depots</i>	<i>Samples infected</i>	<i>No. of tuberculous cows traced</i>
Derbyshire ... ..	7	—	—
Gloucestershire ... ..	40	3	—
Herefordshire ... ..	32	—	—
Leicestershire ... ..	72	4	3
Shropshire ... ..	241	2	3
Staffordshire ... ..	676	28	26
Warwickshire ... ..	568	16	16
Worcestershire ... ..	382	6	3
	2,018	59	51
City Dairies (bulk) ...	46	—	—
	2,064	59	51

(The samples taken at depots included 327 samples of " Tuberculin Tested " milk ; all but one proved negative.).

The following table shows the number of samples of milk sent in from outside sources, taken during the past ten years, and the percentage infected :—

<i>Year</i>				<i>Samples taken</i>	<i>Samples infected</i>	<i>Percentage infected</i>
1947	...	...	...	1,659	84	5.0
1948	...	...	...	2,306	69	3.0
1949	...	...	...	2,326	133	5.7
1950	...	...	...	2,211	98	4.4
1951	...	...	...	2,246	98	4.3
1952	...	...	...	2,243	89	3.9
1953	...	...	...	2,319	72	3.1
1954	...	...	...	2,145	71	3.3
1955	...	...	...	1,757	65	3.7
1956	...	...	...	2,018	59	2.9
Average for period						3.9
Average for period 1937—1946						7.6

With regard to the infected samples, in addition to notifying the County Medical Officers concerned, and in order to avoid delay, copies of notifications are sent to the County Divisional Veterinary Officers of the Ministry of Agriculture, Fisheries and Food (Animal Health Division) who arrange veterinary examinations of the herds concerned, in order to find and eliminate the infected cows.

#### TUBERCULOSIS ORDER

As a direct result of sampling milk for the presence of tubercle bacilli, 51 tuberculous cows were known to have been eliminated during 1956 from dairy herds supplying milk to Birmingham, and dealt with under the Tuberculosis Order.

At 11 farms the investigations had not been completed at the end of the year.

Post-mortem examinations were made on nine cows which had been sent to the city meat market from outside farms, and a report of the post-mortem examination was sent to the Ministry of Agriculture, Fisheries and Food in each case.

## Tuberculosis (Attested Herds) Scheme

The Ministry of Agriculture, Fisheries and Food, introduced the Area Plan for the Eradication of Bovine Tuberculosis on 1st October, 1950, and at the 31st December, 1950, the percentage of attested (certified as free from tuberculosis) cattle to total cattle in Great Britain was 22·1.

Good progress continues to be made in eradicating bovine tuberculosis, and at 30th June, 1956, approximately 65 per cent. of all cattle in Great Britain were in attested herds as against 60 per cent. a year ago.

The main instrument in the eradication of bovine tuberculosis remains the voluntary Tuberculosis (Attested Herds) Scheme, which was started in 1935.

The figures in the following table show the position at 30th June, 1956, for Great Britain, and comparison with earlier years :—

<i>Year</i>	<i>Total cattle population 4th June</i>	<i>Number of attested herds 31st Dec.</i>	<i>Number of cattle in attested herds</i>	<i>Percentage of attested cattle</i>
1939	8,118,788	13,874	477,481	5·9
1945	8,697,169	20,036	788,020	9·1
1946	8,718,998	25,355	945,042	10·8
1947	8,633,216	30,436	1,199,929	13·9
1948	8,840,198	36,896	1,444,794	16·3
1949	9,263,945	44,889	1,762,200	19·0
1950	9,630,757	55,045	2,123,920	22·1
1951	9,513,521	74,025	2,977,056	31·3
1952	9,303,133	96,429	3,702,995	39·8
1953	9,508,101	111,875	4,154,134	43·7
1954	9,785,558	126,616	4,875,628	49·8
1955	9,766,781	152,077	5,862,051	60·0
1956 (30th June)	9,764,800	160,121	6,384,500	65·0

The number of attested herds, i.e., herds officially certified as free from tuberculosis, as at 31st December, 1956, was as follows :—

<i>England</i>	<i>Wales</i>	<i>Scotland</i>	<i>Total (Great Britain)</i>
93,087	35,346	39,308	167,741

The position as at 30th June, 1956, in the counties with which Birmingham is chiefly concerned, was as follows :—

<i>County</i>	<i>Total cattle</i>	<i>Number of cattle in attested herds</i>	<i>Percentage of attested cattle to total cattle</i>
Derby ... ..	187,500	79,600	42
Gloucester ... ..	206,800	121,900	59
Hereford ... ..	151,400	96,700	64
Leicester ... ..	168,300	62,200	37
Salop ... ..	300,600	162,300	54
Stafford ... ..	239,800	95,400	40
Warwick ... ..	151,700	69,200	46
Worcester ... ..	106,400	54,400	51
England ... ..	7,009,000	4,078,600	58
Great Britain ... ..	9,764,800	6,384,500	65
Great Britain		at 31st Dec. 1955	60
Great Britain		at 31st Dec. 1950	22·1

TUBERCULOSIS (SLAUGHTER OF REACTORS) ORDER, 1950. There were slaughtered at the public abattoir 104 cows which had been kept on premises in an eradication area or attested area, and which had reacted to a tuberculin test. A report of the post-mortem examination was sent to the Divisional Veterinary Officer of the Ministry of Agriculture, Fisheries and Food in each case.

#### **Tuberculin Testing of City Herds**

The following animals were tested during 1956 :—

Rubery Hospital Farm. 104 animals tested and passed.

Monyhull Hall Hospital Farms. 144 animals tested and passed.

## ENVIRONMENTAL HEALTH SERVICES

### HOUSING

During 1956 the rate of house building was less than that achieved in 1955. The actual figures for the past five years are: 1952, 5,509; 1953, 4,787; 1954, 3,923; 1955, 3,858; 1956, 3,307. The net increase in the number of houses, calculated by deducting from the number of houses built or provided by conversion into flats the known demolitions, was 2,071.

The Registrar General's estimates of mid-year population for the same period are:—

Mid 1952	...	...	...	1,119,000
Mid 1953	...	...	...	1,118,500
Mid 1954	...	...	...	1,117,700
Mid 1955	...	...	...	1,111,700
Mid 1956	...	...	...	1,110,800

The application register maintained by the Housing Management Department comprised 63,536 eligible cases at the end of the year.

The figures quoted above indicate the gravity of the present situation, and unfortunately no immediate improvement is likely. Within the City, land on which to build sufficient new houses is simply not available; the relatively few plots remaining will not yield new houses in sufficient numbers to effect a material change in the position. Building upwards, by the erection of multi-storey flats does, of course, enable new dwellings to be provided at a higher density than is possible with separate two-storey houses, but where these flats are built on central sites substantial displacements are inevitable. The housing density of the central areas, whether within the Central Redevelopment Scheme or in the Clearance Areas now being dealt with, is so high, that, even with twelve-storey flats it is only possible to replace rather less than one half the number of dwellings cleared. Until the problem of overspill, with perhaps some relocation of industry, is settled, substantial improvement in the situation is unlikely. In the General Purposes Committee report to the City Council on the 24th July, 1956, there is the following authoritative comment:—

“ Virgin housing land in the City is being rapidly absorbed and it is feared that the slum clearance programme and the redevelopment of the central areas may come to a standstill by 1961 unless more land can be found. It is estimated that, after that date, the housing programme will drop from the present level of 3,000 houses per annum to 750 houses per annum and this figure will only be achieved by redevelopment—at greater densities—of land at present occupied by prefabricated bungalows.”



The City has therefore to face the probability that, at least for some years, the majority of existing houses will have to be continued in occupation, even though so many are so grievously sub-standard as to be unfit for human habitation. Costs of maintenance and repair have not fallen, and private owners find that it is impossible, or at the best extremely difficult, to meet those costs out of the permitted rents, especially in the case of those low-grade houses which are so old and worn out as to make it extremely difficult to arrest further deterioration. The average cost to the Housing Management Department of systematic repair of houses in Redevelopment Areas rose from £220 in 1955 to £250 in 1956. It is obvious that few, if any, private owners would, or could, undertake expenditure on this scale, and it is pertinent to note that these works of repair, coupled with good day-to-day maintenance, are not sufficient to render the individual houses fit in all respects for human habitation although the improvements effected are almost spectacular in the benefits they give to the occupying tenants.

Up to this year, renovation has mainly been confined to houses within the Central Redevelopment Scheme. It is now the declared policy of the City Council to apply similar works to all houses taken over in pursuance of the slum clearance programme, and the organisation of the Housing Management Department has been adapted to meet the formidable task which will result from this.

The Housing Repairs and Rents Act, 1954, makes express provision for this operation to be applied to houses purchased following Clearance Area or Individual Demolition Order procedure :

*(Section 2 (1)) . . . " the Local Authority may postpone, for such period as may be determined by the Authority, the demolition of any such houses . . . being houses which in the opinion of the Authority are or can be rendered capable of providing accommodation of a standard which is adequate for the time being, and may carry out such works as may from time to time be required for rendering or keeping such houses capable of providing such accommodation as aforesaid pending their demolition."*

Any scheme of wholesale renovation bristles with difficulties, but the scheme now undertaken is all the more formidable because of the very poor character of most of the houses concerned ; they are old, worn out, dilapidated by long term lack of maintenance, and suffer from defects inherent in original design, e.g., many are back-to-back and have shared sanitary accommodation, conditions which cannot be rectified because of lack of space. It cannot be stressed too often that the best method of dealing with Clearance Areas is the demolition of all the buildings in those areas.

The programme submitted to the Minister of Housing and Local Government during 1955 covered a total of 50,250 houses, about one half of which were already in Corporation ownership under the Redevelopment

Scheme. It was proposed that, of the 25,000 unfit houses in private ownership, 18,000 should be officially represented within the five year period, leaving 7,000 to be dealt with subsequently. As reported last year 26,596 houses were represented during 1955 : 25,248 in the Redevelopment Areas, 1,269 in Clearance Areas, 73 (Individual) under Section 11 of the Housing Act, 1936, and six parts of buildings with a view to Closing Orders, thus leaving 16,652 houses outside the Redevelopment Areas to be represented in Clearance Areas or individually.

During 1956, 4,697 houses were officially represented : 4,627 in Clearance Areas, 66 under Section 11, and 4 for Closing Orders, leaving 11,955 to be represented under the current five year programme.

On the 2nd August, 1956, Royal Assent was given to the Slum Clearance Compensation Act, 1956, the provisions of which are designed to relieve hardship to owner occupiers who had purchased houses so far below proper standards that the normal compensation under the Housing Acts would have been limited to site value. The effect of the Act is that, subject to certain conditions, the owner of an unfit house which, on or after 13th December, 1955, is purchased by a Local Authority at site value or is vacated as a result of a Clearance Order or Demolition Order (or a Closing Order under the Local Government (Miscellaneous Provisions) Act, 1953), will receive a payment amounting to the full compulsory purchase value of his interest, less the value of the site cleared of buildings. In the case of compulsory purchase, the value of the cleared site will be the subject of compensation under the Housing Act, 1936. Important among the conditions are (a) the house must have been purchased by the owner or a member of his family between the 1st September, 1939, and either the 12th December, 1955, or the date the house became subject to clearance action, whichever was the earlier ; (b) the house must have been occupied wholly or partly as a private dwelling by the owner, or a member of his family, on the 13th December, 1955 (but a year's grace is allowed in certain special circumstances) ; (c) the purchase under the Compulsory Purchase Order must be made (or the house vacated under clearance action) within ten years of the 13th December, 1955, and (d) at the date of purchase or vacating, the owner, or a member of his family, must still be entitled to an interest, but need not be in occupation. The Act also provides that, subject to certain conditions, a person receiving the profits of a business carried on in an unfit house may receive special compensation.

It is important to note that the additional compensation referred to is restricted to houses bought between the dates mentioned in (a) above. No such compensation may be paid to owner occupiers who purchased after the 12th December, 1955.

Before the Act was passed, every endeavour had been made by the Corporation and its officers to warn people of the consequences of purchasing unfit houses, but without complete success. That warning is

constantly repeated, as there is still the danger that persons ignorant of the consequences may contract to buy worthless houses. Full notice of all Clearance Areas is regularly given in the newspapers, members and officers of the Council frequently repeat the warning on suitable public occasions, and such indication of future action as is possible is now given freely by the Public Health Department to prospective purchasers who may be in doubt. It is, of course, not possible to give a final decision in every case submitted, as the decision to declare a house unfit is not made finally until the Committee have, in due course, fully considered an official representation, but it is possible to indicate whether or not a house is likely to be subject to review within the current programme of clearance.

### **Staff**

The duties of the specialist Housing Section of the Department were carried out by five district housing inspectors and their staffs. Because of the necessity to concentrate mainly on work connected with slum clearance, and because of the increase in the number of old houses in the ownership of the Corporation due to acquisition under the Housing Acts, public health duties relating to the maintenance of old houses within the Redevelopment Areas were taken over by the Chief Public Health Inspector. This gave considerable relief in the volume of day to day visiting and documentation, and there was no longer any need for the continued employment of the unqualified temporary housing assistants (one to each of five districts), who were accordingly transferred or dispensed with. Further reorganisation was effected by posting the five clerk-enumerators to the five districts, to continue their overcrowding duties under the direct supervision of the district inspectors, and also to give appropriate general assistance as required. One of the former housing assistants is now attached to the drawing office to give general assistance to the Chief Draughtsman and his three assistants, who are heavily engaged in the very considerable amount of survey and plan preparation arising from the massive slum clearance programme.

As already mentioned, applicants who own, manage, or are interested in the possible purchase of houses, may obtain information as to the possibility of future slum clearance action on application to the Department. The provision of this information, which is essential to the applicants, has placed a heavy duty on the section, and the two divisional inspectors, who co-ordinate the various steps taken under the programme, are deeply involved in this aspect of the work.

The shortage of suitably qualified staff unfortunately continues ; at the end of the year there were eight vacancies for fully qualified Inspectors.

Inspections were carried out as follows :—

Inspections or surveys under Parts II and III of the Housing Act, 1936 ... ..	19,824
Inspections or enumerations concerning overcrowding and permitted numbers ... ..	12,962
Miscellaneous visits, including liaison with other departments ...	558

### New Houses

During the year 3,307 houses were built, 2,561 (77·4%) by the Corporation and 746 (22·6%) by private enterprise. Of these 943 were new-traditional in type. In addition 79 more dwellings were provided by conversion into flats, 68 by private enterprise and 11 by the Corporation. The gross yield of new dwellings during the year was, therefore, 3,386 houses and flats.

The City Engineer and Surveyor and the City Architect have kindly supplied these figures and also the fuller information set out below covering the period since the end of the 1914–18 war.

#### NUMBER OF HOUSES ERECTED

Year	By Private Enterprise	By Corporation		Government	Total
		Traditional	New- Traditional	Temporary Bungalows	
1919—1929	12,775	26,203	—	—	38,978
1930	1,738	6,687	—	—	8,425
1931	1,983	3,893	—	—	5,876
1932	2,159	1,703	—	—	3,862
1933	3,028	2,029	—	—	5,057
1934	4,226	837	—	—	5,063
1935	6,265	985	—	—	7,250
1936	6,926	2,285	—	—	9,211
1937	7,662	2,643	—	—	10,305
1938	7,804	3,003	—	—	10,807
1939	5,178	1,413	—	—	6,591
1940	1,183	302	—	—	1,485
1941	181	10	—	—	191
1942	26	63	—	—	89
1943	5	35	—	—	40
1944	37	2	—	—	39
1945	25	6	—	325	356
1946	550	413	—	1,475	2,438
1947	667	826	—	1,333	2,826
1948	470	1,400	—	*1,492	3,362
1949	470	1,225	2	—	1,697
1950	671	1,478	538	—	2,687
1951	555	1,674	1,793	—	4,022
1952	765	2,231	2,513	—	5,509
1953	781	2,241	1,765	—	4,787
1954	918	1,179	1,826	—	3,923
1955	848	1,636	1,374	—	3,858
1956	746	1,618	943	—	3,307
	<u>68,642</u>	<u>68,020</u>	<u>10,754</u>	<u>4,625</u>	<u>152,041</u>

\*Programme completed.

The figures on page 257 relate only to new houses and do not include numbers of houses rebuilt after war damage nor flats provided by the sub-division of existing larger houses.

In regard to the acquisition, construction, repair or improvement of privately owned houses, no applications under Section 4 of the Housing Act, 1949, were dealt with by the City Engineer and Surveyor during the year, but 720 applications by owner occupiers for Improvement Grant, under Sections 20-30 of the Act were approved in addition to the 79 by private landlords mentioned on page 276.

### **Slum Clearance—Housing Act, 1936**

#### **Housing Repairs and Rents Act, 1954**

The programme submitted to the Minister and mentioned on page 254 was actively pursued during the year, and considerable progress was made. As virtually no new houses were available to replace condemned dwellings, action with a view to immediate demolition or closure was restricted to those cases where, owing to some critical condition or combination of circumstances, there was no reasonable alternative to actual demolition, with consequent rehousing. Cases meriting this form of treatment were carefully selected and the official representations, upon which the Local Authority act, were made under Sections 11 and 12 of the Housing Act, 1936. All houses so affected were visited by the Housing Management Committee, and the owners concerned were, in accordance with statute, given an opportunity to attend and show cause why Demolition or Closing Orders should not be made. The Committee decided to exercise their prerogative under Section 3 of the Housing Repairs and Rents Act, 1954, and purchase 19 of the houses in order to carry out such works as would enable the houses to continue to be used as dwellings until such time as they could be demolished. In the remaining cases appropriate Orders were made, or Undertakings Not to Use the houses for human habitation were given by the owners concerned. In all, 70 houses were represented for demolition or closure, including the 19 it was decided to purchase; this brings the total so represented to 1,412 since September, 1939. Demolition Orders were made in 38 cases; one Demolition Order, made in 1955, was revoked under Section 5 of the Housing Repairs and Rents Act, 1954, because the owner had made the house fit for human habitation. One of the Demolition Orders was made because of the owner's default in not carrying out an Undertaking to render the house fit for human habitation. In all, 72 represented houses were demolished, and 12 were closed, 7 of these being houses which had to be left standing to provide support to adjoining houses. This action brought up to a total of 173 the dwellings subject to Closing Orders or to Non-User Undertakings which are periodically inspected by the district housing inspectors.

The following table gives particulars of individual action taken under the Housing Acts during the year.

PROCEEDINGS UNDER SECTIONS 11 AND 13 OF THE HOUSING ACT, 1936

1. Number of houses in respect of which Official Representations were made ... ..	66
2. Number of houses in respect of which Undertakings under Section 11 (3) were accepted :	
(a) Not to Use for Human Habitation ... ..	3
(b) To carry out Works to Render Fit for Human Habitation ... ..	Nil
3. Number of houses in respect of which Demolition Orders were made ... ..	38
4. Number of Houses Demolished :	
(a) In pursuance of Demolition Orders ... ..	50
(b) After the making of Closing Orders under Section 12 of the Housing Act, 1936... ..	5
(c) After the making of Closing Orders under Section 10—Local Government (Misc. Prov.) Act, 1953 ... ..	Nil
(d) After an Undertaking Not to Use for Human Habitation had been accepted ... ..	10
(e) After representation and prior to the making of Demolition Orders ... ..	7
5. Number of houses Rendered Fit for Human Habitation in pursuance of Undertakings under Section 11 (3) ... ..	Nil
6. Number of houses in respect of which Closing Orders under Section 10—Local Government (Misc. Prov.) Act, 1953, were made ... ..	7
7. Number of houses which the Authority determined to purchase under Section 3 of the Housing Repairs and Rents Act, 1954 ... ..	19
8. Number of Demolition Orders revoked pursuant to Section 5 of the Housing Repairs and Rents Act, 1954 ... ..	1

PROCEEDINGS UNDER SECTION 12 OF THE HOUSING ACT, 1936.

1. Number of parts of buildings, separate tenements or underground rooms in respect of which Official Representations were made ... ..	4
2. Number of parts of buildings or underground rooms in respect of which Closing Orders were made ... ..	5
3. Number of parts of buildings or underground rooms in respect of which Closing Orders were determined... ..	1

Total number of houses dealt with under Sections 11 and 12 of the Housing Act, 1936, during 1956 ... .. 70

Total number of houses dealt with under Sections 11 and 12 of the Housing Act, 1936, up to December 31st, 1955 (since September, 1939) ... .. 1,342

TOTAL at 31st December, 1956 ... .. 1,412

The greater part of the programme is being carried out under Section 25 of the Housing Act, 1936, which governs the declaration and definition of Clearance Areas. Considerable experience has now been gained under the altered conditions brought about by the Housing Repairs and Rents Act, 1954. For reasons already quoted, the Council has decided to retain and patch all houses save those where such a course is, by the very nature of the houses, unreasonable. This power of retaining condemned houses in occupation is conferred only upon a local authority ; a private owner has no similar power, though he has the right, before an Order is made by the authority, to render his houses fit for human habitation, if that course is possible, and thus to obtain immunity against clearance action. The power of retention of unfit houses may be exercised in one of two ways (a) by outright acquisition (b) by means of a lease on the houses granted by the owner to the authority. The first of these is accomplished by means of a Compulsory Purchase Order ; the second following the making of a Clearance Order under certain special conditions. Because of the urgent need for land of all types to accommodate houses and industries which will in due course have to be displaced to allow of proper housing development, the Council has decided normally to proceed by way of Compulsory Purchase Order save only where they are satisfied that there are special reasons which justify course (b) above, or early demolition following a Clearance Order.

These considerations have profoundly affected the operations already undertaken. During the year six Public Inquiries were held in respect of 29 Housing Compulsory Purchase Orders covering 1,081 houses. At these Inquiries, opposition on grounds that the houses concerned were fit for human habitation was insignificant in comparison with the opposition to the outright purchase of the lands in the areas. In every case in which an objection on the grounds of fitness was lodged a notice, setting out the principal grounds on which the Authority decided to act, was served upon the objector. As all the houses were undoubtedly well below the standards prescribed by the Acts, the notices of principal grounds were relatively conclusive, with the result that a large proportion of the fitness objections were not pursued. The opposition to the purchase of the land was, however, vigorous and the Public Inquiries were in consequence much more prolonged than would have been the case had this particular issue been absent ; also, following the Public Inquiry, the inspection by the Inspector of the Ministry of Housing and Local Government was extended, owing to the necessity for him to view the various industrial premises referred to by the Counsel for the objectors when their case was presented.

A further point requiring the special attention of the Ministry Inspector was the provision in Section 42 of the Housing Act, 1936 (now amended by Section 3 of the Slum Clearance (Compensation) Act, 1956), which empowers the Minister, if he is satisfied, after causing an unfit

house subject to a Clearance Order or Compulsory Purchase Order to be inspected by an officer of the Ministry, that it has been well maintained, to direct the Local Authority to make a special additional payment. During the year, that form of inspection covered every house in a Clearance Area, but regulations have now been issued which require formal notice to be lodged where this special payment is claimed.

Owing to the many legal requirements which have to be complied with, to difficulties arising out of the necessity to obtain full particulars of ownership of lands and houses, and to the delays which occur when consideration is being given to submissions by owners, it is not possible to give a useful estimate of the time which must elapse between the official representation and the sealing of an Order. Variations are considerable, and areas represented on any one day have been dealt with at as many as three successive Public Inquiries. There have been no undue delays in confirmation of Orders approved by the Minister, but approval has not yet been given to certain Orders, involving 183 houses, where a final decision has been deferred pending consultation between the Corporation and the owners on issues affecting ultimate land ownership.

The Tables below indicate, in their various stages of procedure, the size and, by title, the geographical location of the areas.

The following Clearance Areas were officially represented during 1956 on the dates set out :—

<i>Title of Clearance Area</i>	<i>No. of Houses</i>	<i>Date of Representation</i>
Cato Street North C.A., 1956... ..	33	21/2/56
Nechells Place C.A., 1956 ... ..	27	21/2/56
Sandy Lane, Camp Hill C.A., 1956 ... ..	57	21/2/56
Sherlock Street C.A. (No. 1), 1956 ... ..	19	21/2/56
Sherlock Street C.A. (No. 2), 1956 ... ..	4	21/2/56
Moseley Street C.A., 1956 ... ..	18	21/2/56
Barford Street C.A., 1956 ... ..	10	21/2/56
Bishop Street C.A. (No. 1), 1956 ... ..	27	21/2/56
Bishop Street C.A. (No. 2), 1956 ... ..	96	21/2/56
South Road, Sparkbrook C.A., 1956... ..	107	20/3/56
Ellen Street C.A., 1956 ... ..	194	20/3/56
George Street West C.A. (No. 2), 1956 ... ..	14	20/3/56
Parker Street C.A., 1956 ... ..	237	20/3/56
Monument Retreat C.A., 1956 ... ..	4	20/3/56
Monument Road C.A., 1956 ... ..	4	20/3/56
Liverpool Street C.A., 1956 ... ..	11	20/3/56
Bordesley Park Road C.A., 1956 ... ..	51	20/3/56
Hooper Street C.A. (No. 1), 1956 ... ..	12	20/3/56
Hooper Street C.A. (No. 2), 1956 ... ..	16	20/3/56
Floodgate Street C.A., 1956 ... ..	25	20/3/56
Whitehouse Street C.A. (No. 2), 1956 ... ..	6	20/3/56
Henley Street C.A., 1956 ... ..	7	20/3/56



<i>Title of Clearance Area</i>	<i>No. of Houses</i>	<i>Date of Representation</i>
Ford Street C.A., 1956 ... ..	195	24/4/56
Piddock Street C.A., 1956 ... ..	133	24/4/56
Heaton Street C.A., 1956 ... ..	178	24/4/56
Princip Street C.A., 1956 ... ..	33	24/4/56
Rushey Lane C.A., 1956 ... ..	9	19/6/56
Hingeston Street C.A., 1956 ... ..	324	19/6/56
New Spring Street C.A., 1956 ... ..	175	19/6/56
Ellen Street C.A. (No. 2), 1956 ... ..	59	19/6/56
Ellen Street C.A. (No. 3), 1956 ... ..	85	19/6/56
Witton Road C.A., 1956 ... ..	8	17/7/56
Dollman Street C.A., 1956 ... ..	8	17/7/56
Cathcart Street C.A., 1956 ... ..	16	17/7/56
Cook Street C.A., 1956 ... ..	6	17/7/56
Dugdale Street C.A., 1956 ... ..	28	17/7/56
Moseley Road C.A., 1956 ... ..	8	17/7/56
Spring Road, Tyseley C.A., 1956 ... ..	12	17/7/56
Devon Street C.A., 1956 ... ..	66	17/7/56
Somerset Street C.A., 1956 ... ..	261	17/7/56
Icknield Port Road C.A. (No. 4), 1956 ... ..	28	17/7/56
Icknield Port Road C.A. (No. 5), 1956 ... ..	78	17/7/56
Icknield Port Road C.A. (No. 6), 1956 ... ..	18	17/7/56
Allcock Street C.A., 1956 ... ..	18	17/7/56
Charles Henry Street C.A., 1956 ... ..	10	17/7/56
Carrington Road C.A., 1956 ... ..	160	17/7/56
Moseley Road C.A. (No. 2), 1956 ... ..	24	16/10/56
Ravenhurst Street C.A., 1956 ... ..	3	16/10/56
Catherine Street C.A., 1956 ... ..	99	16/10/56
Wainwright Street C.A., 1956 ... ..	8	16/10/56
Lawley Street C.A., 1956 ... ..	6	16/10/56
Goode Street C.A., 1956 ... ..	190	16/10/56
Tilton Road C.A., 1956 ... ..	194	16/10/56
Winson Street C.A., 1956 ... ..	24	16/19/56
Heath Street C.A. (No. 1), 1956 ... ..	16	16/10/56
Heath Street C.A. (No. 2), 1956 ... ..	15	16/10/56
Heath Street C.A. (No. 3), 1956 ... ..	33	16/10/56
Mount Street, Nechells C.A., 1956 ... ..	6	16/10/56
Malvern Hill Road C.A., 1956 ... ..	6	16/10/56
Grove Road, King's Heath C.A., 1956 ... ..	31	16/10/56
Clifton Road, Balsall Heath C.A., 1956 ... ..	24	16/10/56
Kenyon Street C.A., 1956 ... ..	42	16/10/56
Lichfield Road C.A. (No. 1), 1956 ... ..	25	16/10/56
Lichfield Road C.A. (No. 2), 1956 ... ..	79	16/10/56
Upper Portland Street C.A., 1956 ... ..	9	16/10/56
Heath Street C.A. (No. 4), 1956 ... ..	248	20/11/56
Heath Street C.A. (No. 5), 1956 ... ..	8	20/11/56
Tudor Street C.A., 1956 ... ..	26	20/11/56
Cuthbert Road C.A., 1956 ... ..	62	20/11/56
Heath Street C.A. (No. 6), 1956 ... ..	150	20/11/56

<i>Title of Clearance Area</i>	<i>No. of Houses</i>	<i>Date of Representation</i>
Branston Street C.A. (No. 1), 1956 ...	14	20/11/56
Branston Street C.A. (No. 2), 1956 ...	53	20/11/56
Spencer Street C.A., 1956 ...	37	20/11/56
Hall Street C.A., 1956 ...	10	20/11/56
Mary Street, Balsall Heath C.A., 1956 ...	10	20/11/56
Brearley Street, Handsworth C.A., 1956 ...	66	20/11/56
Bristol Road, Selly Oak C.A., 1956 ...	27	18/12/56
Balsall Heath Road C.A., 1956 ...	40	18/12/56
Herbert Road, Small Heath C.A. (No. 1), 1956	3	18/12/56
Herbert Road, Small Heath C.A. (No. 2), 1956	5	18/12/56
Herbert Road, Small Heath C.A. (No. 3), 1956	17	18/12/56
Herbert Road, Small Heath C.A. (No. 4), 1956	31	18/12/56
Regent Park Road C.A., 1956 ...	87	18/12/56
Coventry Road C.A., 1956 ...	4	18/12/56
TOTAL ...	4,627	

The following Orders were the subject of Public Inquiry during the year :—

<i>Title of Order</i>	<i>Date of Inquiry</i>	<i>No. of Houses</i>
Skinner Lane Hsg. C.P.O., 1955	May 1st & 2nd, 1956	28
Howe Street Hsg. C.P.O. (No. 1), 1956	" "	24
Howe Street Hsg. C.P.O. (No. 2), 1955	" "	15
Arthur Street Hsg. C.P.O., 1955	" "	182
Icknield Port Road Hsg. C.P.O. (No. 1), 1955	" "	36
Vauxhall Street Hsg. C.P.O., 1955	" "	37
Watery Lane, Bordesley, Hsg. C.P.O., 1956	May 29th & June 18th, 1956	98
Wilton Street Hsg. C.P.O., 1956	June 26th & 27th, 1956	179
George Street West Hsg. C.P.O., 1956	" "	70
Newhall Hill Hsg. C.P.O., 1956	October 9th, 1956	2
Graham Street, St. Paul's, Hsg. C.P.O. (No. 4), 1956	" "	18
Frederick Street Hsg. C.P.O., 1956	" "	6
Vittoria Street, St. Paul's, Hsg. C.P.O., 1956	" "	10
Sloane Street Hsg. C.P.O. (No. 1), 1956	" "	15
Sloane Street Hsg. C.P.O. (No. 2), 1956	" "	23
Rosebery Street Hsg. C.P.O. (No. 2), 1956	" "	40
Cato Street North Hsg. C.P.O., 1956	October 30th, 1956	33
Sherlock Street Hsg. C.P.O. (No. 1), 1956	" "	19
Sherlock Street Hsg. C.P.O. (No. 2), 1956	" "	4
Moseley Street Hsg. C.P.O., 1956	" "	18
Barford Street Hsg. C.P.O., 1956	" "	10
Bishop Street Hsg. C.P.O. (No. 2), 1956	" "	96

<i>Title of Order</i>	<i>Date of Inquiry</i>	<i>No. of Houses</i>
Graham Street, St. Paul's, Hsg. C.P.O. (No. 1), 1956	November 21st & 22nd, 1956	14
Graham Street, St. Paul's, Hsg. C.P.O. (No. 2), 1956	" " "	44
Bishop Street Hsg. C.P.O. (No. 1), 1956	" " "	27
Monument Road Hsg. C.P.O., 1956	" " "	4
Liverpool Street Hsg. C.P.O., 1956	" " "	11
Hooper Street Hsg. C.P.O. (No. 1), 1956	" " "	12
Whitehouse Street Hsg. C.P.O. (No. 2), 1956	" " "	6
		1,081

The following Orders and Areas were confirmed by the Minister during the year :—

<i>Title of Order or Area</i>	<i>No. of Houses</i>	<i>Date of Confirmation</i>
Arthur Street Hsg.C.P.O., 1955	182	12th Oct., 1956
Icknield Port Road Hsg.C.P.O. (No. 1), 1955	36	12th Oct., 1956
Icknield Port Road Hsg.C.P.O. (No. 2), 1955	15	13th Mar., 1956
Icknield Port Road Hsg.C.P.O. (No. 3), 1955	84	13th Mar., 1956
Victoria Road, Aston C.A., 1955 (Corporation owned)	17	7th May, 1956
Graham Street, St. Paul's, Hsg.C.P.O. (No. 3), 1956	3	13th Aug., 1956
Frederick Street Hsg.C.P.O., 1956	6	19th Dec., 1956
St. Helen's Passage Hsg.C.P.O., 1956	12	20th Aug., 1956
Rosebery Street Hsg.C.P.O. (No. 1), 1956	51	22nd Oct., 1956
Rosebery Street Hsg.C.P.O. (No. 2), 1956	40	19th Dec., 1956
College Street Hsg.C.P.O., 1956	74	20th Aug., 1956
Spring Hill, Hockley Hsg.C.P.O., 1956	18	13th Aug., 1956
Nechells Place Hsg.C.P.O., 1956	27	18th Sept., 1956
Henley Street Hsg.C.P.O., 1956	7	17th Dec., 1956
Princip Street C.A., 1956 (Corporation owned portion only)	18	4th Oct., 1956
	590	

### Central Redevelopment

During the year one more house and four shops which are also dwellings were acquired by the Corporation in the areas covered by the Birmingham (Central Redevelopment) Compulsory Purchase Order, 1946. This brings the totals which had been acquired under the Order to 27,861 dwellinghouses, 2,120 shops and dwellings and 145 business

premises and dwellings, leaving only 61 dwellinghouses, 61 shops and dwellings and 26 business premises and dwellings to be acquired at a future date.

Block repairs have been carried out to an even greater number of houses than last year, and day-to-day maintenance work has been considerable. This scheme has yielded most valuable experience in the maintenance of low grade houses of the type to be acquired by the Corporation under the slum clearance programme and it is now possible to evaluate some of the results of that experience which concern public health issues. It is clear that, in general, acquisition must be followed by immediate attention to urgent items which give rise to nuisances and which cannot be left until systematic block repair is possible. This block repair, which provides for the abatement of nuisances, reasonable repair, improvements of a cardinal nature such as the provision of additional w.c.'s, water supplies and such food storage as is possible, all coupled with other works expected from a good landlord, has proved to be expensive in relation to the basic value of the houses, but well worth while as a measure to make more tolerable the conditions endured by the tenants until such time as it is possible to apply the radical and proper remedy, namely demolition and replacement. The amount which has to be expended varies considerably from house to house ; during the year it averaged £250 per house over the 1,752 houses renovated. A proper internal water supply is accepted as essential in every dwelling. This important improvement has been incorporated in the renovation scheme ; during the year water was laid into 61 houses which formerly had no supply ; installation is awaited in two cases leaving only 205 other houses without an internal supply because of refusal by the tenants to agree to the installation of a tap and sink.

Some limitations have to be applied to the works carried out on houses of known limited life, and on occasion the estimated cost of repairs has proved to be so high in relation to the potential life of the houses concerned that there has been no alternative to demolition. It must again be stressed that, even after the satisfactory execution of block repairs, it may be necessary to carry out further works as the worn out structures develop further defects. In most cases it is impossible to provide against this contingency without virtual reconstruction, a course which is manifestly impracticable.

Progress in systematic repair is shown by the following figures which give the number of houses dealt with per annum :—

1948	—	795	1951	—	2,340	1954	—	1,395
1949	—	774	1952	—	980	1955	—	1,635
1950	—	1,291	1953	—	1,470	1956	—	1,752

Mr. J. P. Macey, the Housing Manager, has kindly supplied the following information :—

Number of houses renovated during 1956 ... ..	1,752
Total number of houses renovated up to 31st December, 1956 ...	12,432
Number of houses at which renovation was in progress at 31st December, 1956 ... ..	900
Number of houses in respect of which repair schedules or contracts were prepared or were in course of preparation at 31st December, 1956 ... ..	2,300
Average cost of renovation per house during 1956 ... ..	£250
Average number of initial tenants' complaints per week during 1956 ... ..	1,510

Pleasing progress has been made in actual redevelopment, and already new communities, housed in new dwellings of varied types, are springing up on sites formerly occupied by densely packed unfit houses. Redevelopment operations are now phased in such a manner as to keep all available houses beneficially occupied for as long as possible without unduly hindering the erection of new buildings and the replanning of open spaces and streets. Unfortunately some houses are of such poor construction that they have to be thrown out of occupation well ahead of the intended time. During the year the number of houses thus inevitably vacated, plus those lost by site clearance, was 1,144. Including some houses vacated in earlier years, 1,255 houses were actually demolished, whilst at the end of the year 876 were standing "void pending demolition." Since the inception of the scheme 6,620 houses in all have been thrown out of occupation by the Corporation for one or other of the above reasons.

### Overcrowding

The Registrar-General's estimate of population shows a decrease of 900 persons compared with 1955. Figures relating to new house building and to known demolitions show an increase of 2,071 in the number of dwellings. From this, it ought to follow that there has been a fractional easement in the housing situation, but the day-to-day experience of officers in contact with tenants and lodgers in the crowded districts does not reflect this implied improvement. It is well known that a mere numerical assessment of the position may be gravely misleading; maldistribution of a given population in an adequate number of houses may result in overcrowding and undesirable subletting in a substantial number of cases.

A high proportion, probably the majority, of aliens and Commonwealth subjects who have come to Birmingham in recent years tend to seek accommodation near to their fellow countrymen, and this urge is often satisfied by the purchase of larger old type houses in what once were

fashionable districts, those houses being sublet in varying ways. One such house, enumerated during the year in the ordinary course of events, affords a simple illustration. The new owner himself lives in one of the 17 rooms ; the others are let off as furnished rooms to 15 other families at rents varying from 35/- to £5 per week, yielding a total of £38 paid in rents to the owner occupier. Only three of the subtenant families were overcrowded, one grossly, there being in the house 18 persons as married couples, five other males over ten, nine other females over ten, and three children under ten, plus two babies under one year of age.

Until the present shortage of accommodation eases, the prevention of some overcrowding is well nigh impossible. The individuals seeking accommodation usually exhibit a marked preference for tenancy as distinct from lodger status, albeit that that tenancy is of one furnished room only. The persons accepting these applicants as tenants may be actuated by the profit motive, but many are kind-hearted persons who offer accommodation to homeless families in distress without any knowledge of, or regard to, statutory limits. Full scale abatement of overcrowding, such as was envisaged by the Housing Act, 1935, in happier days, will not be possible until other accommodation is available for the overcrowded families who may have to be ordered by the Local Authority to quit crowded accommodation.

Positive preventive action is possible in certain selected cases, those in which the Housing Manager has arranged the transfer from a house let to more than one family. Due advice of pending transfer is followed by a visit by an enumerator from the Housing Section who obtains all occupancy particulars of the sublet house. If, as is frequently the case, the family to be transferred or in fact other families within the house are overcrowded, a formal letter is delivered to the principal tenant, or the landlord, drawing attention to existing overcrowding and giving full information about Part IV of the Housing Act, 1936, by means of a pamphlet dealing fully with the subject ; 608 such letters were sent in 1956. All such cases are followed up periodically to prevent recrowding. Of the 1,577 cases referred for examination prior to rehousing, 610 were found to be statutorily overcrowded.

In addition, the Department constantly endeavours to make widely known the requirement that every rent book or similar document used in relation to a dwellinghouse by, or on behalf of, the landlord shall contain a summary in prescribed form of the provisions of certain Sections of the Housing Act, 1936, and also a statement of the number of persons permitted to occupy the house. It is the duty of the Local Authority upon the application of the landlord, or the occupier, to inform the applicant in writing of the " permitted number " of persons relating to the

house. During the year certificates of permitted numbers were supplied—468 to owners of private houses, 14 to the City Estates Officer, and 2,685 to the Housing Manager—a total of 3,167. These certificates involved measurement, or a check of existing records in each case.

The points scheme operated by the Housing Management Department continues to afford relief to severely overcrowded families. In addition to points for almost every factor relating to housing need and lack of amenities, points are awarded for overcrowding. Reference is made to the Public Health Department in respect of illness or insanitary conditions, each applicant's case being fully investigated by the medical or inspectorial staff, in conjunction where necessary, the final recommendation resulting in an appropriate award of points. (See also page 180).

The following figures, prepared by Mr. Macey, the Housing Manager, help towards a fuller appreciation of the position.

No. of dwellings available for letting during the year	...	...	4,384
No. of families rehoused (including 61 rehoused by Housing Associations) during the year	...	...	5,515
No. of housing tenancies in rent at end of year :			
(a) Excluding Redevelopment Areas	...	...	83,156
(b) Redevelopment Areas	...	...	22,515
No. of applicants registered on housing list at 31st December, 1956			63,536

## SANITARY INSPECTION

### Staff

During the latter part of the year, ten former pupils qualified for the Certificate of the Royal Sanitary Institute and Sanitary Inspectors' Examination Joint Board and were appointed to the permanent staff. One being eligible for National Service, was called up on qualification and one inspector returned to district duties on completion of his National Service. At the end of the year, due to a death, two retirements and five resignations from inspectors who took up appointments elsewhere, the net gain in staff of qualified inspectors was two compared with that at the commencement. The actual strength of inspectors on district duties at the end of the year was :—

District Inspectors	... ..	10
Assistant District Inspectors	... ..	12
Public Health Inspectors	... ..	19
Pupils on district	... ..	28

The pupil training scheme continued to function satisfactorily. Nine new entrants commenced their four year course of training in September, one third year pupil resigned. Those under training at 31st December, 1956, were as follows :—

1st year—to qualify in 1960	... ..	9
2nd year—to qualify in 1959	... ..	10
3rd year—to qualify in 1958	... ..	12
4th year—to qualify in 1957	... ..	6
		—
		37
		=

Certain duties, such as inspections under the Prevention of Damage by Pests Act, 1949, and the Shops Act, 1950, and of canal boat and water sampling, continued to be undertaken by inspectors who specialise in these types of work.

By an Act of Parliament dated 2nd August, 1956, the designation of Public Health Inspector was substituted for that of Sanitary Inspector.



## Inspections

In the past there has been some duplication in the recording of visits made to all classes of premises. When two inspectors have visited premises together, each has recorded the visit in his diary, and this has given an inflated figure under the appropriate heading of "premises visited." In recent years, the substantial increase in the number of pupils under instruction accompanying qualified inspectors on visits of inspection, has given an increasingly misleading figure. From 1st January, 1956, the system of recording visits has been changed, so that for the first time it is possible to give the actual number of visits made to premises, regardless of whether it be by a sole inspector or one accompanied by his district inspector or other qualified colleague or by a pupil under instruction. This change will have the effect of lessening the number of inspections shown to individual categories of premises compared with the figure which would have been given if the basis of compilation adopted in former years had been used, but it will be conducive to greater accuracy of comparison in the future.

The total visits made by the inspectorial staff on the districts was 186,796. This included 35,881 visits made by pupils under instruction, who visited premises whilst accompanying a qualified inspector.

Comparative figures for recent years are as follows :—

<i>Year</i>									<i>Visits</i>
1952	...	...	...	...	...	...	...	...	162,151
1953	...	...	...	...	...	...	...	...	159,945
1954	...	...	...	...	...	...	...	...	164,536
1955	...	...	...	...	...	...	...	...	180,825
1956	...	...	...	...	...	...	...	...	186,796

With the introduction of the Food Hygiene Regulations, 1955, the number of visits to food premises was increased, and for the first time since 1939 a systematic inspection of licensed premises was commenced.

The responsibility for dealing with complaints received in the Department from occupiers of dwellings in the Redevelopment Areas was transferred from the Chief Housing Inspector to the Chief Public Health Inspector with effect from 1st January, 1956. In the early part of the year, many visits were made to investigate such complaints and requests for action were passed to the Housing Manager, but, by arrangement between the Housing Management Committee and the Health Committee normal complaints received after mid-June were referred direct to the Housing Management Department for investigation and action, in order to avoid unnecessary duplication of inspection. Reference to this change of policy is made in fuller detail under the heading Redevelopment Areas on page 285.

The total of visits made by staff engaged on general district duties during 1956 is made up as follows :—

	<i>% of total</i>
House inspections ... ..	93,034 49·81
Inspections of food premises ... ..	9,502 5·09
Visits <i>re</i> infectious disease ... ..	3,433 1·84
Inspections of milk shops ... ..	2,993 1·60
Visits to school premises ... ..	98 0·05
Visits to second-hand dealers... ..	27 0·01
Inspections of outworkers' premises ... ..	1,766 0·95
Inspections of tents, vans and sheds ... ..	193 0·10
Inspections of stables and pigsties ... ..	592 0·32
Inspections of tips ... ..	394 0·21
Visits to burials, exhumations, etc ... ..	278 0·15
Inspections of pleasure fairs and circuses ... ..	121 0·06
Visits <i>re</i> sampling of water ... ..	366 0·20
Visits <i>re</i> taking of rag flock samples ... ..	119 0·06
Inspections of offensive trade premises ... ..	68 0·04
Inspections of factory premises ... ..	5,423 2·90
Inspections of surface air-raid shelters ... ..	126 0·07
Inspections of common lodging houses ... ..	221 0·12
Visits <i>re</i> taking of samples of prepared meat products for bacteriological examination ... ..	48 0·02
Inspections of premises <i>re</i> Town and Country Planning applications ... ..	1,273 0·68
Inspections of public houses ... ..	347 0·19
Inspections of agricultural units ... ..	10 0·01
Visits by pupils under instruction by qualified inspectors ... ..	35,881 19·21
Joint visits made by qualified inspectors ... ..	2,512 1·34
Other successful visits ... ..	11,077 5·93
Unsuccessful visits ... ..	16,894 9·04
	<hr style="width: 100%; border: 0; border-top: 1px solid black; margin: 5px 0;"/> 186,796 <hr style="width: 100%; border: 0; border-top: 1px solid black; margin: 5px 0;"/> 100·00

Total visits made by inspectors, including those engaged on certain special duties :—

Visits by public health inspectors on district ... ..	186,796
Visits by Shops Act inspectors :	
Conditions in shops ... ..	13,173
Hours of trading and special visits ... ..	9,603
	<hr style="width: 100%; border: 0; border-top: 1px solid black; margin: 5px 0;"/> 22,776
Visits by rodent control inspectors ... ..	15,183
	<hr style="width: 100%; border: 0; border-top: 1px solid black; margin: 5px 0;"/> 224,755

These separate totals as percentages of the whole are as follows :—

	%
District visits ... ..	83·1
Shops Act inspectors ... ..	10·1
Rodent control inspectors ... ..	6·8
	<hr style="width: 100%;"/>
	100·0
	<hr style="width: 100%;"/>

The investigation of housing complaints continued to represent a major portion of the work of the district inspectors and their staffs. The hard spell of weather in February brought about the usual seasonal increase in complaints, but throughout the year it was apparent that owners were increasingly carrying out work on house property without waiting for notification from the Department, and the situation so far as availability of labour and materials was concerned, showed a marked improvement.

### **Infectious Disease**

A total of 3,433 visits were made by inspectors in connection with enquiries into cases of food poisoning and certain infectious diseases. These visits include those made to obtain specimens for bacteriological examination to assist the Medical Officer of Health in his investigations.

### **House to House Inspections**

As in 1955, owing to the shortage of experienced qualified inspectors, it was not possible to carry out inspections of houses by routine either under Section 9 of the Housing Act, 1936, or under the Public Health Act, 1936. Such visits as were made to houses were to investigate complaints or for the purpose of special investigations conducted by the Department.

### **Houses Let in Lodgings**

The Housing Repairs and Rents Act, 1954, having repealed the Byelaws made under the Housing Act, 1925, with respect to houses let in lodgings, substituted the power in an amended form in Sections 11 and 12 of the Act.

It is most unfortunate that the Byelaws were repealed, as they gave power to control, not only the structural requirements and equipment of the premises, but the mode of conduct of the landlord and the tenants. Soon after the repeal of the Byelaws there was an influx into the City of workers from widely scattered parts of the Commonwealth and these persons, finding it difficult to secure housing accommodation, purchased large houses, often in residential parts of the town, and filled them to

capacity or even overcrowded them. Facilities provided for the various families and individuals occupying them were inadequate and many visits of inspection have been necessary to advise and to attempt to regulate conditions.

A total of 1,133 visits of inspection have been made to houses let in lodgings in the City, and these inspections have resulted in improvements being carried out. Where it has not been possible by informal action to secure satisfactory conditions, notices have been served and a total of 54 was served under Section 11 of the Housing Repairs and Rents Act, 1954, requiring the provision of additional facilities and 33 under Section 12 of the same Act to reduce overcrowding and to fix permitted numbers of persons who may occupy rooms within the houses. The persons in receipt of these notices have been slow to carry out the requirements of the Department, and in some cases have suggested that the Corporation should undertake the work at their request and permit them to repay the costs incurred by instalments. Unfortunately, there is no provision in the Act to enable this to be done and similarly there is no provision to enable the Department to carry out the work at default. Faced with deadlock, the Department has had no alternative but to pursue the enforcement of the notices in Court, and during the year four summonses were taken out under Section 11 and in each case a penalty was secured, the total being £16. Two summonses were taken out under Section 12; only one of these cases was successful and a penalty of £3, was imposed. The second case was withdrawn due to some complication arising through a change of ownership. It is significant that a change of ownership may render an outstanding notice under Section 11 or 12 null and void. A local authority, having served upon a person a notice informing him of the maximum number of persons who may occupy the house or part of the house as sleeping accommodation at any one time, is deprived of the power to prosecute, should the house become occupied by greater numbers, if there has been a change of occupier. It is frequently found that persons who purchase and run this type of house do so for a quick financial reward, and when there is risk of legal proceedings or of heavy expenditure being incurred, they dispose of their interest in the property.

Another difficulty experienced since the revocation of the Byelaws is that there is no registration of houses let in lodgings, and it does not seem to be an offence for a person to establish a house let in lodgings without prior consultation with the local authority. Therefore, it is only when conditions have reached a critical stage that the Department becomes aware of the existence of a house let in lodgings through complaints received from neighbours or from persons who have recently been evicted from the accommodation.

## Disrepair Certificates

When the Housing Repairs and Rents Act, 1954, came into force it was thought that in the early months at least a considerable volume of work would be created in the Department by dealing with Disrepair Certificates. It was generally supposed landlords and property owners would take advantage of the opportunity to increase rents and that in many instances tenants would apply for Disrepair Certificates to prevent or postpone increases. In actual fact this did not happen to any great extent.

A "repairs increase" of rent can be made only on fulfilment of certain conditions and it may be that the majority of owners preferred to make no change on the basis that any permissible increase would not warrant the expense to put a house in "good repair."

Reference to the Reports of 1955 and 1954 shows that during the past year there has been a considerable decline in this sphere for which there is no obvious or conclusive explanation. Many contributory factors may be responsible, including the one mentioned.

Figures for 1956 are as follow :—

			<i>1920 Act</i>	<i>1954 Act</i>
Applications for Disrepair Certificates	...	...	40	74
Disrepair Certificates granted	...	...	39	60
Disrepair Certificates not warranted...	...	...	—	4
Applications withdrawn by tenants	...	...	1	9
Applications for revocation of Certificates	...	...	13	57
Disrepair Certificates revoked	...	...	10	45
Revocation rejected	...	...	3	16

It should be understood that there is some overlap in these figures, which is inevitable, since applications submitted in the month of December cannot be cleared until January of the following year.

	<i>1920 Act</i>	<i>1954 Act</i>
Total number of applications received from the passing of the Housing Repairs and Rents Act, 1954, until the end of the year	158	395

## Improvement Grants

HOUSING ACT, 1949, SECTIONS 20 TO 30, AS AMENDED BY THE HOUSING REPAIRS AND RENTS ACT, 1954.

The sections relating to grants to assist in the provision of dwellings by means of conversion or the improvement of existing dwellings, which are owned by a person other than a local authority, are delegated jointly to the House Building Committee and the Health Committee. The former Committee deals with applications from owner-occupiers, the latter with applications from landlords.

Since the passing of the Housing Repairs and Rents Act, 1954, the response from owner-occupiers has been considerable but landlords have been slow to avail themselves of the assistance of grants.

It is estimated that there are between 60,000 and 70,000 houses in the City which are structurally sound and have sufficient life to warrant expenditure on the basic amenities which they at present lack; for example, a bathroom with hot water system, indoor sanitation and a ventilated, cool, food store. Grants of up to half the cost of the works necessary to provide such amenities are paid in suitable cases and efforts are being made to bring to the attention of landlords the advantages of the scheme.

In March five demonstration houses were opened to the public for three weeks to show the sort of improvements which could be made to typical houses with the aid of a grant. The demonstration was prepared by the Health Committee in conjunction with the Ministry of Housing and Local Government. The actual work of improvement was executed by the Housing Management Committee as owners of the property, and exhibits of fuel burning appliances were demonstrated by the Midlands Electricity Board, the West Midlands Gas Board and the Coal Utilisation Council. The houses chosen were Nos. 164 to 172, Clifford Street, Lozells. They each had two livingrooms and a scullery on the ground floor and three bedrooms on the first floor. Though in some state of disrepair, they were structurally sound, the water supply was from the mains with a cold tap over the sink at each house. There was a small back yard to each dwelling with a separate external water closet. One house was kept in its original state and at the others alternative methods of providing bathrooms, hot water supplies, ventilated food stores and indoor sanitation were demonstrated. In one case a back bedroom was converted into a bathroom with water closet, in another the back livingroom was altered to contain an approved oven grate, sink unit and food store, the former scullery being converted into a bathroom with water closet. At the other houses alternative methods were demonstrated of converting the outhouses so as to provide a bathroom with internal water closet.

Costs were kept within reasonable limits and valuable experience was gained in the difficulties to be overcome in this type of work. The finished house in each case formed a desirable living unit and it is significant that each of the families, who had to be temporarily rehoused during the period of demonstration, asked to be allowed to return to their former homes, despite the fact that permanent alternative accommodation was offered.

The demonstration remained open from 1st to 17th March, and during that period 23,738 persons passed through the houses, including delegations from 25 neighbouring local authorities. Public Health

Inspectors were available to answer queries throughout the period and although considerable interest was shown by owner-occupiers and landlords and tenants, the number of applications from landlords for grant assistance has been small.

At the invitation of the Health Committee discussions took place with the Birmingham and District Property Owners' Association to consider any steps which might encourage owners to improve their property with the aid of a grant under the Housing Act, 1949. It was recognised that in fixing the maximum rental of a house, subject to the improvement grant, the Corporation should make the rental sufficiently attractive to owners to expend money on repairs and improvement, at the same time keeping the rent within reasonable limits so that the tenant would be agreeable to pay. There was little or no difference of opinion as between the Birmingham and District Property Owners' Association and representatives of the Birmingham Corporation on this point, and a basis for general guidance was decided upon as 12½% of the net approved capital outlay by the landlord, in addition to any repairs increase for which such property qualified under the Housing Repairs and Rents Act, 1954, taking into account the upper rental limit imposed by that Act.

Figures for applications received from landlords are as follows :—

	1/4/55 to 31/12/55	1/1/56 to 31/12/56
Applications from landlords ... ..	44	70
Number of houses affected ... ..	55	104
Number of houses where " life " was suitable ...	55	103
Number of houses where " life " was unsuitable ...	—	1
Number of houses for which grant approved ...	42	79
Number of houses where work completed ... ..	6	50
Total grant aid approved	£563/10/0	£4,386/5/0
Applications withdrawn prior to approval ... ..	1	10
Applications withdrawn after approval ... ..	6	1
Applications still under consideration at end of period mentioned ... ..	4	24

The number of applications from owner-occupiers during 1956 approved by the Public Works Committee was 720, and the grant aid approved totalled £56,640.

### Rent Restriction Acts

The Chief Public Health Inspector acts as the Local Registrar for the purposes of the Rent Restriction Acts, and in this respect maintains two registers, namely :—

1. The Furnished Houses (Rent Control) Act, 1946.
2. The Landlord and Tenant (Rent Control) Act, 1949.

The two Rent Tribunals which operate in this City forward to the Department notifications of any decision made by them concerning the rents of properties. During 1956 a total of 372 official notifications was received in comparison with 415 for 1955. These notifications resulted in 319 entries being recorded in the 1946 Register and 52 in the 1949 Register, and one in the Register under the Housing Repairs and Rents Act, 1954.

The Registers were produced on 10 occasions for inspection by members of the public and resulted in the issue of 36 Certified Copies of Entries, the requisite fee of one shilling being paid in each case.

### Abatement of Nuisances

As in previous years, complaints are received in the Department mainly from tenants concerning defects in the houses they occupy. These are investigated and, if conditions warrant, action is taken under the nuisance sections of the Public Health Act, 1936, for the abatement of nuisances. Where the defect is of a structural nature the notice is served on the owner. It has been the policy of the Health Committee that prompt attention should be given to these complaints and every effort should be made to secure early compliance with any notices served.

Of the total of 12,288 statutory notices served in 1956, under the Public Health Act, 1936, the Housing Repairs and Rents Act, 1954, the Birmingham Corporation Acts, 1935, 1946 and 1948, and powers contained in the Byelaws, 9,147 were abatement notices served under Section 93 of the Public Health Act, 1936.

The average time taken for compliance with the abatement notices served was two months three days. This figure compares with previous years as follows :—

1953	...	...	...	...	...	...	2 months 22 days
1954	...	...	...	...	...	...	2 months 16 days
1955	...	...	...	...	...	...	2 months 23 days
1956	...	...	...	...	...	...	2 months 3 days

The majority of notices receive the attention of owners within a short period of being served, but there are cases where much time has to be expended in following the lengthy legal procedure laid down under Sections 93 to 95 of the Public Health Act, 1936, before the Department can execute work at the default of an owner.



The total of 12,288 statutory notices served is made up as follows :—

Nuisances under Section 93 of the Public Health Act, 1936— dealing mainly with roofs, spoutings, fallen plaster, defective floorboards, broken sashcords and window frames ... ..	9,147
Stopped up drains, soil pipes, w.c's and private sewers, dealt with under the Birmingham Corporation Act, 1946, as amended by the 1954 Act ... ..	1,316
Urgent nuisances, badly leaking roofs, broken w.c. pedestals, etc., dealt with under the Birmingham Corporation Act, 1948 ...	691
Provision or improvement of piped water supply—Section 138, Public Health Act, 1936, as amended by Section 30, Water Act, 1945 ... ..	336
Yard paving and drainage—Section 56, Public Health Act, 1936	163
Unsatisfactory drainage—Section 39, Public Health Act, 1936	434
Filthy or verminous premises—Section 83, Public Health Act, 1936 ... ..	60
Additional water closets—Section 44, Public Health Act, 1936 ...	11
Conversion of closets—Section 47, Public Health Act, 1936 ...	23
Byelaw infringements—nuisances ... ..	10
Provision of sanitary accommodation—Section 39, Birmingham Corporation Act, 1935 ... ..	4
Removal of noxious matter—Section 79, Public Health Act, 1936	6
Houses let in lodgings—fitness for occupation by families, Section 11, Housing Repairs and Rents Act, 1954 ... ..	54
Houses let in lodgings—prevention of overcrowding—Section 12, Housing Repairs and Rents Act, 1954 ... ..	33
	12,288

The main defects which were remedied were :—

Rooms with defective wall and/or ceiling plaster ... ..	6,838
Roofs, causing dampness ... ..	5,148
Leaking eaves gutters or spoutings ... ..	4,976
Windows or sashcords defective ... ..	4,819

98% of all notices were complied with, the remainder having to be cancelled. Change of ownership before the notices had been complied with is the main reason for this.

To enforce the requirements of the abatement notices it was necessary to serve 672 summonses. This is a marked decrease on the 1,442 summonses served in 1955. In most instances, following the service of a summons, the work was put in hand or completed before the case came before the Magistrates, and in only 143 cases was it necessary to apply to the Magistrates for Enforcement Orders, and these were granted.

One summons was issued against an owner who disobeyed a Magistrates' Order and in 52 cases the Orders were executed by the Enforcement Section of the Department at the default of the owners and the costs subsequently recovered.

*Summonses taken out during 1956—*

General nuisances	...	...	...	...	...	...	...	672
Dogs fouling footpath	...	...	...	...	...	...	...	4
Contraventions of Shops Act, 1950	...	...	...	...	...	...	...	4
Contraventions of Rag Flock and Other Filling Materials Act, 1951	...	...	...	...	...	...	...	3
Disobeying Magistrates' Order	...	...	...	...	...	...	...	1
Contravention of Section 4, Housing Act, 1936	...	...	...	...	...	...	...	66
Contravention of Section 11, Housing Repairs and Rents Act, 1954	...	...	...	...	...	...	...	4
Contravention of Section 12, Housing Repairs and Rents Act, 1954	...	...	...	...	...	...	...	2
								756

Number of Magistrates' Orders	...	...	...	...	...	...	...	143
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*Fines imposed—*

	£	s.	d.
Dogs fouling footpath (3)	2	0	0
Contraventions of Shops Act, 1950, (4)	8	0	0
Contravention of Rag Flock and Other Filling Materials Act, 1951, (2)	10	0	0
Disobeying Magistrates' Order (1)	5	0	0
Contravention of Section 4, Housing Act, 1936, (59)	76	0	0
Contravention of Section 11, Housing Repairs and Rents Act, 1954, (4)	16	0	0
Contravention of Section 12, Housing Repairs and Rents Act, 1954, (1)	3	0	0
	£120	0	0

*Rent Restriction Acts—*

Number of summonses taken out under the Furnished Houses (Rent Control) Act, 1946...	...	...	...	...	...	3
Number of summonses taken out under the Landlord and Tenant (Rent Control) Act, 1949...	...	...	...	...	...	Nil
Total amount of fines imposed	...	...	...	...	...	£2 0 0

## **Enforcement Section**

The primary responsibility of this special section is to carry out all works required to comply with statutory notices served under the Public Health Act, 1936, and associated Acts at the request and default of owners and owner-occupiers, and to carry out the requirements of Nuisance Orders and Magistrates' Orders made by the City Justices at the Victoria Law Courts where these Orders have not been complied with by the persons concerned.

The institution of all legal proceedings undertaken by this Section of the Department in collaboration with the Town Clerk's Department forms another important function of this Section.

This work involves the preparation of evidence and collection of information of every description necessary for prosecutions to be successfully conducted.

The Section, formed in 1947, was originally inaugurated to carry out works at the default of owners for non-compliance with Nuisance Orders as property owners at that time experienced extreme difficulty in arranging for works to be carried out promptly and at a reasonable cost.

The fact that the Department was able to arrange for work to be carried out without undue delay and at a reasonable cost, and that supervision by an inspector while the work was in progress ensured that the repairs were satisfactorily carried out, gave owners confidence in the service provided by the Department and resulted in requests being received from numerous owners for the works required by statutory notices to be carried out on their behalf. This applied in particular where more than one owner was affected and where the costs had to be apportioned between the owners concerned, usually such apportionment of costs being accepted without question.

Many owners experience financial hardship in meeting the costs of repairs to property and in requesting the works necessary in accordance with statutory notices to be carried out on their behalf also request financial help.

In such cases it is the policy of the Health Committee to permit repayment of the said costs incurred to be spread over a period normally of three years, but in cases of exceptional hardship the time for repayment has been extended beyond this period. The special circumstances of each case are considered on their respective merits before any such action is taken.

During the year 47 owners, in requesting the Department to carry out works on their behalf, indicated that they desired to repay the costs incurred by instalments.

Power to execute works to comply with statutory notices is given by Section 275 of the Public Health Act, 1936, where work is carried out

by agreement with owners or occupiers of premises and Section 291 of the same Act allows the recovery of the cost of works carried out by instalments spread over a period of years.

During the year 25 sealed instalment orders for recovery of expenses were made by the Town Clerk and formal arrangements for payment by instalments were made in two cases. Agreements for recovery of expenses incurred were made by the Secretary-Accountant in 17 cases and collection of rents in recovery of expenses undertaken in two instances. Receivership was made in one case, and the Department took over the complete management of the property concerned until such time as the debt was cleared.

Repairs to property detailed by this Section during the year have varied greatly from minor items of plastering, renewal of sashcords, and repairs to roofs and eaves guttering, to the replacement of internal water supplies, and the provision of an adequate supply of water to occupiers of the houses, the conversion of pan closets to water closets which entailed the construction of a new sewer and in another instance excavation for drains which had to be cut through solid sandstone rock. Paving of approaches to houses in tarmacadam or in concrete paving slabs has also been carried out.

In several instances extensive roofing repairs have been carried out and dangerous structures taken down and rebuilt which necessitated in one case the taking down of gable walls and the whole of the rear elevation and wing building of a house and, in another instance, the roofs of a block of property had slipped dislodging the upper courses of brickwork of the front and rear walls.

In a number of cases this work was carried out in collaboration with the Public Works Department following Court Orders made by the City Justices under the provisions of Section 58 of the Public Health Act, 1936, regarding dangerous or dilapidated buildings and structures.

During the year 279 specifications affecting 648 houses were prepared, and the total cost of all works carried out was £9,882 14s. 9d. Of these, 160 specifications were for execution of building repairs to abate nuisances at 241 houses at a cost of £5,223 10s. 7d.

Repairs and improvements were carried out at a total of 460 houses at the request of owners which necessitated the preparation of 150 specifications at a cost of £6,917 3s. 0d., and in 277 cases at the default of owners involving 110 specifications at a cost of £2,965 11s. 9d.

In 52 cases essential works were carried out to comply with Nuisance Orders made by the City Justices at the Victoria Courts. The cost of this work totalled £1,584 7s. 5d. and the number of houses affected was 67.

The following analysis indicated the works undertaken by the Section during 1956 :—

	<i>Jobs</i>	<i>Houses</i>	<i>Cost</i>		
			£	s.	d.
<i>Section 93, Public Health Act, 1936.</i>					
<i>General Nuisances—repairs to defective houses.</i>					
At default of owners—for non-compliance with Nuisance Orders ...	52	67	1,584	7	5
By agreement ...	108	174	3,639	3	2
<i>Section 56, Public Health Act, 1936.</i>					
<i>Paving of courts, yards and passages.</i>					
At default of owners ...	2	9	101	15	4
By agreement ...	3	19	98	14	11
<i>Section 39, Public Health Act, 1936.</i>					
<i>Provision of satisfactory drainage.</i>					
At default of owners ...	34	95	247	16	5
By agreement ...	37	117	789	8	8
<i>Section 44, Public Health Act, 1936.</i>					
<i>Construction of Water Closets.</i>					
At default of owners ...	1	1	59	3	7
By agreement ...	1	5	73	0	0
<i>Section 47, Public Health Act, 1936.</i>					
<i>Replacement of existing privy midden by water closet.</i>					
By agreement ...	4	13	1,022	10	6
<i>Section 58, Public Health Act, 1936.</i>					
<i>Dangerous and dilapidated buildings.</i>					
At default of owners ...	3	7	242	1	2
<i>Section 79, Public Health Act, 1936.</i>					
<i>Removal of noxious matter from premises.</i>					
At default of owners ...	4	4	14	14	4
<i>Section 138, Public Health Act, 1936.</i>					
<i>(as amended by Section 30, Water Act, 1945). Houses already having internal water supply but where supply was insufficient—improvement effected.</i>					
At default of owners ...	13	51	715	13	6
By agreement ...	17	86	1,294	5	9

All works carried out in accordance with specifications during the year have been on a daywork basis of labour and materials plus cost as set out in the National Schedules of Daywork Charges for general building work.

This method of execution of repairs and improvements of every type has been found from experience to be the most practical and economical and results in work being put in hand without delay.

The building industry during the year has again experienced an acute shortage of labour, and it has been only by the full and active co-operation of the building contractors engaged with the Department that prompt execution of all types of work has been carried out.

The supply of building materials of all types now appears to be back to normal, but difficulty of hiring tubular steel scaffolding has been experienced as the demand is greater than the capacity of firms supplying this type of scaffolding.

Legal proceedings were instituted during the year in 756 instances, and the summonses issued and fines imposed are set out on page 279.

It is of interest to note that this is the first instance that the Department has been left with no alternative but to enforce the provisions of Section 4 of the Housing Act, 1936, which requires the name and address of the Medical Officer of Health to be provided by owners in writing by means of a rent book or other suitable document before any rent is demanded or collected.

Certain large houses in various districts of the City have been purchased mainly by coloured persons and let off in single rooms, often at high rents to various families, and for reasons best known to themselves the landlords have refused to co-operate with requests made by the Department to provide this essential information.

When the summonses were heard by the City Justices, full support was given and convictions made and penalties imposed in respect of every separate letting in each case.

To prove the Corporation's case it was essential to bring every sub-tenant to court to state under oath that rent had been paid on a certain day, and that this information was not provided in writing on that occasion.

Considerable difficulty was often met in ensuring that these essential witnesses of various nationalities would be present at court and in many cases sub-poenas had to be issued.

The out-of-pocket expenses for loss of work and travelling had to be paid by the Department and in every case costs to meet these expenses were awarded against the defendants by the City Justices.

The repealing of the Houses Let in Lodgings Byelaws by the Housing Repairs and Rents Act, 1954, has resulted in the Department taking

action under Section 11 of that Act to secure the fitness for occupation of houses let in lodgings for the number of families accommodated in respect of the structural requirements and provision of essential amenities which include separate cooking facilities, storage of food, accessible water supply and the prevention of overcrowding as detailed by Section 12.

In four cases taken to Victoria Courts under Section 11, fines of £16 were imposed, and a fine of £3 for one case under Section 12.

### Urgent Nuisances

The Birmingham Corporation Acts of 1946, 1948 and 1954, give special powers for securing the abatement of nuisances which it is considered are of such an urgent nature that action should be taken in a shorter period than that permitted by national legislation under the Public Health Act, 1936.

Section 59 of the 1946 Act, as amended by the Act of 1954, gives the Corporation authority to notify owners of premises on which occur obstruction of drains, water closets, soil pipes and private sewers, and provides the owner with an opportunity to carry out the work within twenty-four hours from the time of the service of the notice. Should this work not be done in the requisite time then the Corporation is authorised to do the work and recover the cost.

Section 32 of the Birmingham Corporation Act, 1948, extends the power to deal with urgent nuisances, such as defective roofs, collapsed floors and defective water closets. In this case the Corporation is empowered to execute the work at the default of the owner after a period of nine days.

#### *Birmingham Corporation Act, 1946—Section 59.*

Total number of notices served during 1956 (involving 1,148 jobs)	...	...	1,316
Work carried out by owners in specified time	...	...	699
Orders given by this Department <i>in default</i> of owners' compliance	...	...	371
Orders given by this Department <i>at request</i> of owners	...	...	78
Total cost of work given to the Department's contractors totalled	...	...	£1,508 17 9
Average cost per job	...	...	£3 7 5
The maximum charge in respect of any one job was	...	...	£32 16 6
and the minimum was	...	...	7 9

During the year notices were served in respect of obstructions in 15 private sewers, affecting 216 houses.

*Birmingham Corporation Act, 1948—Section 32.*

Total number of notices served during 1956 (involving 670 jobs)	...	...	691
Work carried out by owners in specified time	...	...	481
Orders given by this Department <i>in default</i> of owners' compliance	...	...	173
Orders given by this Department <i>at request</i> of owners	...		16
The cost of the work given to the Department's contractors totalled	...	...	£1,227 17 3
Average cost per job	...	...	£6 9 11
The maximum charge in respect of any one job was	...	...	£100 7 8
and the minimum was	...	...	9 10

### Redevelopment Areas

With the resumption of the programme of large scale slum clearance and compulsory acquisition of unfit properties, it was found necessary to release the experienced housing inspectors on the staff of the Chief Housing Inspector from the duties which they had been undertaking of investigating complaints received in the Department from or on behalf of tenants of the Corporation owned houses in the five Redevelopment Areas. Arrangements were made for all such complaints received in the Department on and after 1st January, 1956, to be the responsibility of the Chief Public Health Inspector.

Between 1st January and 25th June, 3,575 complaints were received affecting properties on the Redevelopment Areas. Each complaint was investigated by a public health inspector and these investigations resulted in a total of 2,987 notifications of disrepair being sent to the Housing Management or Estates Department, calling for appropriate action. In many cases the complaints related to items of disrepair, which were causing nuisance, the existence of which had not previously been reported to the Housing Management Department by the tenant. In a number of instances the tenants complained that they had passed information concerning defects to the rent collector or to the Housing Management Department but either had heard nothing further or had experienced considerable delay in having the defects remedied.

In order to avoid unnecessary duplication of inspection and, so far as possible, to improve efficiency in maintenance, a meeting of representatives of the Housing Management and Health Committees was called in May, and it was agreed that all future complaints received in the Public Health Department from tenants of houses in the Redevelopment Areas



in the City should be passed direct to the Housing Management Department for such action as may be necessary, with the exception of those complaints which presented some feature which could be regarded as manifestly detrimental to health, which would be dealt with by the Public Health Department, who, in turn, would request the Housing Management Department to submit a report to the Chief Public Health Inspector as to the action taken thereon.

Since 25th June, when the new scheme was put into operation, close liaison between the two departments has been maintained. 1,786 obvious first complaints were forwarded direct to the Housing Management Department on a daily list and 754 complaints were investigated and notification sent to the Housing Manager, in appropriate cases. The time taken between the date of notification and the satisfactory completion of the necessary work is about the same as in those cases where formal statutory action is taken against a private landlord.

Figures for complaints received from tenants in the five Redevelopment Areas are :—

Complaints received and investigated—

1st January to 24th June	...	...	...	...	...	3,575
25th June to 31st December	...	...	...	...	...	754

Complaints forwarded direct to Housing Management Department—

25th June to 31st December	...	...	...	...	...	1,786
						<hr/> 6,115 <hr/>

### Domestic Surface Air Raid Shelters

Arising out of the survey carried out in 1954, further consideration was given during 1956 to numbers of shelters which had been the subject of complaints received in the Department. In 112 cases it was considered that the amenities of nearby dwellinghouses were so disturbed as to constitute a danger to health and therefore to warrant representation being made for the demolition of the shelters. The total number of shelters represented for demolition since the survey began was brought up to 288 at the 31st December, 1956 as follows :—

		<i>Total shelter structures surveyed</i>	<i>Shelters represented for demolition</i>
Central Wards	...	816	115
Middle Ring Wards	...	1,208	151
Outer Ring Wards	...	1,994	22
		<hr/> 4,018 <hr/>	<hr/> 288 <hr/>

## Common Lodging Houses

The Department maintains a register of all established common lodging houses in the City as required by the provisions of Section 237 of the Public Health Act, 1936. This record provides detailed information as to the full names and addresses of all persons registered as "keepers" and "deputy keepers" together with the addresses of all such lodging houses. The permitted number of persons which each may accommodate is also specified in the register.

Twelve premises were registered for the year, comprising 11 for men and one for women. These provided a total accommodation figure of 751 for men and 46 for women respectively. There were no changes in ownership during the year.

Byelaws made under the Public Health Act, 1936, are framed to secure the proper management and control of such hostels. To ensure the observance of these Byelaws, public health inspectors carry out routine visits of inspection both by day and night. During the course of the year, the inspectorate made a total of 221 visits, details of which are as follows :—

Day visits	...	...	...	...	...	...	...	...	46
Night visits	...	...	...	...	...	...	...	...	161
Special visits	...	...	...	...	...	...	...	...	13
Unsuccessful visits	...	...	...	...	...	...	...	...	1
									<hr/>
									TOTAL ... .. 221
									<hr/>

## Tents, Vans and Sheds

Reference to the report for 1955, will show the problems which then confronted the Corporation in the occupation of unauthorised sites by caravan dwellers, not necessarily being natives of Birmingham. These dwellers were, in many cases, gipsies or nomads, possessing very little knowledge of the elementary principles of hygiene, and sites occupied by them soon became an eyesore and a danger to public health.

The action taken by the Public Works Department last year in fencing off vacant sites in the central areas of the City, has had a marked effect during 1956. Similarly, the appointment of a special officer by the Public Works Committee in September, 1955, to deal with the unauthorised parking of caravans, has greatly minimised the problems of a year ago.

This officer is in a position to initiate action under the provisions of Section 43 of the Birmingham Corporation Act, 1935, which in short, provides that no tent, van, shed or similar structure used or intended to be used for human habitation, shall be placed on any land situated within the City without the previous approval of the Corporation.

Throughout 1956, public health inspectors maintained a constant liaison with the Public Works Department, in the immediate notification of all cases of occupation of unauthorised sites. This action, together with the other measures referred to above, resulted in a total of 193 visits made by the inspectors, as compared with 433 visits during 1955.

It was not necessary for the Department to serve any abatement notices within the provisions of the nuisance section of the Public Health Act, 1936. This is, no doubt, largely due to the fact that any unauthorised occupation by caravan dwellers now immediately becomes the subject of joint action between the Health and Public Works Departments, resulting in the prevention of nuisances arising.

### **Offensive Trades**

Any reduction in the number of offensive trades may be regarded with some satisfaction, inasmuch as one less means the removal of a potential source of nuisance. During the past year the number of premises in the City at which offensive trades are operated has been reduced by one, thus leaving twenty-four establishments in existence.

Complaints with regard to these trades have been very few, nevertheless the customary routine visits have been made by the staff of the Chief Public Health Inspector. Sixty-eight such visits of inspection may be responsible to a great extent for the generally satisfactory position prevailing in the realm of offensive trades. Periodical but unexpected calls serve a very useful purpose if they merely prevent lapses into carelessness, inevitably resulting in the occurrence of nuisances.

It was not necessary to serve any notices for contraventions of the City Byelaws for offensive trades and it is to be emphasised that the measure of co-operation accorded to the Department, through its representatives, apart from being a reason for satisfaction, goes far to explain the lack of resort to statutory powers.

It is noteworthy, as indicated in last year's report, that a good summer and nuisances from flies and odours are almost inseparable and it may be due to the fact that the summer of 1956 was poor that the usual number of complaints were not received between May and September.

### **Pig Keeping**

Little can be said regarding this subject in addition to the comment in last year's report.

The number of domestic pig keepers continues to decline and the larger scale keepers remain unchanged. Proximity of sties to dwellings was during the war and the early post-war years a fairly common contravention of the relevant Byelaws which were temporarily suspended by Defence Regulation 62 B, and nuisances and complaints were consequently frequent.

The position to-day is one of great change for the better. The number of complaints received during the past twelve months were very few, but routine visits of inspection of known sties and the bigger establishments resulted in the service of notices in ten cases where Byelaw contraventions were observed. In these circumstances, there can be little doubt that pig keeping in the City is being carried on in a very satisfactory manner. The lack of complaints, justified or not—even those based on prejudice—may be taken as a reliable guide.

### **Tips and Tipping**

There was no change in the number of established tips in the City which remained at 14 at the end of the year. Inspectors made a total of 394 visits during 1956 which were mostly of a routine character. Few complaints were received and by prompt approach to the tip operators, any nuisances were abated.

The troubles arising from the abuse of vacant sites and unused land by the dumping thereon of domestic rubbish, have continued and no solution seems likely to be forthcoming until such sites are put to useful purpose or the community develops a greater sense of social responsibility among its individual members.

### **Pleasure Fairs**

Since it is not generally known, it may be opportune to state that the City Byelaws regarding pleasure or fun fairs embrace not only such fairs and circuses but also "any exhibition of human beings or performing animals, merry-go-round, roundabout, switchback railway, cocoanut-shy, hoop-la, shooting gallery or swings, or anything similar to any of the foregoing, if run for profit." Such is the definition detailed in the Byelaws.

Promoters and organisers of week-end or half-day garden fetes are seldom aware that a shooting-gallery, hoop-la stall or cocoanut-shy brings their function within the scope of the Byelaws, requiring, among other things, three days' previous notice in writing to the Town Clerk and the Chief Constable. This notification is quite separate and distinct from the application for a music licence, which must be submitted to the Licensing Justices.

It is, therefore, incumbent on the Department to know what functions, including any of the defined factors, are held so that the necessary supervision from the Byelaws standpoint may be given.

During 1956, 28 pleasure fairs were held in the City, including the annual one associated with the Birmingham University Carnival.

As found in recent years, the Byelaws are well observed and in only two instances was it necessary to write to proprietors calling attention to

contraventions, in one case, with regard to sanitary accommodation and in the other, the untidy state of the site after the closure of the fair. Immediate remedial steps were taken.

Objection was again raised by local residents to a fun fair on the ground that the noise would prevent children from sleeping. The site was the subject of similar objection in 1955 and again the fair was permitted subject to the absence of music.

Public health inspectors made 121 visits to fairs and fair grounds.

### Removal of Human Remains

Plans for the redevelopment of the area necessitated the removal of human remains from Saint Bartholomew's Churchyard. The appropriate permission having been granted, the work was carried out by a contractor selected by the Public Works Committee. The actual work of removal entailed excavation of the site to a depth varying from nine to 18 feet. The work was undertaken in such a manner as not to offend any susceptibilities and the greatest care was taken to ensure that no nuisance was created. During the period daily inspections were made by public health inspectors. Work commenced on 22nd February and by 29th June, when the task was completed, the remains of 7,690 persons had been removed from the site and re-interred at Warstone Lane Cemetery.

The inscriptions still legible on some coffin plates indicated that the burials had taken place over a period of about 150 years. The earliest legible inscription related to a woman who died on 9th February, 1760, and the most recent to a man who died on 17th July, 1899, ten years after Birmingham became a City and when the population was a little over 510,000.

### Canal Boats

During the year 1956, the number of boats inspected on the canals within the City area was 927 and the number of inspections each quarter is shown as follows :—

First quarter	...	...	...	...	...	...	...	...	230
Second quarter	...	...	...	...	...	...	...	...	185
Third quarter	...	...	...	...	...	...	...	...	304
Fourth quarter	...	...	...	...	...	...	...	...	208
									927

The 927 boats inspected were registered for the accommodation of 2,783½ persons and when inspected were found to be carrying 623 men, 563 women and 517 children, a total of 1,703 persons—represented in terms of adults as 1,444½.

Of the 927 boats inspected during the year, it was found that 898 or 96·8% were in good condition, and conforming with the Public Health Act, 1936, and Canal Boat Regulations, while in 29, or 3·2% of the total, various contraventions were found. These are classified thus :—

Boats with one contravention each	25,	making total contraventions	25
.. .. two	.. .. 3,	.. ..	6
.. .. five	.. .. 1,	.. ..	5
	—		—
	29		36
	—		—

Complaint notes were duly served on the owners in all cases, except for verminous boats which were disinfested by the Authority, 23 Complaint notes were issued during 1956 and 20 brought forward from 1955. Fifteen Complaint Notes were complied with during the year, leaving an outstanding balance of 28.

During the year certificates were returned by owners signed by the various Canal Boat Inspectors, showing that 21 contraventions had been remedied. It has not been necessary during the year to take any Court proceedings under the Public Health Act, 1936, or the Canal Boat Amendment Regulations, 1925, all works being well carried out by owners.

No cases of infectious disease were reported during the year 1956.

The register of canal boats has been reviewed and a number of owners circulated to ensure that boats on the register are still in commission. It was found that a great number had been broken up or disposed of in various ways which has resulted in a drastic pruning of the register. The 135 boats on the Birmingham register are classified as follows :—

Ordinary boats ... ..	50
Motor boats ... ..	85
Steam boats ... ..	—
	—
	135
	—

### The Prevention of Damage by Pests Act, 1949

For the first time since the inception of the Act it is possible to report a drop in the number of complaints received by the Section during the year, although the figure is still approximately 80% above that of the year when the Act came into force (1950).

The staff numbers for 1950 and 1956 are approximately the same, and this gives some idea of the pressure of work in the Section. These difficulties are particularly apparent during the holiday periods, and at other times due to sickness amongst the operative staff.

The comparative figures for complaints notifying the presence of rats or mice received in the various years are as follows :—

1949	1950	1951	1952	1953	1954	1955	1956
3,536	4,843	4,901	5,387	5,690	7,409	8,889	8,090

This drop in the number of complaints was evident during the first quarter of the year, whilst the months of April and May showed increases in the complaints. The three month period to August showed a drop in the number of complaints and this trend continued to the end of the year. Rats breed throughout the year but it is known that there are peak breeding seasons in the spring and autumn, and it is possible that the April and May increases are due to this fact, whilst, surprisingly, the expected autumnal increase was absent.

The reduction in the number of complaints of infestation is naturally reflected in the numbers of inspections and resultant treatments which have been carried out at varying types of premises, as follows :—

<i>1954</i>				<i>Domestic</i>	<i>Industrial</i>	<i>Total</i>
Original visits	...	...	...	7,050	2,715	} 13,354
Re-visits	...	...	...	1,681	1,908	
<i>1955</i>						
Original visits	...	...	...	9,067	3,208	} 15,784
Re-visits	...	...	...	1,796	1,713	
<i>1956</i>						
Original visits	...	...	...	9,020	3,131	} 15,183
Re-visits...	...	...	...	1,811	1,221	

#### TREATMENT

	<i>1954</i>		<i>1955</i>		<i>1956</i>	
	<i>Rat</i>	<i>Mouse</i>	<i>Rat</i>	<i>Mouse</i>	<i>Rat</i>	<i>Mouse</i>
Domestic	3,378	1,593	4,729	1,606	4,279	1,532
Industrial	1,441	1,052	1,552	1,149	1,296	939
	<hr/>		<hr/>		<hr/>	
	7,464		9,036		8,046	
	<hr/>		<hr/>		<hr/>	

These figures are broken down into the various types of property inspected and in many cases treated during the year, and the tables reveal that practically every type of property and business in the City has received attention, either on complaint from the tenants, or as the result of survey carried out during inspection.

	<i>Inspections</i>	<i>Re-inspections</i>	<i>Treatments for</i>	
			<i>Rats</i>	<i>Mice</i>
Domestic and bombed sites	9,020	1,811	4,279	1,532
Corporation Properties :				
Schools	211	56	100	129
Civic restaurants and bake-houses	16	1	11	13
Corporation tips	10	2	4	—
Allotments, parks, etc.	26	35	17	2
Welfare centres and nurseries	28	41	13	24
Destructors ( <i>see separate details for treatment</i> )	—	165	—	—
Offices, stores, depots, etc.	102	7	30	41

	<i>Inspections</i>	<i>Re-inspections</i>	<i>Treatments for Rats</i>	<i>Mice</i>
<b>Industrial :</b>				
Private schools ... ..	18	7	20	3
Private tips ... ..	4	1	—	—
Hospitals, nursing homes, etc.	71	22	58	32
Cafes, restaurants and hotels	114	36	62	51
Other food premises ...	706	369	295	220
Cinemas and theatres ...	48	84	8	33
Canal and railway banks ...	5	23	1	—
Non-food shops ... ..	412	140	177	108
Non-food factories, offices, etc.	844	200	492	283
Farms, piggeries, etc. ...	10	31	8	—
Other visits ... ..	506	1		
Night visits ... ..	139	—		
Smoke tests ... ..	375	—		

These visits resulted in formal action in the following cases :—

Notices served for proofing ... ..	84
Notices served for treatment ... ..	—
Notices completed ... ..	73
Reminder letters sent ... ..	4
Letters sent <i>re</i> -proofing ... ..	—

In addition to the above action, in the case of 182 properties, rat-proofing measures have been carried out without the service of formal notices ; approximately 80 % of these entailed extensive repairs to drainage systems mainly to properties in the control of the Housing Management Department and the Estates Department, whilst the remainder covered such items as defective footings and air bricks in privately owned properties. The figure of 182 does not include repairs to road sewers where defects in the sewers have caused collapse of road surfaces ; the Section having been called in by the Public Works Department.

The majority of owners and agents of property whom the Section have had to contact regarding ratproofing measures are anxious to extend the utmost co-operation in this work, and the service of notice is normally a formal matter so far as they are concerned.

All business premises are charged for any treatments carried out, whilst purely domestic premises are treated free of charge in accordance with the Circular of the Ministry of Agriculture, Fisheries and Food which deals with the Exchequer Grant under the Act.

The scheme devised for the regular servicing of industrial premises at regular periods has continued to work very well. In many of the premises so served the period between the treatments has been extended, this being indicative of the success of the Section's treatments.

As in previous years, there have been occasions, such as during the holiday periods and due to illness amongst the operatives, when householders have been asked to carry out treatments for mice infestations and



advised on the use of poison to enable the Section to deal with the more serious infestations by rats. The public thus requested were extremely co-operative, but a few of them found it necessary to call in the Section when their efforts were unsuccessful. Later, inspections showed that the treatments carried out by householders (using Warfarin preparations) had been very successful.

#### SALVAGE DEPARTMENT DESTRUCTORS

The five depots which deal with household and industrial refuse continue to be the most heavily infested premises in the City. Due to the amounts and the varied kinds of refuse taken into the depots and the harbourage and food which is available for rats, the depots present the utmost difficulties in successful rat extermination. Adequate inspection to assess the rat population at any given time is impossible during normal working hours. Similarly, it is not practicable to apply poison bait treatment when the plant is in full operation. Inspections, therefore, must be carried out at night and during weekends when the depots are comparatively quiet, and every opportunity is taken to carry out treatments in certain portions of the depots, such as the charging decks, when these are taken down for repair. Additionally, the five hoppers at the Montague Street Depot have been cleared by hand during the year on several occasions, the resultant catches being sent alive to the Research Laboratories of the Ministry of Agriculture, Fisheries and Food at Tolworth. Only with the closest co-operation of the staffs of the Salvage Department Depots has it been possible for the treatments to be carried out with any degree of success.

#### SEWER TREATMENTS

The routine treatments of the City's sewer system have continued throughout the year. There are some 1,600 miles of sewers in the City and manholes on the system provide the only places where the sewer rat population can be poisoned. The sewer poisoning scheme, although routine and not spectacular, has, over the years, substantially reduced the number of rats in the sewers. When it is appreciated that by far the majority of rat infestations within a radius of approximately three miles of the City Centre are attributable to rats coming from defective drainage systems, the real importance of this sewer poisoning can be envisaged. Some sewer lengths are now known to be free from rats, particularly in the suburban areas, whilst the reduced "takes" of poison in other areas clearly point to a substantial reduction in the sewer rat population.

The following figures of bait taken by rats from baiting points give some idea of the beneficial effect that the treatments have had :—

	<i>Quantity of Bait taken</i>				
	<i>Complete</i>	<i>Good</i>	<i>Small</i>	<i>Totals</i>	<i>No "takes"</i>
Initial treatments	246	2,227	2,368	4,841	4,734
19th Maintenance treatment ...	—	213	491	704	6,763

At the close of the year the 20th Maintenance Treatment was continuing.

#### EXPERIMENTAL TREATMENT OF ASTON AND WITTON SEWERS

(Ministry of Agriculture, Fisheries and Food).

The Research Section of the Infestation Division of the Ministry again requested the help and assistance of the Section in the carrying out of a treatment of the Aston and Witton sewers, using the poison Sodium Mono Fluoroacetate. This sewer system had been used previously by the Research Staff of the Ministry, details of this experiment being given on page 281 of the 1955 Annual Report.

The 1956 experimental treatment was commenced in May and continued through June and July at intervals. A pre-poison census was first carried out, the bait used being accurately weighed daily and the resultant "takes," after a period of a few days, gave a fairly accurate estimate of the numbers of rats using the particular manholes.

The poison was then placed on the benches in the manholes and again the amounts used were weighed. After an interval of a few days a post poison census of rats at the manholes was carried out, again with the amount of bait used and taken for several days accurately weighed. The difference in the weights of baits taken during the pre-poison census and the post poison census gave an indication of the number of rats killed at the manholes.

The Head of the Research Section of the Ministry, Dr. E. W. Bentley, has written to say that his figures for this treatment give a kill of 92·8% of the rats using the manholes.

An interval of six months must elapse before the final post poison census which will commence in January, 1957, when the resultant bait "takes" will furnish valuable evidence of the build-up rate of rat population in the sewers.

This experiment is one of a number which have taken place in towns and cities in various parts of the country.

#### RAT-PROOFING

Disused drains continue to be the cause of many rat infestations within buildings. Defective existing drains, even though performing the purpose of removing drainage from a building, are also a cause of rat infestations within buildings. Carelessness in the laying or repairing of drains is the root cause and tests have to be applied in order to trace the site of the defect. During the year some 227 drainage systems were found to be so defective that rats were leaving the system and causing infestation. When it is appreciated that one defective drain can cause infestation in a number of surrounding properties and gardens, it will be realised that the figure of 227 in no way reflects the actual number of properties which have benefited by the repair of these systems.

#### INNER RING ROAD SCHEME

During the year the demolition took place of a number of business premises along the site of the proposed ring road from Smallbrook Street in the direction of Worcester Street. Within a few days of the demolitions commencing it was evident that rats were leaving the disused drainage systems and this led to infestations in adjoining occupied premises and new premises in the course of construction. Through the active co-operation of the Public Works Department it has now been arranged for drainage systems to be disconnected and sealed and other remedies applied in the hope of preventing infestations in premises to be erected on the cleared sites. Several poison treatments were carried out in various empty properties in the area in order to reduce the rodent population.

#### RAT INFESTATIONS IN NEW BUILDINGS

As in previous years more examples of infestations in new properties, due to inefficient sealing of footings around the general purpose drain pipes and service pipes and cables, were found. The attention of the City Architect's Department was drawn to those cases where the properties concerned were in Corporation ownership, and the clerk of works on the site in other cases, and the necessary proofing measures carried out.

#### **The Rag Flock and other Filling Materials Act, 1951**

At the end of 1956 there were six premises licensed under the above Act. In one case the licence was for the manufacture of rag flock and in five cases for the storage of rag flock. 53 premises were registered for the manufacture of new furniture, bedding or stuffed toys.

Regular routine sampling is carried out of materials to which the Act applies, which are stored or used on registered or licensed premises, and the reports upon samples submitted for analysis are set out below :—

<i>Material</i>	<i>Satisfactory</i>	<i>Unsatisfactory</i>	<i>Total</i>
1. Rag Flock ... ..	56	1	57
2. Cotton Felt ... ..	27	1	28
Cotton Millpuff ... ..	3	—	3
3. Woollen Felt ... ..	12	1	13
Woollen Flock ... ..	4	—	4
4. Jute ... ..	2	—	2
5. Synthetic Fibres ... ..	—	—	—
6. Hair ... ..	8	—	8
7. Feathers or Down ... ..	1	—	1
8. Kapok ... ..	—	—	—
9. Coir Fibre ... ..	25	—	25
Algerian Fibre ... ..	5	—	5
10. Sisal and Cotton Felt Pads ... ..	1	—	1
	144	3	147
TOTAL samples in 1955 ... ..	145	21	166

Unsatisfactory samples taken, worked out as percentages of all samples for the year, are as follows :—

1952 ... ..	16·3%
1953 ... ..	6·5%
1954 ... ..	6·2%
1955 ... ..	12·6%
1956 ... ..	2·0%

Legal proceedings were instituted in respect of an unsatisfactory sample of rag flock and two samples of hair, which had been taken from registered premises in the autumn of 1955. In neither case had the material been purchased or supplied with a written warranty and, therefore, the cases were taken against the occupier of the registered premises, who was represented by a solicitor. In one case the summons was withdrawn. In each of the other two cases the defendant was fined £5, this being the first occasion on which he had been before the Court.

### Supervision of Shops

A staff of four whole-time Shops Act Inspectors was available to carry out the general routine inspections and various other duties relating to the retail distributive trade as prescribed by the provisions of the Shops Act, 1950.

These duties include :—

*General Inspections*—Periodical inspection and the recording of all the necessary particulars of all retail shops, certain wholesale establishments and warehouses.

*Conditions of Employment, Assistants*—The regular examination of the prescribed records relating to statutory weekly half-holidays, hours of employment on Sundays and compensatory time off in lieu of Sunday employment. The checking of the regulated hours of employment of young persons employed in retail shops, cinemas and other places of entertainment and in the catering trade. Visits to ensure that the correct intervals for meals are allowed to all shop assistants.

*Staff Accommodation*—Inspections to ascertain that a suitable standard is provided and maintained regarding sanitary accommodation and washing facilities made available for use by the staff ; that a reasonable standard of heating, lighting and ventilation is maintained at all times where staff are employed ; to ensure that seating accommodation is made available for female staff and that suitable facilities are available for the taking of meals on the premises.

*Early Closing Day and Night Closing Regulations*—Regular routine patrols are made to ascertain that the regulations regarding the compulsory half-day closing and general night closing hours are complied with by shopkeepers.

*Sunday Trading*—Regular routine patrols are made enforcing the limitations of Sunday trading exemptions ; the special provisions for Jewish traders and the City of Birmingham (Rednal) Sunday Trading Order, 1939.

The work of the Shops Act Inspectors for the year ending 31st December, 1956, is summarised as follows :—

#### GENERAL INSPECTIONS

Visits ... ..	9,731
Re-visits ... ..	3,442
	<hr/>
	13,173
	<hr/>

#### SPECIAL VISITS

Half-day closing ... ..	5,711
Night closing ... ..	644
Sunday trading (day) ... ..	2,286
Sunday trading (night) ... ..	42
Appointments ... ..	523
Complaints and enquiries ... ..	108
Jewish traders ... ..	289
	<hr/>
	9,603
	<hr/>

## STREETS PATROLLED

Half-day closing	...	...	...	...	...	...	...	5,675
Night closing	...	...	...	...	...	...	...	781
Sunday trading	...	...	...	...	...	...	...	2,561
								<hr/> 9,017 <hr/>

## SHOPS ACT FORMS PROVIDED

Early closing	...	...	...	...	...	...	...	430
Assistants' half-holiday	...	...	...	...	...	...	...	246
Young persons' hours of employment	...	...	...	...	...	...	...	239
Sunday duties	...	...	...	...	...	...	...	4
Exemption (week-days)	...	...	...	...	...	...	...	158
Exemption (Sundays)	...	...	...	...	...	...	...	284
								<hr/> 1,361 <hr/>

## STAFF ACCOMMODATION DEFECTS REMEDIED

W.C. and washing facilities	...	...	...	...	...	...	...	501
Heating, lighting and ventilation	...	...	...	...	...	...	...	38
Facilities for meals	...	...	...	...	...	...	...	90
								<hr/> 629 <hr/>

## OFFENCES REPORTED FOR ACTION

Half-day closing :								
Sales after closing time	...	...	...	...	...	...	...	12
Night closing :								
Sales after closing time	...	...	...	...	...	...	...	12
Sunday trading :								
Illegal sales	...	...	...	...	...	...	...	135
Summons issued in respect of illegal Sunday trading included in above-mentioned offences	...	...	...	...	...	...	...	4
Warning letters issued in respect of above-mentioned offences	...							155

During the year it was found necessary to institute legal proceedings against four shopkeepers for contraventions of the Shops Act, 1950. In each case the offence was illegal Sunday trading by shopkeepers who had continued to trade in non-exempted goods on Sundays after having been sent official warning letters for previous similar offences. In each case the charge was proved and a fine was imposed by the Magistrates.

This Department was pleased to be able to assist a Colonial Labour Officer with studies on the administration of the Shops Act, 1950.

## Disinfestation and Disinfection

The Disinfecting and Cleansing Station is situated in Bacchus Road, which is reasonably central. The staff carry out their duties under the supervision of a Depot Superintendent who reports daily to the Chief Public Health Inspector, and this arrangement does much towards ensuring a prompt and efficient control of all measures relating to disinfestation and disinfection.

The Department receives throughout the year a steady flow of complaints from occupiers of domestic and business premises concerning infestations of bugs, fleas, flies, cockroaches, blackbeetles, ants, etc., which are promptly investigated by the public health inspector. Following investigation, the necessary arrangements for treatment are made with the Depot Superintendent. 1,081 houses were treated in 1956 as compared with 920 in 1955, representing an increase of 161 treatments or 17.5% over the year.

There has been a general decrease in this type of work during recent years due, no doubt, to the increasing use of modern insecticides. The above increase is probably due to the early summer weather experienced in May, when no less than 227 houses were treated.

In addition to this work, many treatments have been carried out in business premises, including restaurants, licensed houses, theatres, cinemas, public baths and hospitals, where mainly infestations of steam flies and cockroaches have occurred. The number of separate treatments involved amounted to 133 for the year.

No charges were rendered in respect of treatments for domestic premises but appropriate accounts were submitted in all other cases, the charges being based solely on the cost of labour and materials used.

### SERVICES TO THE TUBERCULOUS

Other services are also operated by the Depot Staff. By arrangements made with the Chest Clinic and the Housing Management Department, 638 houses were disinfected following the removal of tuberculous patients to sanatoria or into new housing accommodation. Similarly, a delivery and collection service of complete bedding units is maintained to and from the homes of such patients. During the year 576 units were delivered and 432 were collected and disinfected prior to re-issue.

### DISINFECTION

Where aged people are incapable of maintaining a reasonable standard of cleanliness in their homes, the Department undertakes the necessary cleansing, including the removal of refuse from their accommodation. This service is given free of charge and during the year, 21 such houses were cleansed and 50 beds, together with bedding, were removed for destruction.

The steam disinfection plant, which is in constant use, has treated more materials than ever. The work includes the disinfection of large quantities of hospital bedding and blankets. Accounts, where applicable, were rendered to the appropriate authorities. A "stove" represents one complete operation of the disinfector and charges are based on the rate of 15/- per stove. No less than 2,047 complete stoves were effected by the end of the year as compared with 1,650 during 1955.

#### CLINIC TREATMENTS

The cleansing of scabies cases and verminous persons is carried out in the clinic at the Cleansing Station, where separate bathing facilities are provided. A day and evening service is operated, the clinic remaining open until 8 p.m. during the week, except Saturday, when it closes at 5 p.m. No treatments are provided on Sunday.

Details of treatments given in 1956 are as follows :—

##### *Clinic*

<i>Bacchus Road (men)</i>	<i>Scabies</i>	<i>Body Lice</i>	<i>Pubic Lice</i>
Men ... ..	178	272	67
Boys ... ..	15	—	—
Second treatments ... ..	6	—	—
Third treatments ... ..	6	—	—
<b>TOTAL</b> ... ..	<b>205</b>	<b>272</b>	<b>67</b>

<i>Bacchus Road (women)</i>	<i>Scabies</i>	<i>Body Lice</i>	<i>Pubic Lice</i>	<i>Head Lice</i>
Women ... ..	128	15	5	35
Girls ... ..	102	11	—	49
Boys ... ..	81			
Second treatments ... ..	22	—	—	—
<b>TOTAL</b> ... ..	<b>333</b>	<b>26</b>	<b>5</b>	<b>84</b>

Children represented in the above statistics were treated at the same time as their parents.

A service was introduced in the latter part of 1955 to provide bathing facilities for the aged and infirm. During 1956, weekly programmes were arranged for the bathing of these aged folk, who were collected and returned to their homes in Corporation transport under the care of a health visitor. During the year 350 baths were provided for women and 139 for men.

#### **The Problems we meet**

The public health inspector spends a considerable amount of his time in the investigation and abatement of nuisances. Much of his



work, therefore, is connected with the essential repair of houses, especially in a large congested city like Birmingham containing so many thousands of houses which vary in age, description and character.

In some cases, and resulting from the statutory action taken by the inspector, gross inconvenience and difficulty may be experienced by tenants of privately owned houses when extensive repairs are carried out. This applies particularly in the case of the small house and single rooms occupied by families. This problem became the subject of a consultation between the Chief Public Health Inspector and the Housing Manager during May, 1956.

The object was to determine the possibility of the Housing Management Department providing for the temporary rehousing of families, in appropriate cases, until the necessary repairs were satisfactorily completed. The above discussion made it quite obvious that the Housing Management Committee were not in a position to offer accommodation to persons in privately owned houses who were inconvenienced as a result of extensive repairs being carried out.

The first difficulty arose from the fact that in many instances it was impossible to persuade the landlord to take the families back again.

The Housing Management Committee feel it a moral obligation, on their part, to offer such accommodation in the case of a house which may be structurally dangerous. Even in these cases, and in spite of assurances given by both the private landlord and his tenant, the matter has occasionally ended by the Corporation being left with the responsibility for permanently rehousing the family. Sometimes, the tenants themselves have dishonoured their side of the bargain, but more frequently, it is the landlord who will not accept them back.

It should also be remembered, that because of the very acute housing shortage which exists in Birmingham, the Housing Management Committee does not move its own tenants when extensive reconditioning works are carried out in central areas houses. The provision of alternative accommodation for this type of work just cannot be afforded.

It is because of these serious difficulties, that in a few very difficult cases the co-operation of the Welfare Committee has been sought, and temporary hostel accommodation has been provided for persons, particularly those living in rooms, whilst essential repairs have been carried out.

It is interesting to note that it is very seldom tenants do complain of inconvenience of this nature, for they apparently realise that the benefit to be derived from the execution of the work far outweighs the temporary inconvenience.

In the very few cases where tenants have complained, they have generally admitted that they were hoping for permanent rehousing in a Corporation house but were ineligible for consideration at the time.

## DRAINAGE AND SEWERAGE

The information which follows, on the sewerage works carried out by the Public Works Department in the City, has been very kindly provided by Sir Herbert Manzoni, the City Engineer and Surveyor.

The reconstruction of the existing sewers in Ludgate Hill, St. Vincent's Street and Brewery Street, all in the City Centre, have been completed during the year.

In addition, the sewers have been reconstructed in the following roads, Chapel Lane, Selly Oak and Kensington Road, Selly Park.

The second contract for the reconstruction of the Cole Valley Eastern Outfall Sewer is nearing completion and the new valley sewer is in use from Yardley Sewage Works to the Coventry Road.

Extensions to existing sewers have been carried out in Aldridge Road, Moor Lane, Witton ; Cock Hill Lane and Priory Road, Yardley Wood. This latter has enabled seven houses to be drained and the dumbwell demolished.

The River Tame has been deepened and improved for a total length of approximately 2,000 yards at various points between Salford Bridge and the Walsall Road. This should alleviate the flooding which took place in this area.

Temporary improvement works have also been carried out to the rivers Rea and Bourn above Cannon Hill Park in the Stirchley area and also to a short length of the Hockley Brook at the City boundary.

During the year sewers have been constructed for the following Housing Estates :—

### BY CONTRACT

Malthouse Estate, Yardley.	South Road Estate, Northfield.
Kingshurst Hall Estate.	Perry Villa Estate, Perry Barr.
Part 2, Section 1.	Ashleigh Grange Estate,
Wyrley Birch Estate, Erdington	Moseley.
Bucknall Crescent, Kitwell	Firs Estate, Flats Site, Castle
Farm Estate.	Bromwich.
Eachway Farm Estate, Rubery	Redevelopment Unit No. 11
(completion).	(Duddeston and Nechells).
Fairholme Road (School), Ward	
End.	

### BY DIRECT LABOUR

Laurel Road Estate, Handsworth.	Bell Holloway Estate, Northfield (completion).
Lyndhurst Estate, Part 1, Erdington.	Merritts Brook Lane, Northfield (completion).
Beilby Road and Pope's Lane, Northfield.	

WORK ON THE FOLLOWING CORPORATION ESTATES IS IN HAND

Welsh House Farm Estate, Part 2, Harborne.

Kingshurst Hall Estate, Part 2, Section 2A. (Outside of City Boundary).

Highcroft Estate, West Heath.

In addition to the above Corporation Estates, approximately 2.37 miles of sewers have been laid by private enterprise in private housing sites.

Up to the end of December last, the total length of sewers now laid in the City is 1,617.9 miles, of which 553.4 miles are surface water sewers and 1,064.5 miles are foul water sewers, a total increase for the year of 9.7 miles.

During the year eight dumbwells have been demolished and filled in, and the properties formerly draining to them have been connected to the main drainage system. In addition main drainage is now available for 21 properties previously using "pan closets."

### REFUSE COLLECTION AND DISPOSAL

For a number of years now, Mr. W. H. Andrews, as General Manager of the Salvage Department, has kindly provided information for insertion in this Report on the work of the Salvage Department under the above heading. It is, therefore, fitting to mention that Mr. Andrews retired from service with the Corporation on superannuation on the 30th September this year, having served the Corporation for some forty-six years, fourteen of which were in the capacity of General Manager.

Mr. Andrews has been succeeded by Mr. Alan G. Barton as General Manager who has kindly supplied the details which follow.

The Salvage Department is responsible for the duties connected with the collection, utilisation and disposal of house and trade refuse, the emptying of cesspools and privy pans and for the removal and treatment of refuse and animal residues from the City Markets and Abattoir.

Dustbins for the temporary storage of domestic refuse are also supplied by this Department in accordance with the policy adopted by the City Council whereby these receptacles are provided as a charge on the rates.

#### Refuse Collection

Refuse collection throughout the City necessitates regular calls at some 333,000 premises, the work allocated to the 166 rounds varying considerably with the differing classes and types of property to be cleared.

The distance the refuse has to be carried from the house to the vehicle also varies greatly between areas: where court property and similar houses predominate, bins are often grouped together within easy access from the roadway, but in other areas the "carry" may be as much as 100 yards. The latter conditions particularly apply where new housing estates have been developed. Similarly, the output of refuse is not

constant over the whole of the City ; whilst houses in some parts produce an average of about 17 cwts. per annum, at others the mean output is as high as 28 cwts.

During the year under review the Department dealt with a total of 370,463 tons of refuse of all classes, the majority of which was refuse from domestic premises and shops.

A fleet of 227 vehicles of all kinds was employed, 217 of which were engaged on refuse collection, the remaining vehicles being used in the emptying of cesspools and pans, cleansing of the Markets, delivery of fertilisers and general transport at the various works.

Different types of vehicle have been experimentally employed from time to time on refuse collection and of the 217 in service during 1956, 129 were petrol driven, 86 electrically propelled and two were diesel oil vehicles.

The provision of dustbins to domestic premises under the rate borne scheme has continued and 35,618 bins were supplied during the year. This brings the total number provided since the inception of the scheme in 1950 to 233,931.

Refuse collection from multi-storey communal dwellings and other establishments by the use of large containers and vehicles specially adapted for dustless loading has proved most satisfactory and this method of storage and clearance is being increasingly adopted wherever conditions are suitable. The number of such containers in use at December 1956, was 108, serving 1,536 premises.

There was a steady improvement in the labour position throughout the year, particularly in the latter months, and by December 1956, the collection force available was up to full strength. This situation was mainly brought about by a recession in certain sections of industry in the district, coupled with the fact that the remuneration offered by the Department, which includes incentive bonus, now bears favourable comparison with that of outside concerns. In May 1956, amended working hours were introduced for the manual strength, allowing the majority of the employees to enjoy a five-day week for nine months of the year. During the three winter months, when refuse output is heavy, the men work alternate 5 and 5½ day weeks. These arrangements have worked satisfactorily to the mutual advantage of the Department and the employees.

In previous years, owing to the difficulty in obtaining and retaining suitable labour, considerable assistance has been required from hired transport in order to keep the refuse collection service up to date. This assistance has, of course, been most needed during late autumn and winter but by the end of 1956, due to the very much improved labour strength, the standard of refuse collection had been maintained to an extent which enabled the Department to eliminate almost entirely the use of hired vehicles on the work.

## **Refuse Disposal**

The main method of refuse disposal employed is that of separation and incineration and it is mechanised to a considerable extent. The plants at the five refuse disposal works are, however, working to full capacity and surplus refuse is dealt with by controlled tipping.

Locating suitable tipping sites inside the City has become increasingly difficult during the past few years and the position became so acute that the assistance of the City Engineer and Surveyor was sought in an effort to solve the problem. Various sites have been examined with a view to providing the tipping accommodation required by the Department, and it appears likely that sufficient space will now be made available to meet the needs for at least a few years.

Useful assistance has been given to the Parks Department during the past year in raising the level of land at Kings Norton which will result eventually in the playing area of the recreation grounds being enlarged. The Parks Department has also utilised screened dust from refuse in connection with work at Quinton Nurseries.

Welfare facilities for the men have been constantly under review and whilst much work has been executed during the past year, numerous other schemes are envisaged both in the matter of welfare and in plant improvements, and these will be carried out when financial conditions permit.

## **Salvage and By-Products**

Particular attention has continued to be given to the recovery of all items of salvage which can be re-used in industry and which give an economical return for their recovery. Markets generally have been good with the exception of that for mixed waste paper, the demand and prices for which have been very variable during the period under review. Fibreboard containers for re-pulping and ferrous and non-ferrous scrap metals, however, commanded good prices in a keenly competitive market.

The Department undertakes the removal of condemned meat, offal and other residues from the City Meat Market and Abattoir. From the treatment of this material and other organic wastes received at the works a total of nearly 3,000 tons of animal feeding stuffs, fertilisers and fat was produced.

The income of the Department from all sources for the year amounted to £173,261 compared with £166,761 for 1955.

## **Cesspools, Pans and Privy Middens**

At the end of 1956 there were 117 cesspools, serving 137 premises being regularly emptied by the Department. During the year five cesspools which had been emptied by the Department were abolished by being connected to the sewers and no new cesspools were constructed which required attention. There are still 131 pans in the outlying parts of the City which need the Department's attention.

## CITY'S WATER SUPPLY

The Chief Engineer of the Water Department, through the kind co-operation of Mr. A. E. Fordham, General Manager and Secretary of that Department, has kindly prepared the following notes for inclusion in this Report.

### Headworks

In connection with the long term project for increasing the output of the filtration plant in the Elan Valley, the conversion of a third unit of the existing slow sand filters into two rapid gravity type filters was completed and taken into commission during the year. The conversion of three further beds is in hand, two of which were nearing completion at the end of the year, whilst the conversion of a seventh bed has been authorised.

### Aqueduct

Further progress has been made with the laying of the Fourth Main of 60" diameter concrete-lined steel pipes on the siphon sections of the Elan Aqueduct. During the year some  $3\frac{3}{4}$  miles of pipes have been laid and altogether approximately  $23\frac{1}{4}$  miles (64%) of the total length of  $36\frac{1}{2}$  miles of siphon sections have been laid.

### Frankley

The last of the eight new rapid gravity filters with a total capacity of 16 million gallons per day and comprising the first instalment of the scheme for increasing the filtering capacity at the Frankley Works was taken into commission.

Work on the construction of the second instalment also of eight filters is proceeding satisfactorily.

Authority has been received to commence on the construction of the third instalment comprising twelve filters and some preliminary work has already been carried out.

### Area of Supply

For the improvement of supplies in the Department's Statutory Area of Supply, the programme of laying new trunk mains comprising concrete-lined cast iron and steel pipes has continued.

Progress during the year has been as follows :—

<i>Diameter</i>	<i>Level</i>	<i>Locality</i>	<i>Length Miles</i>	<i>Remarks</i>
24"	Middle	Victoria Park to Third Avenue, Small Heath	1.3	Completed and taken into commission May, 1956.
24"	Low	Bromford Lane, Drews Lane, Ward End	1.2	Completed and taken into commission April, 1956.

<i>Diameter</i>	<i>Level</i>	<i>Locality</i>	<i>Length Miles</i>	<i>Remarks</i>
24"	Northfield	Frankley Pumping Station to Northfield Reservoir	0.8	Completed and taken into commission May, 1956
30"	Low	Hunton Hill, Erdington	0.8	Completed and taken into commission April, 1956
18"	Warley	Portland Road, Edgbaston	0.9	Completed and taken into commission February, 1956
36"	Middle	Hampton Lane, Solihull	0.8	0.6 mile laid

### **Local Works—Whitacre**

Satisfactory progress has been maintained on the reconstruction of these works from which bulk supplies are afforded to Coventry and Nuneaton.

The construction of the chlorine contact tank has been completed and work on the seven rapid gravity filters is well advanced.

The low lift pump house has been completed and the pumps were brought into operation in January, 1957, pumping River Blythe water from Whitacre Reservoir to Shustoke Reservoir.

### **General**

All water distributed has been treated with chlorine generally at a rate of 0.3 parts per million.

Although seagulls visited Bartley reservoir frequently in the early and late months of the year, the only serious contamination associated with their visits was that revealed in a sample of the raw water on December 27th. As on previous occasions, however, contamination was effectively eliminated by filtration and chlorination.

The water distributed in the City area was entirely the soft moorland water of the Elan Supply despite the fact that consumption reached unprecedented high rates during the rapid thaw following a severe spell of frost at the beginning of February.

At all times water supplies have been satisfactory in quality and generally adequate in quantity.

The programme of trunk mains already referred to, with the exception of one main, is complete and the mains have fulfilled their objects of improving the pressure in the localities where previously it was not as high as desirable, and meeting the considerable increase in consumption experienced since the war.

## ROUTINE SAMPLING OF CORPORATION WATER

After a dry Spring, the remainder of the year was wet, a factor which tended to influence the bacterial quality of certain samples.

### Bacteriological Examination

#### ELAN VALLEY SUPPLY

The only samples taken from the head waters were two from an improved supply to Nantybeddau Farm which now gave excellent results.

The impounded water before passing into the aqueduct is treated with six parts per million of lime to neutralise its natural acidity and it is passed through rapid filters to remove suspended particles which might otherwise be deposited in the aqueduct.

The practice of adding 0.5 parts per million of chlorine at the point of entry to the aqueduct was continued. When therefore the water was sampled at two to three week intervals at Steventon, half way along the aqueduct, B.Coli was found in only two of the twenty-two samples—2 B.Coli Type I per 100 m.l. on each occasion. One further sample contained 310 organisms per 1 m.l. but no other contained more than six.

The aqueduct outlet at Frankley works was sampled weekly. In the 51 samples B.Coli Type I occurred on six occasions, the greatest number present being 9 per 100 m.l. The contamination coincided with the periods of heavy rain and occurred through water gaining access to the aqueduct. The number of organisms per 1 m.l. in the water entering Frankley Works on no occasion exceeded 14.

The water flowing from the aqueduct is stored in Bartley and Frankley Reservoirs prior to filtration and the water being fed to the filters is sampled weekly. In the first half of the year water from both Frankley and Bartley Reservoirs was used and three samples from the latter during January, when seagulls were frequenting the reservoirs, contained 2, 9 and 2 B.Coli Type I respectively and up to 10 organisms per 1 m.l. growing at 38°C. In the second half of the year mainly water from Frankley Reservoir was used. On six occasions this contained up to 5 B.Coli Type I per 100 m.l. On 27th December, however, when water from Bartley Reservoir was in use, 240 B.Coli Type I per 100 m.l. were present, again due to the presence of water birds.

The water is little altered bacteriologically by passing through the rapid filters whose function is that of clarification by removal of particles larger than bacteria.

The alternative process of slow sand filtration, is intended to remove even bacteria and is so effective that of 44 samples only seven contained B.Coli Type I and the highest concentration was 5 per 100 m.l. Two of the seven samples were from filters recently resanded and not yet in



commission again. The 39 samples taken from filters in commission contained an average of 3 organisms per m.l. growing at 38°C. the highest concentration in any sample being 13 per 1 m.l.

Five samples from recently resanded filters not yet in commission averaged 80 organisms per 1 m.l., mostly derived no doubt from the sand itself.

The filtered water is finally chlorinated by adding up to 0.5 parts per million of chlorine and weekly samples are taken as the fully purified water leaves the works. No sample contained coliform organisms and the ones with most organisms growing at 38°C had 159, 12, 10, 8, 7, 6 and 4 per 1 m.l.

With one exception no evidence of contamination was detected by monthly sampling of the eight covered pure water storage reservoirs or in 66 samples taken from consumers' taps throughout the City. The exception was on 13th June when, after a heavy rainfall, 15 B.Coli Type I were present in the Erdington Reservoir sample, probably having been washed through the roof.

#### WHITACRE SUPPLY

The Rivers Blythe and Bourne are sampled weekly and are always found to be heavily polluted as shown by the average bacterial content of the weekly Blythe samples being 2,761 per 1 m.l. with extremes of 14,900 and 150 and of the weekly Bourne samples being 14,870 with extremes of 134,000 and 400. B.Coli Type I averaged 5,387 per 100 m.l. in the Blythe and 15,958 in the Bourne.

During the year only water from the River Bourne was used for supply, the first step in purification being storage for one month in Shustoke Reservoir. This produces a clear water whose average bacterial content of 52 samples was only 74 organisms per 1 m.l. with extremes of 456 and 2 and 44 B.Coli per 100 m.l. with extremes of 240 and Nil.

Subsequent slow sand filtration reduced the bacterial content to an average of 28 organisms per 1 m.l. growing at 34°C in 24 hours. In 76 samples B.Coli Type I was found on six occasions in amounts of 9, 5, 2, 2, 2, and 2 organisms per 100 m.l.

Disinfection of the filtered water by adding up to 1.0 parts per million of chlorine eliminated coliform organisms from all the weekly samples and these contained an average of only 10 organisms per 1 m.l. growing at 38°C in 24 hours with extremes of 33 and 1.

In March, 1955, a new main was brought into use for supplying water to Nuneaton and weekly samples were taken from a point about half way along its length. Bacterial content was similar to when the water left the Whitacre Works.

#### WELLS

Short Heath Well was not used for supply but fortnightly samples taken direct from the well contained no coliform organisms on any occasion. Only one sample contained more than 5 organisms per 1 m.l.

At Longbridge fortnightly samples were taken direct from the well and only once contained as many as 15 organisms per 1 m.l. apart from a period between late July and early September when engineering work was in progress and the water was not used for supply.

### **Chemical Examination**

The number of samples taken from certain points, their average chemical composition and the range of its variations are set out on page 312. The results vary little from year to year.

The figures for "Plumbo-solvency" and "Erosion" are a measure of the power of the water to dissolve lead. "Plumbo-solvency" is measured by the lead content of 50 mls. of water which have taken 180 seconds to pass through a tube packed with bright lead shot. The figure for "Erosion" is the lead content of 10 mls. of water which have stood in the laboratory overnight with a 1" strip of bright lead immersed in it. The reports are regarded as satisfactory particularly as, when considering their significance, one must bear in mind that the lead used for the test is bright metal without the protective coating which normally develops on the inner surface of a lead water pipe.

In addition, at least once in every month a sample is examined from a domestic tap in each of the three levels of supply. The chemical composition of these samples varied insignificantly from that of the water when it left the Frankley Works.

Direct measurements of the lead content of drinking water as delivered from consumers' taps are made from time to time using that water which is drawn first from the tap in the morning. The lead content of these samples has varied from 0.05 to 0.40 parts per million. There is, however, often some doubt as to whether the whole of the sample being analysed has stood in the lead service pipes overnight. With special precautions to ensure that this was so, a series of six samples was therefore taken into lead-free bottles. Their lead contents ranged between 0.40 and 0.30 parts per million. In view of the fact that the service pipe at each of these houses was at least 24 years old, and some were certainly much older, a further four samples were taken from houses where the lead pipes were 2, 10, 20 and 21 years old and their lead contents were respectively 0.4, 0.65, 0.3 and 0.4 parts per million. These results are satisfactory.

The considerable increase recently in the domestic use of detergents means that they are present in significant quantity in sewage and sewage effluents. The froth upon many of our streams and rivers draws attention to their sewage effluent content. Estimations of the detergent in the Rivers Bourne and Blythe are now being made. It is found that storage in Shustoke Reservoir reduces the concentration and slow sand filtration almost or completely eliminates the detergent.

AVERAGE RESULTS OF CHEMICAL EXAMINATION

PARTS PER MILLION (Extreme values in brackets)												
No. of samples taken	Description	Ph.	Total Solid Matter	Free Ammonia	Albuminoid or Organic Ammonia	Nitrogen in Nitrates	Oxygen consumed in 4 hours at 27°C. (80°F)	Chlorine in Chlorides	Hardness (as CaCO <sub>3</sub> )	Total Alkalinity (as CaCO <sub>3</sub> )	Plumbo-Solvency	Erosion 1 day
12	WELSH WATER: Aqueeduct Outlet ...	9.2 (8.8-9.4)	42 (39-46)	.000 (.000-)	.045 (.032-.056)	.11 (.07-.16)	1.33 (0.82-1.88)	8.8 (8.0-10.0)	19 (18-20)	7.4 (6.0-10.0)	0.9 (0.4-2.0)	
12	After storage in Bartley or Frankley Reservoirs ...	7.7 (7.0-8.7)	42 (38-45)	.000 (.000-)	.044 (.032-.064)	.11 (.07-.16)	1.15 (0.78-1.85)	8.9 (8.0-10.0)	20 (18-22)	8.5 (8.0-10.0)		
12	After filtration and chlorination	7.3 (7.1-7.7)	43 (39-47)	.000 (.000-)	.035 (.024-.048)	.11 (.07-.16)	1.12 (0.66-1.84)	9.1 (8.0-10.0)	20 (18-21)	8.3 (7.0-10.0)	0.7 (0.4-1.1)	105 (90-120)
12	WHITACRE: River Blythe ...	8.0 (7.6-8.9)	474 (412-692)	.196 (.000-.720)	.355 (.200-.700)	2.46 (0.77-4.49)	3.46 (2.20-6.79)	30 (25-35)	310 (240-504)	148 (104-240)	Detergent 0.36 0.58 (2 readings only)	Nitrogen in nitrates .078 (.030-.225)
12	River Bourne ...	7.6 (7.5-7.7)	541 (456-606)	.193 (.030-.680)	.184 (.120-.320)	4.20 (3.52-4.91)	1.68 (1.06-2.95)	59 (36-95)	345 (264-384)		0.5, 0.4, 0.38, 3 readings only	
12	After storage in Shustoke Reservoir ...	8.5 (8.0-8.8)	454 (411-486)	.020 (.000-.128)	.298 (.160-.720)	1.71 (0.37-3.70)	1.35 (0.92-2.23)	53 (46-60)	290 (240-320)		0.14, 0.13, 0.20, 0.13 4 readings only	
12	After filtration and chlorination	7.9 (7.4-8.3)	389 (188-486)	.001 (.000-.008)	.072 (.048-.096)	1.73 (0.16-4.20)	0.68 (0.54-0.91)	45 (23-60)	245 (88*-312)		Perm. Hardness 0.00, 0.00, 0.10, 0.00, 4 readings only	
3	WELLS: Longbridge ...	6.7 (6.7-6.7)	255 (251-260)	.000 (.000-)	.007 (.006-.008)	3.56 (3.21-3.79)	0.05 (0.00-0.08)	16.8 (16.0-18.0)	173 (172-176)	95 (90-104)	HARDNESS PERM. 81 (72-92)	92 (80-100)
3	Short Heath ...	7.3 (7.3-7.4)	476 (452-500)	.000 (.000-)	.026 (.018-.036)	9.4 (9.2-9.9)	0.13 (0.08-0.19)	30 (29-32)	288 (276-304)	107 (90-118)	181 (176-184)	107 (92-120)

\* Due to considerable admixture with Welsh water.

## Private Wells

### INDUSTRIAL

A total of 111 premises are known to use water from bore holes within the City made up as follows :—

Breweries and mineral water manufacturers using well water for all purposes	...	...	...	...	...	...	...	8
Hotels and blocks of flats using well water for all purposes	...							3
Hospital using well water	...	...	...	...	...	...	...	1
Industrial premises using well water for all purposes	...	...						16
Industrial premises using well water for industrial purposes only								83
								<hr/>
								111
								<hr/>

80 samples for bacteriological examination and 39 for chemical analysis were obtained in 1956 and in all cases, the reports indicated that the water from these bore holes, although hard, was in a state of high bacteriological purity.

### DOMESTIC

There has been no change in the number of dwellinghouses in the City which have to rely on water from wells or springs for their drinking supply.

The numbers of dwellings supplied from wells or springs at the end of the years 1952 to 1956 were as follows :—

Year				Number of dwellings	Source of Supply	
					Wells	Springs
1952	...	...	...	40	20	2
1953	...	...	...	25	18	1
1954	...	...	...	16	11	1
1955	...	...	...	14	9	1
1956	...	...	...	14	9	1

There are two temporary dwellings included in the total for 1955 and 1956 ; one draws water from a well and one from a spring.

### Piped Water Supplies within Dwellinghouses

Last year's report indicated that at the end of 1955 there were no fewer than 1,089 houses in the City lacking an internal water supply. This figure is undoubtedly high, particularly if it is conceded that such a supply is an essential amenity in these days of improved housing conditions. It is, however, very surprising to find that, of the figure mentioned, refusal by tenants to have a supply installed accounted for 972, leaving a small balance of 117 in which absence of an internal supply was due to other factors.

During the past twelve months internal supplies have been installed in 71 houses and 41 houses lacking supplies have been demolished. The figure of 1,089, mentioned above, has been reduced therefore to 977. While one would desire a considerably smaller figure, no great change was anticipated in view of the number of refusals, which now totals 907.

The following table summarises the position at the end of 1956.

1. Houses, having a suitable life, known to lack an internal supply, and for which notices have not been served ...	—
2. Houses in respect of which there are notices outstanding ...	—
3. Houses whose life does not justify expense ... ..	24
4. Dwellings supplied by wells—usually distant from a main supply ... ..	13
5. Houses in which space limitation or other reasons made provision impracticable ... ..	1
6. Houses whose occupants did not desire a supply ... ..	702
7. Houses whose lack of drainage made provision impracticable	2
8. Houses, for whose acquisition by the Corporation, negotiations were proceeding ... ..	4
9. Houses now included in declared Clearance Areas ... ..	24
	770
	770

These figures do not include houses in the Redevelopment Areas, which are classified as :—

1. Houses with an insufficient life ... ..	—
2. Houses whose tenants refused supply ... ..	205
3. Houses awaiting installation by :—	
Estates Department ... ..	1
Housing Management Department... ..	1
	207
	207

During 1956 water supplies were installed :

1. By owners ... ..	10
2. In vested properties ... ..	61
	71
	71
Houses, previously lacking supply, demolished during 1956 ...	41

## SAMPLING OF SWIMMING BATH WATER

In the course of his duties of sampling the water of each bath once a month the Water Sampling Officer obtained 274 samples for bacteriological examination and measured the concentration of chlorine at the time each sample was taken.

Even though the date and time of his visits are never known at the baths before he actually arrives in the building, only six samples produced more than seven organisms per 1 c.c. after two days' incubation at 38°C. One of these six was also the only sample of the whole series from which coliform organisms were isolated and then only 2 Type I per 100 c.c. were present.

The free chlorine in the water is the active bacterocidal agent and the concentration of this is normally maintained between one and two parts per million. The chlorine concentration in parts per million of the six bacteriologically unsatisfactory samples was—

<i>Free chlorine</i>	2.0	0.3	0.4	0.1	0.1	0.1
<i>Total chlorine</i>	2.0	0.4	0.5	0.2	0.3	0.4

Mr. J. Moth, General Manager of the Baths Department, states that attendances at the various bathing establishments have continued to increase during 1956, and it is gratifying to observe that once again the bacteriological examinations of the swimming bath water have shown such satisfactory results.

## SUPERVISION OF INDUSTRIAL PREMISES

### Sanitary Accommodation in Factories

The Chief Public Health Inspector and his staff are responsible for dealing with sanitary matters arising in factories in accordance with the provisions of Part I of the Factories Act, 1937. The Act indicates the extent to which the provisions of this part are to be enforced by the local authority, and contains various general requirements relating to cleanliness, overcrowding, temperature, ventilation, drainage of floors and sanitary conveniences in factories in which mechanical power is not used.

The number of visits paid to industrial premises, defined as Factories under the Act, totalled 5,423 for the year. Details of this work, including the number of premises registered, are as follows, viz. :—

<i>Factories</i>		<i>Number on Register</i>	<i>Inspections</i>	<i>Informal Notices</i>
With power ...	...	5,103	5,010	250
Without power ...	...	330	261	20
Other premises ...	...	85	152	11
TOTALS	...	5,518	5,423	281

Once again, factory managements continued their past co-operation with the Department in complying with the requirements of the informal notices referred to above. It was not necessary, therefore, for the Department to resort to statutory procedure with regard to such notices.

As in the previous year, public health inspectors when making their visits under the Factories Act, also dealt with other statutory duties in connection with factory canteens, outworkers, etc., thus exercising the most economical use of available manpower.

### FACTORIES ACTS, 1937 and 1948

1.—INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH (including inspections made by public health inspectors).

<i>Premises</i> (1)	<i>Number on Register</i> (2)	<i>Number of</i>		
		<i>Inspections</i> (3)	<i>Written notices</i> (4)	<i>Occupiers prosecuted</i> (5)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities ... ..	330	261	20	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority ... ..	5,103	5,010	250	—
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding outworkers' premises) ... ..	85	152	11	—
TOTAL ... ..	5,518	5,423	281	—



2.—CASES IN WHICH DEFECTS WERE FOUND

Particulars (1)	Number of Cases in which Defects were found				Number of cases in which prosecutions were instituted (6)
	Found (2)	Remedied (3)	Referred To H.M. Inspector (4)	Referred By H.M. Inspector (5)	
Want of cleanliness (S.1) ... ..	7	7	1	6	—
Overcrowding (S.2) ... ..	—	—	—	—	—
Unreasonable temperature (S.3) ... ..	1	—	—	—	—
Inadequate ventilation (S.4) ... ..	2	3	—	—	—
Ineffective drainage of floors (S.6) ... ..	1	—	—	—	—
Sanitary conveniences (S.7) ... ..	—	—	—	—	—
(a) Insufficient ... ..	92	96	—	9	—
(b) Unsuitable or defective ... ..	617	500	—	211	—
(c) Not separate for sexes ... ..	1	4	—	3	—
Other offences against the Act (not including offences relating to outwork) ... ..	—	1	4	10	—
TOTAL ... ..	721	611	5	239	—

## Outworkers

Certain classes of light work in connection with the making, ornamenting or finishing of various types of goods, are given out to persons who do this work in their own homes or small workshops.

The employers of such persons are required under the provisions of Section 110 of the Factories Act, 1937, to supply the local authority with lists of their names and addresses during the months of February and August in each year.

The August return for 1956, which was submitted to the Ministry of Labour and National Service, gave the following particulars, viz. :—

### LIST OF OUTWORKERS, 1956

<i>Nature of Work</i>	<i>Number of Outworkers in August</i>
Wearing apparel ... ..	110
Linen and household linen ... ..	10
Electro-plating ... ..	52
Brass and brass articles ... ..	138
Fur-pulling ... ..	1
Paper bags ... ..	12
Box making ... ..	44
Making of brushes ... ..	10
Feather sorting ... ..	1
Buttons, hair pins, etc. ... ..	202
	<hr/>
	580
	<hr/>

This return shows a sharp decrease of 310 outworkers or approximately 35% over the corresponding figure of 890 for August, 1955, the main trade affected being that dealing with brass and brass articles.

However, the number of visits paid to outworkers' premises during the year was 1,766 and, when compared with the figure of 1,919 for 1955, shows a decrease of only 8%.

## Town and Country Planning Acts, 1947 and 1954

The continued liaison between this Department and the City Engineer and Surveyor has resulted in the maximum use being made of these Acts to ensure that good planning incorporates the legislated requirements of Public Health and the recommendations in codes of practice.

Plans and applications which have a bearing on the work of the Department, such as those for food premises, offensive trades and factories, are forwarded to the Chief Public Health Inspector and, after preliminary examination, are referred to specialist officers in the Department where

necessary. During the year 1,361 planning applications (a decrease of 274 from 1955), together with appropriate plans, were referred to the Department and were scrutinised by the following officers :—

	<i>Number of applications referred</i>					
Public Health Inspectors	...	...	...	...	...	1,197
Smoke Inspectors...	...	...	...	...	...	500
Housing Inspectors	...	...	...	...	...	82
Milk Inspectors	...	...	...	...	...	8
Shops Inspectors	...	...	...	...	...	97

These officers' opinions were collated and suitable replies prepared by the Chief Public Health Inspector. In 555 cases (approximately 40%) it was found necessary to make comment which was, as far as possible, offered in constructive form.

## ATMOSPHERIC POLLUTION BY SMOKE, FUMES, EFFLUVIA AND DUST

### Smokeless Areas

The City of Birmingham (Smokeless Areas) No. 1 Order became operative on the 1st July, 1956, prohibiting the emission of smoke from premises within two defined areas, namely the Central Smokeless Area and the Garretts Green Industrial Smokeless Area.

The chimneys of the premises in the areas have been kept under observation, and it is pleasing to record that occupiers have endeavoured to comply with the requirements of the Order. In some cases considerable expense has been incurred in the alteration or adaptation of fittings and appliances to comply with the legislation.

Technical officers of the Department deal with enquiries from owners or occupiers of the premises included in the areas giving advice on such matters as suitability of appliances, the use of alternative fuels and the costs of various adaptations or installations which may be required. This personal contact has undoubtedly been a contributory factor in the acceptance of the new obligations under the Birmingham Corporation Act, 1954.

It is felt that the above approach to this subject has elicited more co-operation than would have been the case if enforcement had been adopted as the means to bring about compliance with the conditions laid down for smokeless areas.

Photograph No. 1, taken before the Smokeless Area legislation became operative, shows a north easterly view of some of the buildings, chimneys and roof tops in the Central Area, with a typical smoke haze from the coal burning appliances. Photograph No. 2, taken in July, 1956, and reproduced by kind permission of the "Birmingham Gazette," depicts a westerly view of the area and the absence of smoke; the target of a Clean Air policy.

Photo 1

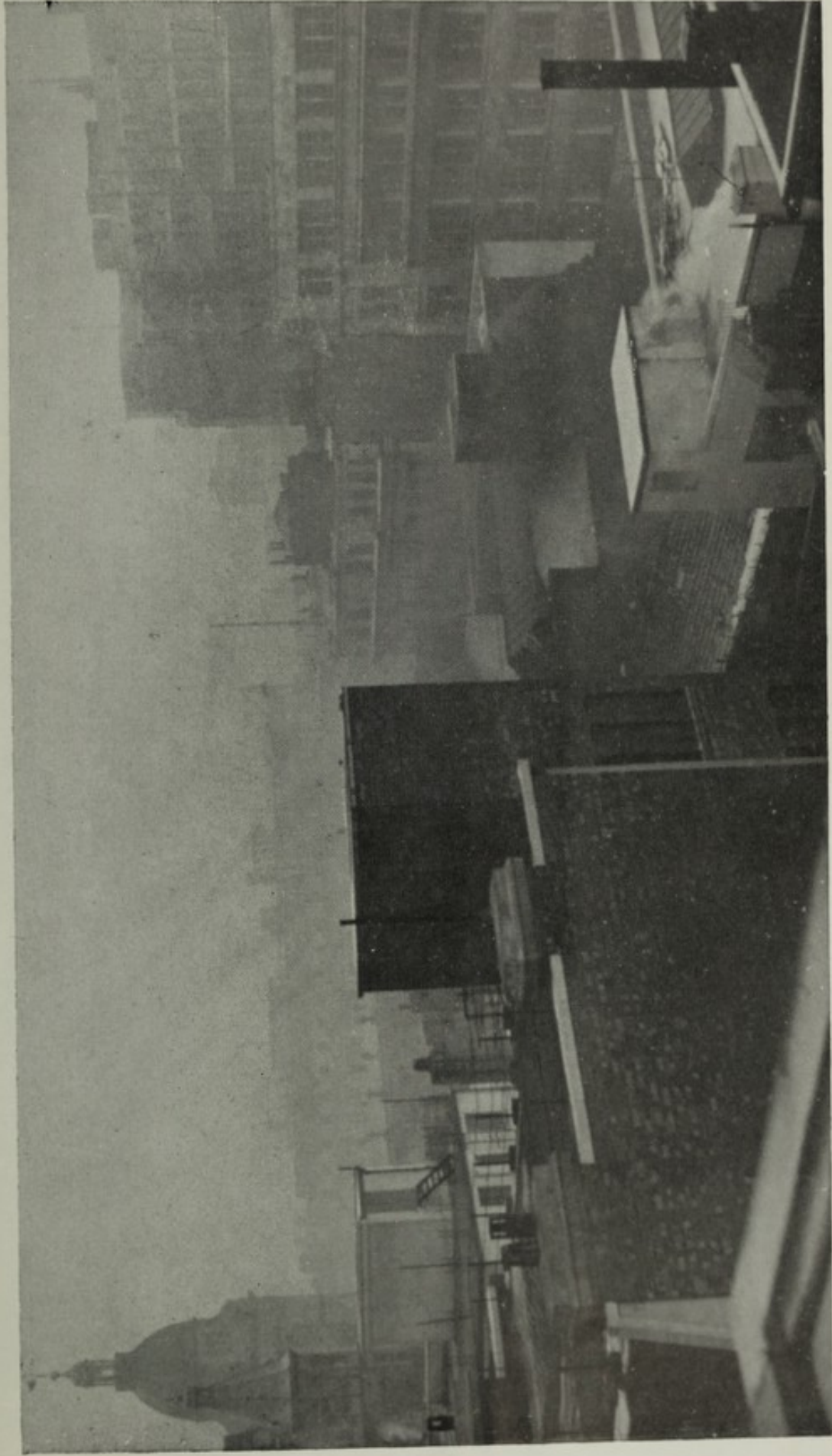
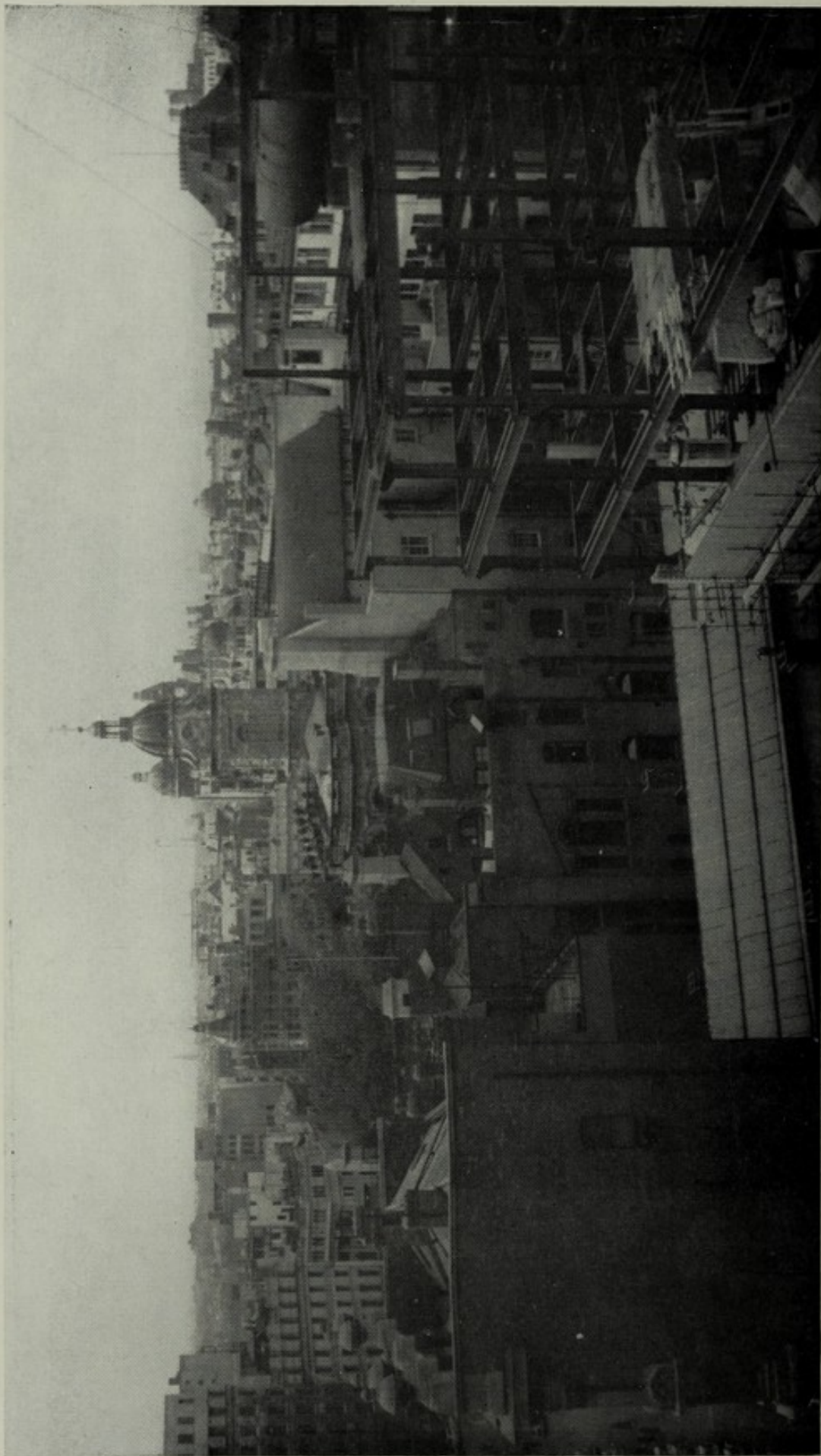


Фото 2



Smokeless Areas in this City have, so far, been made in accordance with Section 35 of the Birmingham Corporation Act, 1954. Sub-section (3) of this section states "The Corporation may, if they think fit, contribute the whole or part of the expenses necessarily incurred by any person in executing works, or in providing, altering or adapting any fixtures, fittings or appliances for the purpose of complying with the provisions of an Order under this Section."

During the latter half of the year, fifteen applications were received from owners or agents seeking financial assistance from the Corporation towards the costs involved in carrying out works in premises within the Central Smokeless Area in order to comply with the provisions of the City of Birmingham (Smokeless Areas) No. 1 Order. The total sum involved was estimated to be £5,651 3s. 8d. Each application was considered on its merits by the Health Committee, and in no instance was financial assistance granted to the applicants.

In furtherance of the smokeless area policy a survey of fuel burning appliances in premises, other than those within the two smokeless areas, occupied by the Welfare, Catering, Health and Education Committees of the Corporation, was carried out during the year.

The survey revealed that out of a total of 12,646 appliances, 9,311 were operated smokelessly, whilst the remaining 3,335 burning solid fuel were not capable of smokeless operation at all times, which includes the lighting up period.

From the information obtained from the survey, recommendations were made indicating what alterations or adaptations would be required to existing appliances, which could be used as a guide in the case of any replacements necessary in the near future, thus ensuring that, should the premises fall within future smokeless areas, the appliances would comply with the requirements applicable to such areas.

### **Industrial Atmospheric Pollution by Smoke**

It has long been recognised that efficiency in the use of bituminous coal by industry as a whole falls far short of what is desirable and practicable, and to a large extent smoke abatement and fuel efficiency are two aspects of the same problem. With modern boiler installations there is no difficulty in burning coal with little or no smoke by mechanical means, provided the equipment is maintained and properly operated. Conversely, when burning similar fuel by hand the exacting requirements necessary to burn the volatiles arising from the distillation of the fuel during the early part of the combustion period cannot be readily produced, with the result that valuable volatiles given off as smoke are emitted from the chimney serving the plant.

The question of efficient combustion of fuel should be the aim of all managements, so that not only will users benefit from the financial saving but also the public in general by a cleaner atmosphere.

Observations throughout the year on industrial chimneys were as follows :—

<i>Number of chimneys observed</i>	<i>Total minutes of smoke emitted</i>	<i>Average smoke emitted per 30 minutes observation</i>
3,523	1,969½ minutes	0.56 minutes

During the above observations a number of chimneys were noted emitting excessive smoke as follows :—

<i>Number of chimneys emitting excessive smoke</i>	<i>Total minutes of excessive smoke</i>	<i>Average excessive smoke emissions per 30 minute observation</i>
76	792½ minutes	10.43 minutes

These emissions from individual chimneys were duly reported to the Health Committee or the appropriate Health (Proceedings) Sub-Committee and authorisation for Abatement Notices was given under the Public Health Act, 1936.

After the service of Abatement Notices further observations on the chimneys resulted as follows :—

<i>Number of chimneys observed</i>	<i>Number of observations</i>	<i>Total smoke noted</i>	<i>Average smoke per observation</i>
76	317	296 minutes	0.93 minutes

It will thus be seen that considerable improvement was effected by the service of the notices, the average smoke emission being reduced from 10.43 minutes to 0.93 minutes per observation.

During these observations seven of the chimneys were emitting excessive smoke and legal proceedings were instituted in each case.

In five of the cases Nuisance Orders were obtained and penalties imposed for non-compliance with the Abatement Notices. The two remaining cases were adjourned in order to allow time for works to be done to prevent further recurrence of the nuisance.

Arising out of this procedure, 38 firms have notified the Department of the measures taken, or to be taken, to reduce the excessive smoke emissions as follows :—

<i>Stricter supervision imposed</i>	<i>Changes in fuel effected</i>	<i>New equipment ordered</i>	<i>Consultant engineers brought in</i>
26	3	7	5

From this information it was noted that the change in fuel usage was the conversion from the hand firing of coal to the use of oil fuel, whilst the new equipment included mechanical stoking arrangements,

oil fuel firing installations, the provision of automatic control apparatus, carbon dioxide recording instruments and smoke density meters. The approximate cost of the remedial works is estimated to be £3,300. Other projects for renewal of steam raising plant, muffle furnaces and oil fuel conversions are estimated to cost £18,000.

In three cases of excessive smoke it was found more expedient to institute legal proceedings under the Birmingham Corporation Consolidation Act, 1883, and the cause of the smoke due to negligence and inefficient operation of mechanical stokers was soon remedied by managerial action.

*Summary of Statutory Action*

*Public Health Act, 1936*

Number of Abatement Notices served	...	...	...	83
Number of prosecutions	...	...	...	7
Number of Nuisance Orders granted	...	...	...	5
Total amount of fines imposed	...	...	...	£12

*Birmingham Corporation Consolidation Act, 1883*

Number of Contravention Notices served	...	...	3
Number of prosecutions	...	...	3
Total amount of penalties imposed	...	...	£3

**The Clean Air Act, 1956**

This Act received the Royal Assent on the 5th July, 1956, and by reason of Section 31, various general provisions of the Public Health Act, 1936, are applied with suitable modifications. The Clean Air Act, 1956, therefore, forms part of the public health code and the functions of those authorities who are local authorities for public health purposes are in consequence extended.

Certain provisions of the Act came into force on the 31st December, 1956, under the Clean Air Act, 1956 (Appointed Day) Order, 1956. The provisions which became operable deal with the installation of new furnaces, the height of chimneys, smoke control areas, pollution from colliery spoil banks, research and publicity and amendment of building byelaws. Ministry of Housing and Local Government Circular, No. 64/56 indicated that the Minister intends at a later date to make an Order fixing a date in the early part of 1958 as the "appointed day" for the remaining provisions of the Act. The principal sections of the Act not yet in operation are those relating to the emissions of dark smoke, dust, and grit; smoke nuisances; and smoke from railways and shipping.

Air pollution in this City comes from many sources and takes many forms. It includes not only smoke, gases, dust and grit from chimneys, but also the fumes and gases from internal combustion engines, chemical works and industrial processes. Whilst the Clean Air Act, 1956, gives local authorities new powers and duties for the prevention of air pollution, the rate of progress will depend on technical and economic factors, together with the interest and co-operation of the public.



## New Fuel Burning Installations (Industrial and Commercial Types)

Information derived from the study of planning applications submitted under the Town and Country Planning Acts, 1947 and 1954, and observations made by the smoke inspectors when they find new fuel burning installations or industrial chimney stacks being constructed, are used to ensure that the new equipment will not in the future be a source of smoke nuisance or the cause of possible complaint.

During the year replies to enquiries regarding 58 new installations have been received from the owners or architects concerned. The following table indicates the trend of fuel usage for the installations concerned and, despite the possibilities of restricted oil supplies due to the Suez Crisis, the use of oil fuel firing on small installations was the favoured method. The installations designed for coal were all mechanically stoked and in no instance did the nature of the installation present difficult technical problems.

<i>Fuel Usage</i>		<i>Coal</i>	<i>Coke</i>	<i>Oil Fuel</i>	<i>Town's Gas</i>
No. of installations (58)	...	4	6	43	5

## Atmospheric Pollution from Railway Smoke

Observations have been maintained throughout the year on coal fired locomotive engines operating at the principal stations, engine sheds, depots and goods sidings. Whilst frequent short emissions of black smoke have been noted, such emissions have been within the limit of three minutes, in the aggregate, over a period of thirty minutes and therefore not excessive.

The introduction of diesel engines for passenger and shunting traffic has been a noticeable feature, and the first step in the dieselisation of the City's suburban railway services between Birmingham (New Street), Sutton Coldfield and Lichfield is to be welcomed from a clean air point of view, because, although much can be done to reduce air pollution from steam locomotives by careful operation, maintenance, and the provision of suitable steam raising coal, complete elimination of smoke, grit and soot is not possible. The solution must, therefore, be sought in alternative forms of motive power such as electric and diesel engine locomotives, and a progressive reduction in air pollution from this source is to be anticipated as the implementation of the modernisation plan of the British Transport Commission proceeds.

## Fumes and Effluvia

Fourteen complaints have been investigated during the year. These all referred to industrial processes, such as non-ferrous metal casting, enamelling, paint spraying, fumes from acid dipping tanks, and polishing operations.

The increased use of oil fuel firing has also given rise to complaints of the characteristic smell associated with this type of fuel burning, especially where the chimney height has been insufficient to ensure the effective dispersal of the combustion gases.

Every case calls for individual consideration but, given co-operation, time and thought on the matters involved, a mitigation of the cause of the complaints can generally be found. It has been necessary for the Health Committee to authorise the service of three Abatement Notices, two in relation to effluvia and one for excessive fume emissions.

## **Dust**

Excessive dust emissions caused by any trade, business, manufacture or process and being prejudicial to the health of, or a nuisance to the inhabitants of the neighbourhood, may, in accordance with the provisions of Part III of the Public Health Act, 1936, be dealt with summarily as a statutory nuisance.

Complaints continue to be made of emissions from various trade processes, and twelve cases have been investigated during the past year. The remedial measures employed have resulted in the renewal of bag filters, the overhaul of cyclone apparatus, and the effective sealing of containers which receive the dust when trapped. When dust arrestation methods have to be employed, to safeguard the health of the employees, the plant concerned is generally situated outside the industrial premises, but once installed there is a tendency for the plant to be neglected, and unless systematic inspection and maintenance of the dust arrestation plant is carried out, it is not long before the efficiency falls, with a resultant escape of dust to the atmosphere and annoyance to nearby residents.

## **Pollution Recording Apparatus**

The monthly recording from the eight stations in operation has been maintained throughout the year. Each station consists of a deposit gauge and a lead peroxide instrument.

The plotted graphs show the fluctuations of the readings during the years 1955 and 1956.

Graph No. 1 indicates the monthly deposits of total solid matter expressed in tons per square mile.

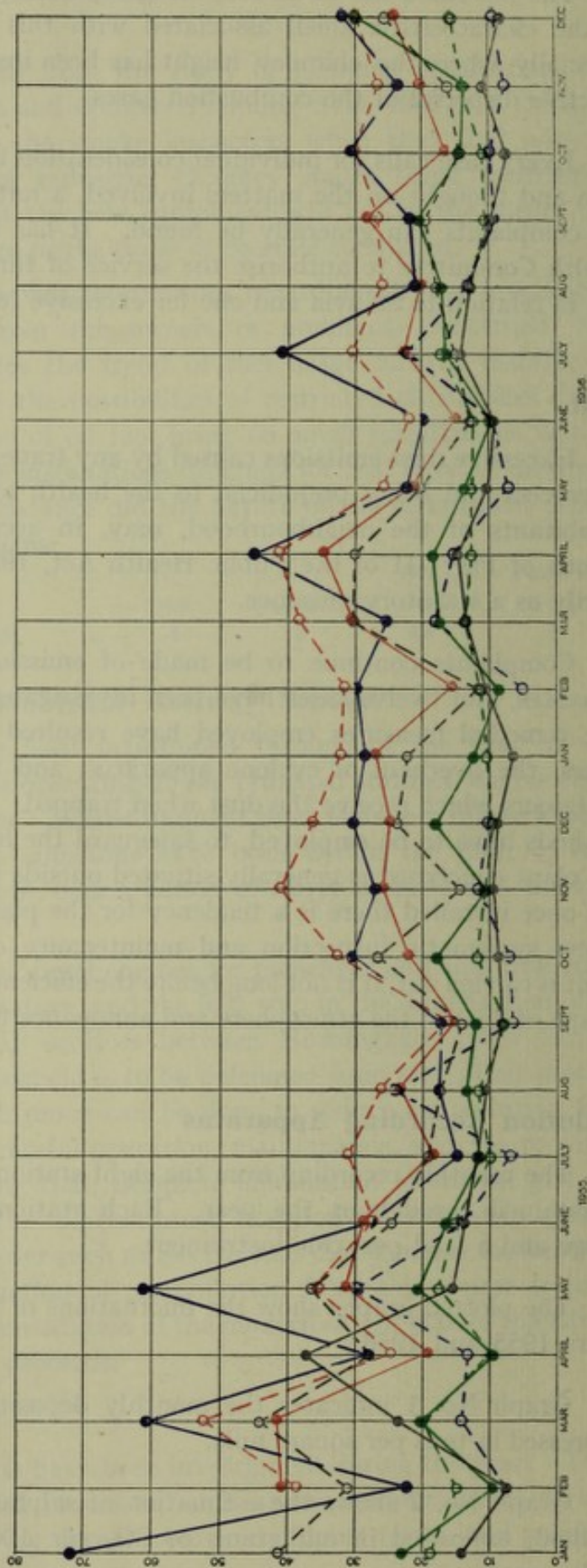
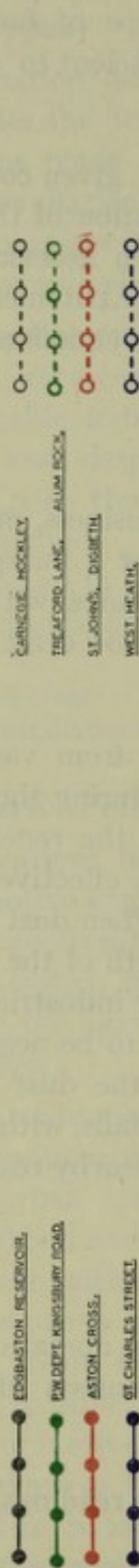
Graph No. 2 shows the estimation of sulphur by the lead peroxide method, expressed in milligrams of  $\text{SO}_3$  per 100 square centimetres—daily average.

GRAPH No. 1

ATMOSPHERIC POLLUTION

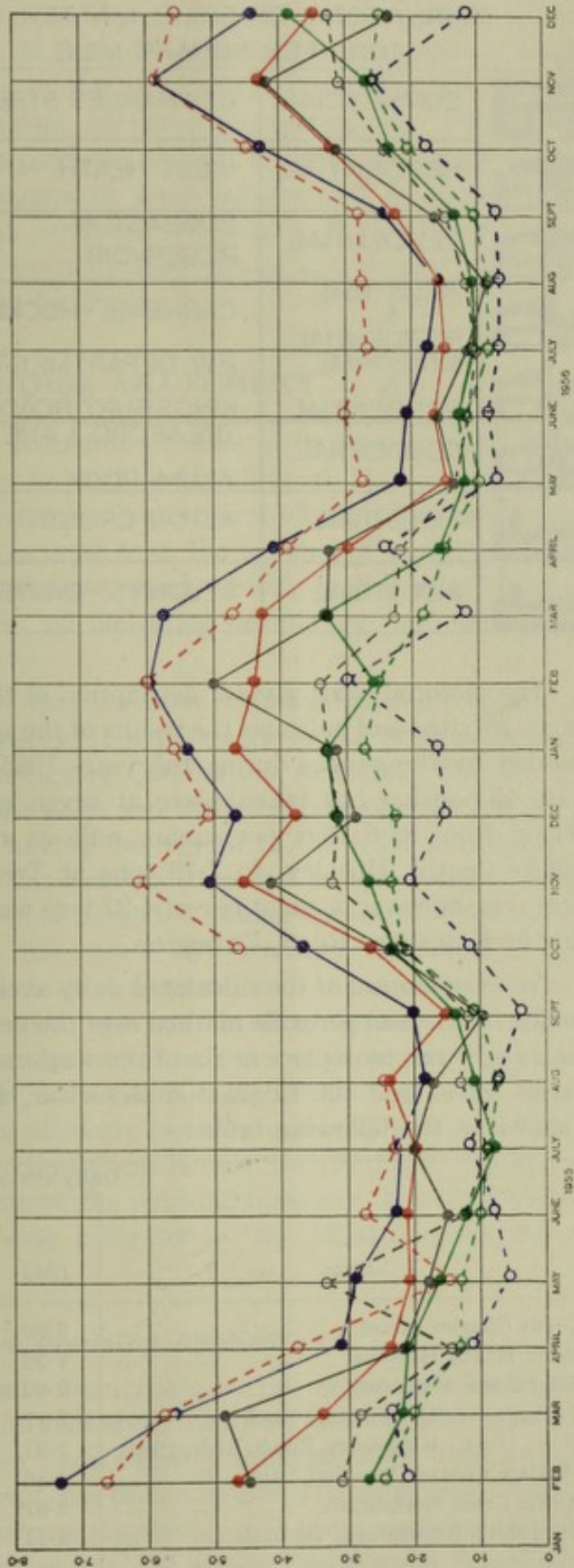
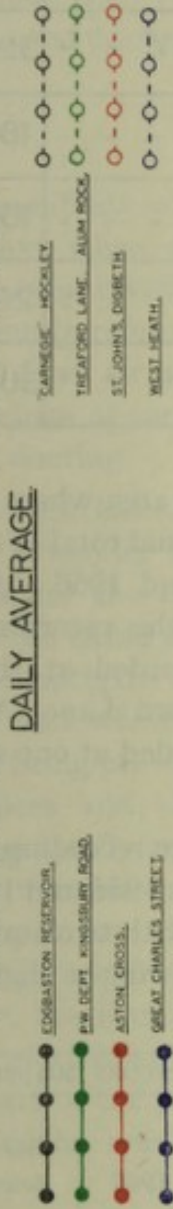
DEPOSIT GAUGE

MONTHLY RECORD OF SOLID MATTER IN TONS PER SQUARE MILE.





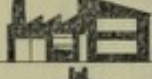

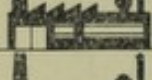



GRAPH No. 2

SULPHUR DETERMINATION      LEAD PEROXIDE METHOD.  
MILLIGRAMS OF SO<sub>2</sub> PER 100 SQUARE CENTIMETRES.



ATMOSPHERIC POLLUTION.

YEARLY TOTAL OF SOLID MATTER IN TONS PER SQUARE MILE.			1955.	1956.
	COMMERCIAL.	GT. CHARLES STREET. - -	420·17	347·55
	RESIDENTIAL.	WEST HEATH. - - - - -	155·15	131·76
	RESIDENTIAL.	EDGBASTON RESERVOIR. - - - - -	170·36	129·17
	INDUSTRIAL & RESIDENTIAL.	"CARNEGIE" - HOCKLEY. - -	321·45	235·83
	INDUSTRIAL & RESIDENTIAL.	P.W. DEPARTMENT KINGSBURY ROAD. - - - - -	186·14	190·41
	RESIDENTIAL.	TREAFORD LANE ALUM ROCK. - - - - -	160·64	152·85
	INDUSTRIAL.	ASTON CROSS. - - - - -	291·88	268·17
	INDUSTRIAL.	"ST. JOHN'S" - DIGBETH. - -	363·83	352·65

The pictorial chart gives a description of the area where the deposit gauges are sited and indicates the results of the annual total of solid matter recorded by the gauges during the years 1955 and 1956. A reduction in the deposition has taken place at seven of the recording stations, varying from 85·6 tons per square mile as recorded at the Carnegie Welfare Centre, Hockley, to 7·79 tons at Treafoord Lane, Alum Rock. There was, however, a slight rise of 4·27 tons recorded at one station, this being at Kingsbury Road, Erdington.

An examination of the calculated daily average recordings of sulphur trioxide by the lead peroxide method over the years 1955 and 1956, reveals that a slight rise took place at six of the stations, with two stations, Great Charles Street and the Edgbaston Reservoir, showing a slight decrease as shown in the following table :—

Station	Daily average mgms S <sub>0</sub> per 100 sq. cms.			
	1955	1956	SO down	SO up
Great Charles Street ... ..	3·80	3·78	·02	—
West Heath Hospital ... ..	1·36	1·40	—	·04
Edgbaston Reservoir ... ..	2·62	2·59	·03	—
Carnegie Welfare Centre, Hockley ...	2·17	2·18	—	·01
P.W. Dept., Kingsbury Road, Erdington	1·91	2·10	—	·19
Welfare Centre, Treafoord Lane ... ..	1·56	1·68	—	·12
Aston Cross Restaurant ... ..	2·87	2·97	—	·10
St. John's Restaurant, Digbeth ... ..	4·11	4·17	—	·06

The results of the recordings as depicted in the chart and tables over the two years may at first sight seem promising, especially in regard to the trend of reduction in the solid deposits, but it should be borne in mind that measurements of this description, which indicate variations in pollution at individual sites, are subject to fluctuations. This variance has been found to be due partly to changes in fuels, the rate of emissions of combustion gases, changes of wind velocity and direction, rainfall, and other meteorological variables. Therefore, the results noted over longer periods than two years of observations are necessary before any significant conclusions can be drawn.

## NOISE ABATEMENT

The possibility of a reduction of noise at its source, receives prime consideration when dealing with complaints of this nature. Thirty cases have been investigated by the technical officers of the Department. The complaints referred to noise from the working of machinery such as high speed fans, air compressors, wood working machinery, refrigeration plants, cyclone apparatus, oil fuel firing installations and the vibration of metal ducting.

Every case has to be considered on its individual merits and, whilst this work is mainly advisory, it is necessary in the event of legal proceedings under the Birmingham Corporation Act, 1935, Section 58, to determine the cause of the noise and the remedial measures that may be adopted to mitigate it, having due regard to the reasonableness of the complaint and whether the noise is excessive or unnecessary, and yet capable of being prevented or mitigated, taking into consideration all the circumstances and also the cost. This advisory work and a tactful approach generally result in the co-operation of the managements of the industrial premises concerned, who put into effect measures recommended by the inspectors. In some cases the services of acoustic engineering consultants is sought. By such means as the overhauling of the offending machinery, the fitting of silencers or introduction of sound baffles and, as a last resort where circumstances permit, the resiting of machinery to another part of the premises, the remedial measures thus employed have resulted in the noise being mitigated to the satisfaction of the complainants.

### **Advisory Work—Town Planning Applications**

Reference has already been made in this section of the Report to the manner in which information derived from the study of applications and plans under the Town and Country Planning Acts, 1947 and 1954, referred to the Department, has been a means of ensuring that, in the case of proposed new fuel burning installations, the equipment would comply with smoke abatement legislation. (See New Fuel Burning Installations).

In addition to the above, comments have been forwarded relating to the siting of machinery in order to avoid possible noise and dust complaints.

During the year five hundred and twenty-four planning applications have been commented upon, and eighty-seven industrial premises have been visited to ascertain that the conditions laid down when planning approval was granted by the Public Works Committee, have been complied with.

### **Industrial and Commercial Survey Redevelopment Areas**

In addition to the above, the classification under the Town and Country Planning (Use Classes) Order, 1950, of one hundred and thirty premises within the Redevelopment Areas has been completed to provide information in connection with the Industrial and Commercial Survey of premises for the allocation of alternative sites for industries.

## **HEATING APPLIANCES**

### **The Testing of Guards on Oil, Gas and Electric Heating Appliances**

The Heating Appliances (Fireguards) Act, 1952, prohibited the sale or letting on hire of unguarded electric fires, gas fires or oil heaters. This legislation was followed by the Heating Appliances (Fireguards) Regulations, 1953, and the schedule to the Regulations prescribed the standards of construction and fitting for guards and also the tests to be applied in ascertaining whether the guards when fitted comply with the Regulations.

These Regulations apply to any heating appliance of a type which is so designed that it is suitable for use in residential premises, and the expression " heating appliance " means a gas fire, electric fire or oil heater, other than one which is so constructed that, when the appliance is burning, or in the case of an electric fire, consuming electrical energy at the maximum rate for which it is designed, the heating element, and in the case of a gas fire or oil heater, any flame, is so enclosed within the body of the appliance, that there is no likelihood of injury to the person from burning, or of ignition of clothing, or other fabrics by reason of, in either case, contact with or proximity to the heating element or any flame.

From this definition it will be seen that some heating appliances offered for sale are exempt from the Regulations, therefore, the requisite guarding is not required. A large percentage, however, fall within the Regulations and the requisite guards must be provided.

The following table summarises the inspectorial work involved during the year :—

<i>No. of premises visited</i>	<i>No. of appliances examined</i>	<i>No. of appliances found unsatisfactory</i>
242	1,324	40

Of the forty unsatisfactory appliances, twenty-nine were found to be without guards, and the remainder (eleven) had guards fitted which did not satisfy the tests carried out in accordance with the schedule of the Regulations.

These appliances are summarised as follows :—

*Second hand Appliances*

Electric fires	No guards fitted	...	...	...	...	16
Gas fires	No guards fitted	...	...	...	...	10
Oil heaters	No guard fitted	...	...	...	...	1
Electric fires	Defective guards fitted...	...	...	...	...	2
Gas fires	Defective guards fitted	...	...	...	...	6
Oil heaters	Defective guards fitted...	...	...	...	...	2
TOTAL						37

*Unused Appliances*

Electric fires	Defective guard fitted	...	...	...	...	1
Gas fires	No guards fitted	...	...	...	...	2
TOTAL						3

It is gratifying to note that all the above appliances were withdrawn from sale for the requisite guards to be fitted and no legal action was necessary.



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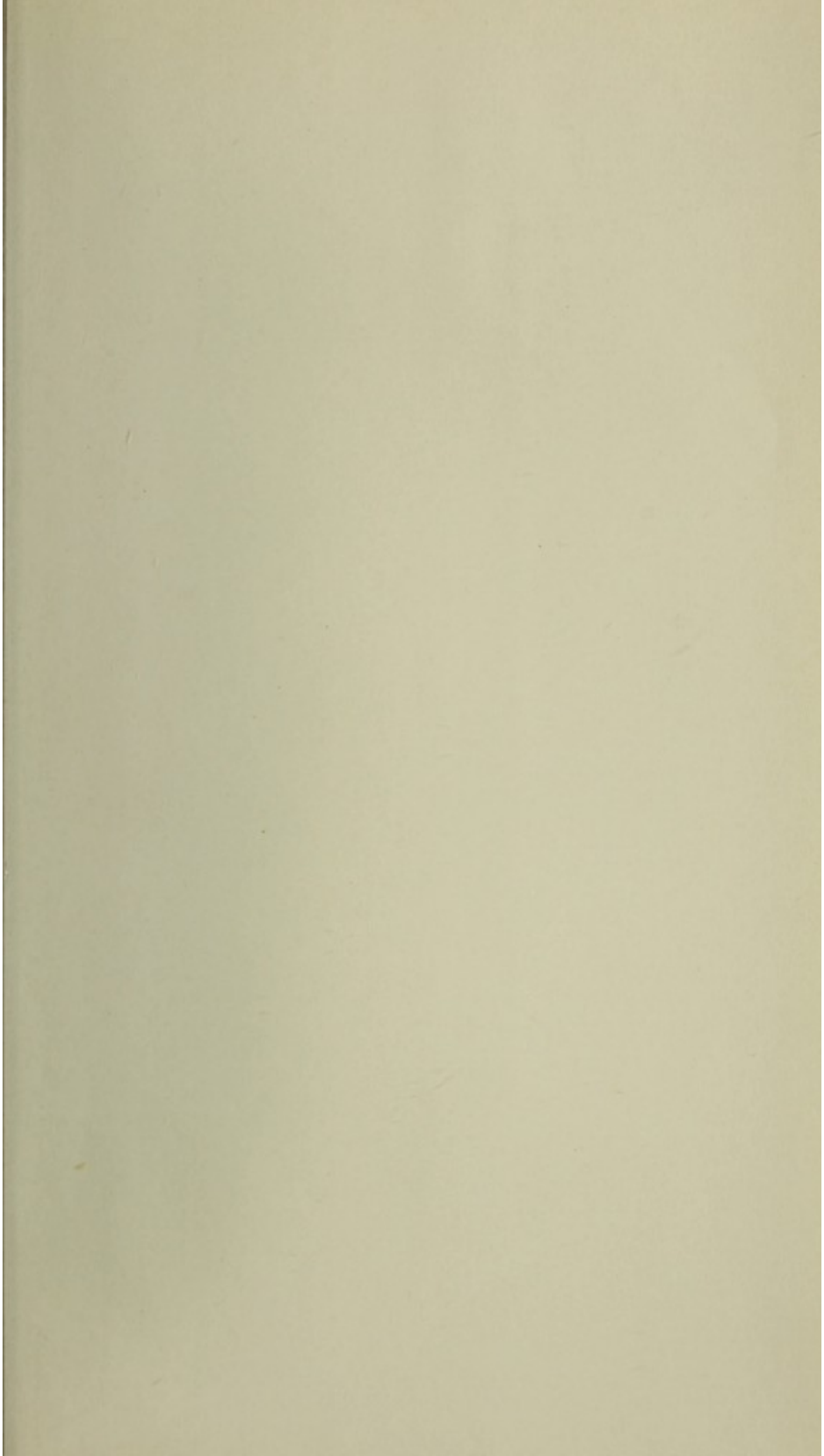
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